



PROSE Antenna Catalogue 2025

PROSE

Who We Are

Rosenberger Hochfrequenztechnik GmbH & Co. was founded in Germany in 1958 and ranks among the leading manufacturers of high-speed interconnect solutions worldwide. With its long tradition of excellence and innovation, Rosenberger has excelled and earned an outstanding reputation all over the world.

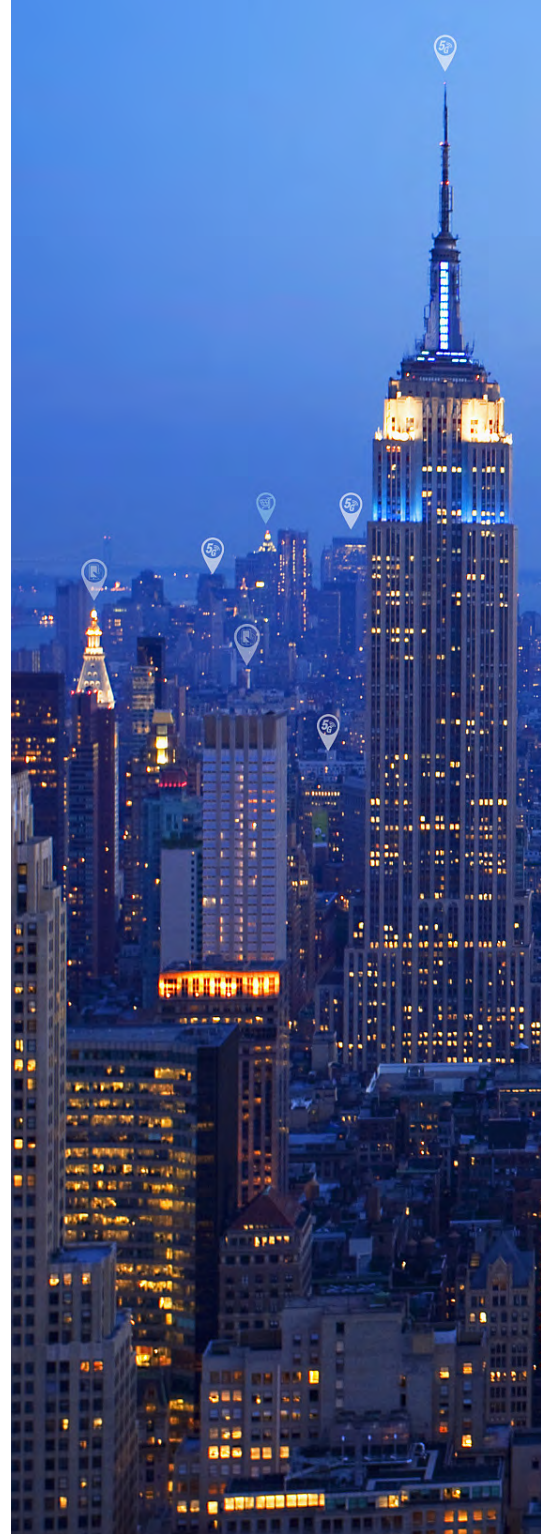
In early 2022 the Rosenberger Group announced the restructure of its antenna and coverage solution product portfolio with a new brand entity PROSE. The strategic focus of PROSE will be on the development of base station antennas, microwave antennas, indoor and outdoor coverage solutions, Open RAN sub-systems, data center, cabling system, IoT solutions, Automotive and related services.

As an independent entity, PROSE, with its lean, agile, and decentralized organizational structure, will be better placed to serve global customers and manage growth by bringing new technologies and solutions, aligned with the changing needs of customers in the telecom industry. The PROSE product portfolio will uphold Rosenberger's tradition of the highest innovation and quality while delivering improved technology expertise and enhanced local customer support around the globe.

PROSE consists of more than 3500 people, with 40+ subsidiaries sales/service offices, 4 factories, and 7 R&D centers covering mainly North America, Europe, the Middle East, Africa, and Asia. It will continue to serve more than 100 operators/service providers worldwide including a wide set of customized solutions for 5G deployments.

PROSE is an ISO 9001 quality system and ISO 14001 environmental system certified company. Equipped with advanced machinery, automatically assembly, and testing centers supported by a large group of more than 400 R&D engineers, state-of-the-art production assembly lines, and stringent product and quality control.

PROSE's reliability and competitiveness are the cornerstones of this sustainable growth, which have resulted in long-term partnerships with most of the leading companies in their respective industries. PROSE will continue to provide excellent product solutions and services for its customers around the world.





B



C



D

A: Pune, India
 B: New Jersey, USA
 C: Donauwörth, Germany
 D: Suzhou, China

Mission

- Customer always comes first
- Drive innovation together with and for our customers
- Maintain a secure, humane and happy environment for our employees
- Develop our employees by investing in their education
- Take social responsibility
- Protect our environment with ecologically friendly products, production and processes

Core Value

- Value Innovation
- Customer Focus
- Sustainable Growth
- Social Responsibility





Products & Services

BTS Antennas	Single-MultiBand Antennas
	Multibeam Antennas
	Beamforming Antennas
	Small Cell Antennas
	High Efficiency BSA (PROTREEM)
	5G Massive MIMO Antennas
	Camouflage Products
	Combiner Unit
	Master Unit
	Extended Unit
	Low Power Remote Unit (LPRU)
	High Power Remote Unit (HPRU)-Cabinet 4G
	High Power Remote Unit (HPRU)-Cabinet 5G
	High Power Remote Unit (HPRU)-Blade 4G
	High Power Remote Unit (HPRU)-Blade 5G
	Medium Power Remote Unit (MPRU)
	Passive DAS Components
	Class 3 Series
	Class 4 Series
	E-Band Series
	Dual-Band Series
	Microwave Components
	ORAN Radio Unit (ORU)
	Digital Control Unit (DCU)
	Small Cell
	RF Coaxial Products
	Power Products
	Fiber Products
	Hybrid Cable Solution
	Installation Material
	Automatic Infrastructure Management System
	Building Cabling System
	Data Center Cabling System
	Edge Computing Data Center
	Modular Data Center
	MDC Cloud Management Platform
	Interference Mitigation Filters
	Embedded Filters
	Site Combiners

5G-Ready BSA Platform Solutions (All-In-One)

1

Multi-Band Solution

- All bands in one antenna
- Support 600MHz/1400MHz/3.5GHz
- Up to 15+ bands (30+ ports)

2

Multi-Beam Solution

- Multiple sectors in one antenna
- Capacity and coverage improvement Up to nona-beam, 4x4 hexa-beam per antenna

3

FDD+TDD Hybrid Solution

- BF Ultra-wide band 2300-3800MHz
- FDD support for 4T4R
- Improve capacity and coverage

4

A+P Hybrid Solution

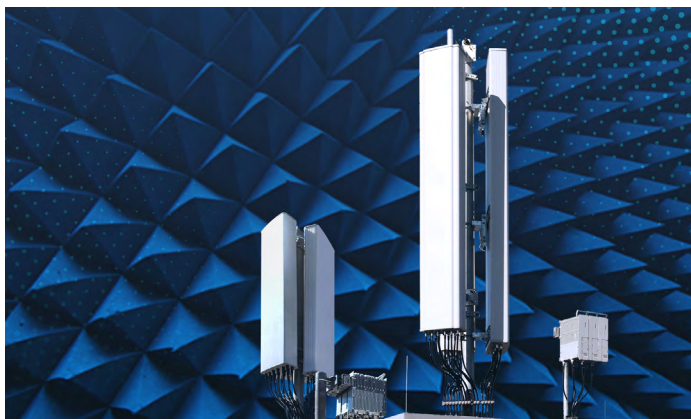
- Passive + mMIMO in one antenna
- FDD support for 4T4R

Deployment of Long Term Evolution access is being accelerated with network operators struggling to exploit various applications urging frequency bands expansion along with request of new operating bands for 5G and beyond. PROSE is developing innovative 5G-ready BSA All-In-One Platform which includes Multiband antenna solutions / Multi beam solutions / FDD+TDD Hybrid solutions / A+P Hybrid solutions, covering all mainstream Sub 3.5GHz bands (from low 612-960MHz, mid 1427-2690MHz to high 3300-4200MHz).

For Multi-beam solution, PROSE is offering a wide portfolio on multi-beam antennas to address the unpredictable MIMO performances at cell edges enhancing capacity and coverage for the legacy systems. Multiple sectors solutions for 2/3/5/6/9-beam antennas can be customized supporting even 4T4R and various combination of FDD + Multibeam+ TDD upon request.

With strong capability in multi-band antennas for legacy FDD systems and NR 8T8R Beamforming design positions, PROSE offers efficient FDD+TDD solutions in one radome for high capacity with low tower loads and low deployment cost.

The fastest emerging wireless communication systems is creating challenges on the antenna platform designs where interference cancellation becomes critical for high bandwidth applications in presence of a fading change over time propagation environment. Massive MIMO is one of the key technologies addressing the high-capacity and low latency applications in dense areas. PROSE has patented designs of radiating elements and massive co-located arrays to provide 3D beamforming antennas where on-demand pattern coverage for any given users' location and selected applications. Our broad portfolio covers multiple TRx platforms being widely implemented like 16T16R, 32T32R, 64T64R up to 192 antenna elements for the mid and Sub-6GHz bands applicable for both FDD and TDD Advanced Antenna Systems. We have the capability in designing innovative multi-band integrated with Massive MIMO antennas to generate Active + Passive antenna solutions.



PROTREETM Passive Family

PROTREETM family has evolved from single-band Generation 1.0 to multi-band Generation 2.0, with further innovation for Generation 3.0 underway. The antenna offers significant improvements in radiation and coverage efficiency, along with enhanced directivity and gain thanks to optimized beamforming technology.

Efficiency At Its Best

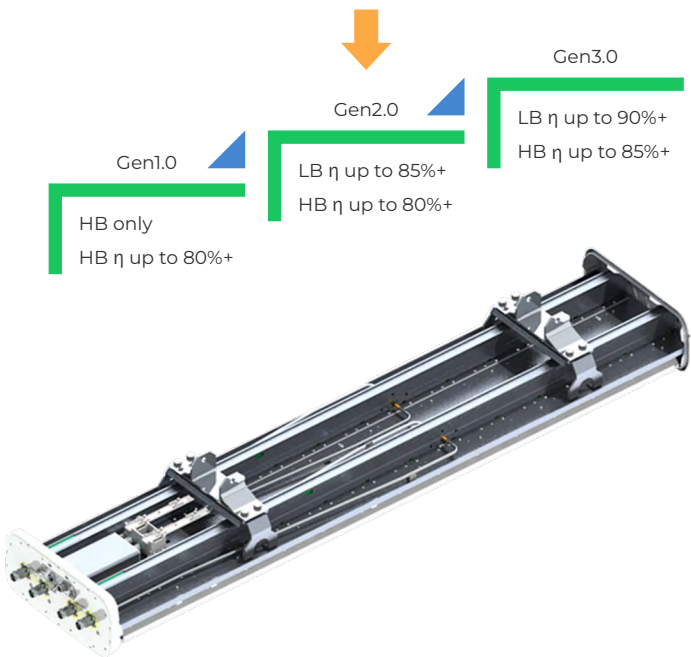
Improved RF performance

- Innovative Air Stripline Structure for lower insertion loss
- Non-phase cable to further reduce loss
- Compact P.S. to minimize dielectric loss

Enhanced Coverage Area

- Good tilt accuracy
- Improved pattern performance

High directivity with good beam shaping technology

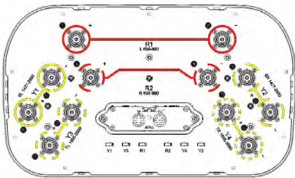
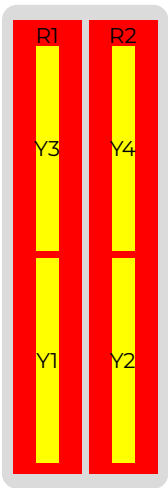


New Innovation - 2LXH 379 mm Width Platform

PROSE 12 port antenna	R1/R2/Y1/Y2/Y3/Y4		
Sub-Bands (MHz)	698-960	1695-2690	1427-2690
Gain (dBi)	15	16	16.3
Horizontal Beamwidth	65	65	65
F/B Ratio (dB) Copolar (180°±30°)	> 22	> 26	> 26
Vertical Beamwidth	11	10	10
1st USSR	15	16	16
VSWR	≤ 1.5:1		
Port Isolation (dB)	25		
Band Isolation (dB)	28		
3rd order PIM(dBc@2 x 43dBm)	153		
Dimensions	2029 x 379 x 219 mm		
Weight	33±3.8 (Bracket)		
Windload(Frontal / Lateral / Max)	432 / 319 / 649 N		

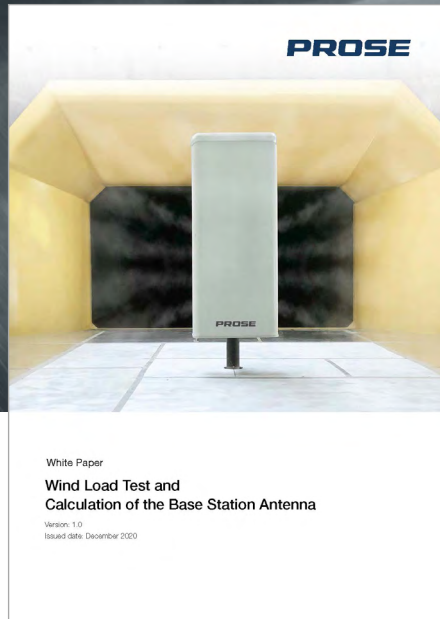
PROSE 2G2J2WD-21-N1 Feature:

- 2L4H advanced width in industry – less than 380mm
- Support 2 ultra-wide high band for 1400MHz
- Brand new design for narrow version
- Great and stable RF performance
- All bands support independent E-tilt change
- Top level wind load and weight optimization which gives low tower loads and low deployment cost



Endcap view

New Innovation - PROSE's Efficient Drag Reduction Solutions



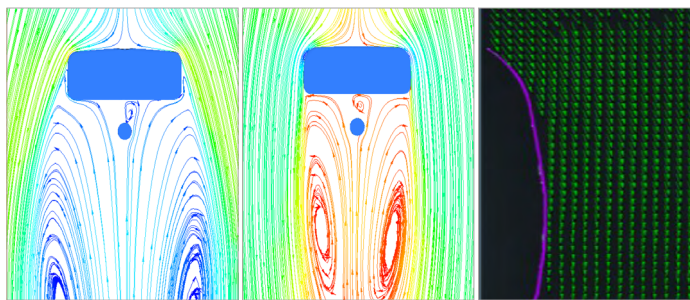
- New Whitepaper (Published April 2021)

Wind Load Test and Calculation of the Base Station Antenna

Find it at: <https://www.prosetechnologies.com//resourcesCatalog>

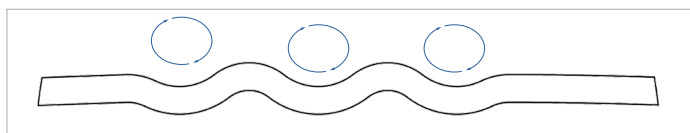
Aerodynamic Optimized Radome

- The most important factor affecting the wind load is the shape of the radome
- Wind tunnel and CFD simulation verify that the shape of the radome is aerodynamic.
- The redesigned radome can be effectively compatible with the original antenna layout



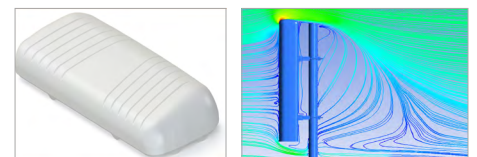
Side Aerodynamic Ribs

- The ribs can form "air-lubricated bearings", reducing wind load
- It can improve the vortex-induced vibration to some extent.



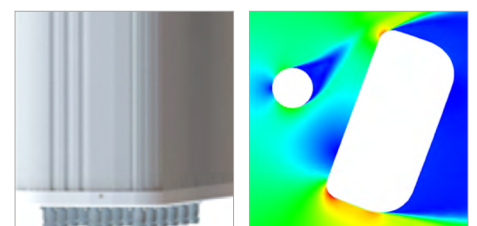
Bionic Drag Reduction End Cap

- PROSE's patented products
- The bionic streamlined shape delays the separation point
- The bionic diversion grooves will increase the quasi-sequential type of airflow



Turbulence generator

- The maximum wind load of the antenna can be reduced.
- It can increase fluid disturbance and inhibit fluid separation



PROSE Massive MIMO Platform

PROSE 5G Massive MIMO platform continues evolution along with customer and market requirements.

- 1st product has been completed in 2018, followed by PROSE innovation on multiple platforms in recent 6 years.
- Working frequency covers from 2300~2690MHz to 3300~3980MHz
- New products go lower frequency band to 1710~2200MHz
- Except for 32T/R to 64 T/R, more and more channel antenna has been developed.

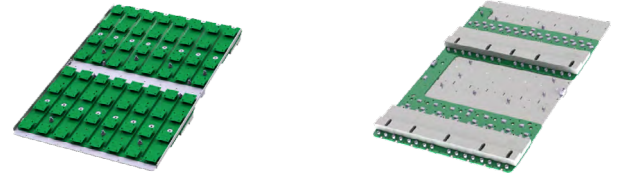
- AFUs with filter application varies from ceramic to traditional cavity of new design
- With new compact cavity design-SMF, brings smaller size, lighter weight, better shielding.
- No need EMC cover

- AU integrated RETM platform
- Gives good balance between 3D coverage and power assumption.
- Excellent & stable performance
- Low-profile driving system
- High accuracy of tilt setting

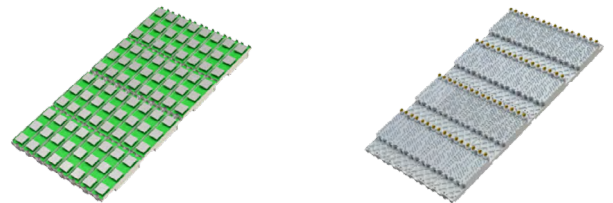
- FDD Massive MIMO 32 T/R released with good PIM performance



AU Platform – 64T/R AU with Calibration Network Function



AFU Platform – Ceramic Filter, with EMC cover



AFU Platform – Cavity Filter, Integrated FU with Reflector of AU



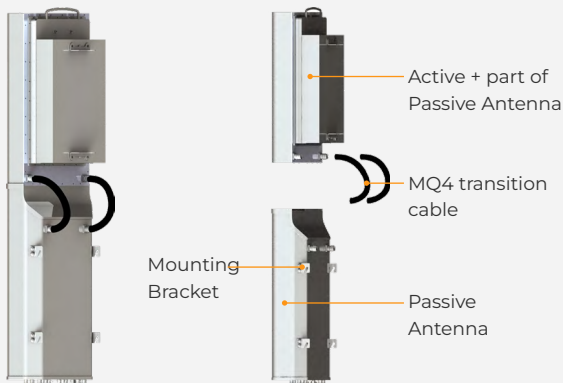
Generation AU with RETM Platform Cable Solution



2nd Generation AU with RETM Platform Cableless Solution,
High Accuracy of Driving System

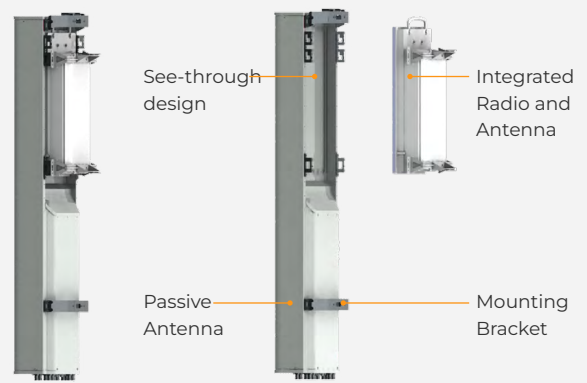
PROSE A+P Solution

Traditional Design



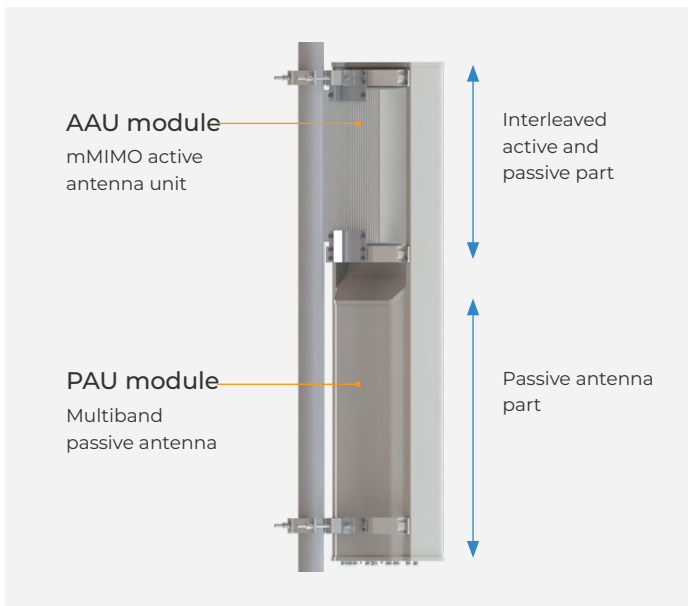
- AAU installs right behind the top of passive antenna
- Passive part consists of two parts, connected together with MQ4 transition cables
- High integration with very complex structure

New Design



- Removes transition cable, passive part designed as one part
- New decoupling design gets excellent mMIMO performance
- Shares same antenna radome
- Simplified structure and installation

Details of New Design



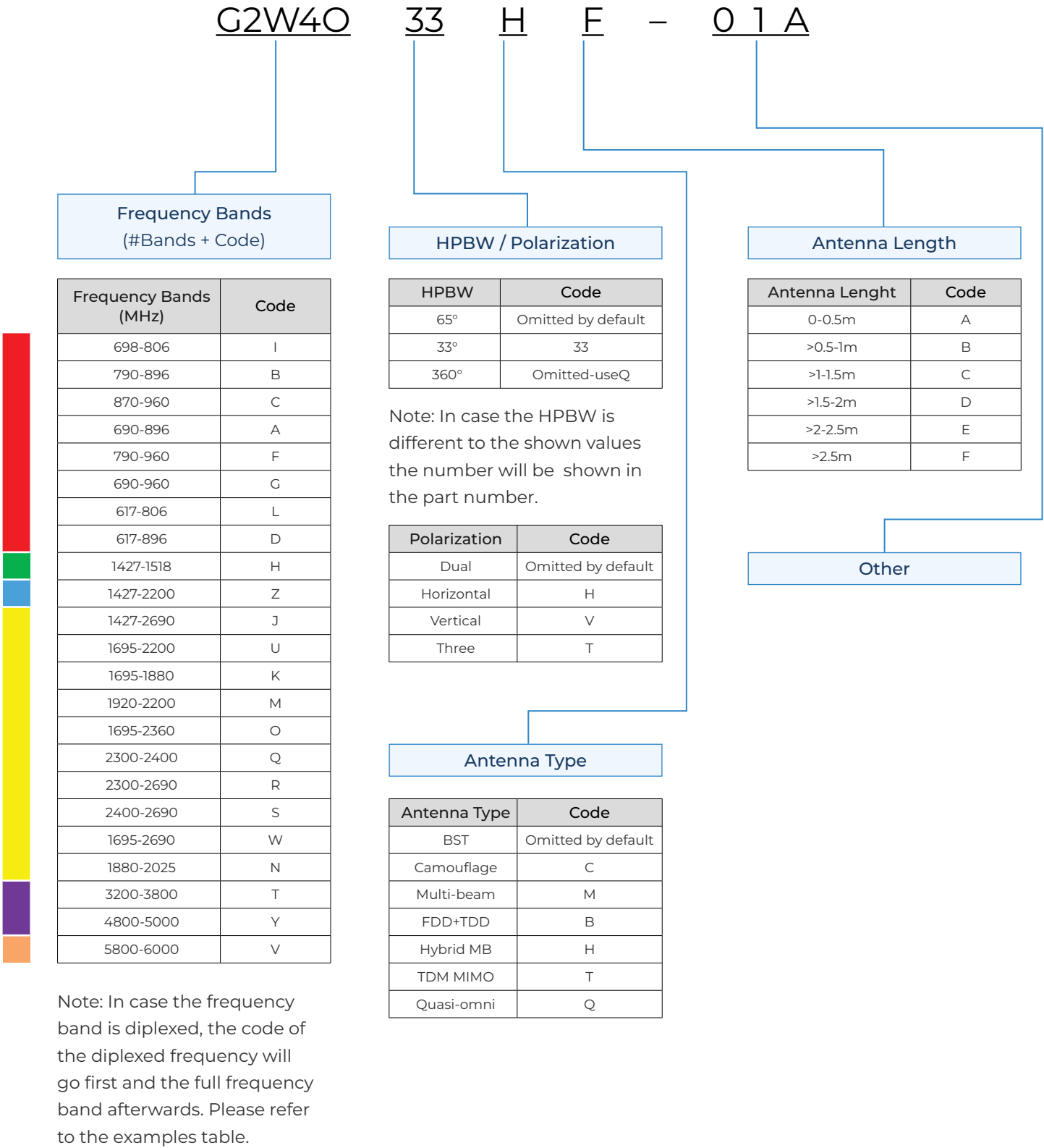
- Integrated active and passive arrays in the top module
- Modular design can separated for both AAU and passive antenna use
- All in one solution helps simplify installation, reduces wind load and volume
- Easily get a more compact layout and flexible combination

PROSE Advantages

- Simplifies the site license application and reduces the number of elements/boxes on the tower and looks like one antenna
- Flexibility on the configuration of Massive MIMO and passive antennas as required
- Innovation by using plastic mounting kit, aimed at reducing tower load (under development)



Antenna Product Model Naming Rule



Product Category

Passive Antennas	Single-MultiBand Antennas	12
	Multi-Beam Hybrid Antennas	205
	Beamforming Antennas	302
	PROTREEM Antennas	403
	Small Cell Antennas	420
RET System		428
Mounting Bracket		429
AISG		430

Single MultiBand Antennas

Model	Port	Antenna Type	Frequency(MHz)	Gain(dBi)	3dB HBW	L x W x D(mm)	Page
GC-21	2	1L	698-960	15.1	65	1449 x 320 x 140	16
GD-21	2	1L	698-960	15.8	65	1999 x 301 x 180	19
GE-21	2	1L	698-960	16.5	65	2300 x 301 x 180	22
GF-21	2	1L	698-960	17.0	65	2546 x 300 x 190	25
G90F-20	2	1L	698-960	16	90	2500 x 300 x 180	28
WC-21	2	1H	1695-2690	18.1	65	1470 x 180 x 115	31
GWC-21	4	1L1H	698-960 1695-2690	14.2 / 16.6	65	1449 x 350 x 200	34
GWD-21	4	1L1H	698-960 1695-2690	15.6 / 17.0	65	1995 x 300 x 190	37
GWF-21	4	1L1H	698-960 1695-2690	16.9 / 18.3	65	2690 x 350 x 200	40
2GD-21-N45	4	2L	2 x (698-960)	15.6	65	1999 x 448 x 188	43
2GF-21-N45	4	2L	2 x (698-960)	15.6	65	2550 x 448 x 188	46
2WC-21	4	2H	2 x (1710-2690)	18.0	65	1389 x 295 x 115	50
2WD-21	4	2H	2 x (1710-2690)	19.0	65	2020 x 295 x 115	53
2TB-21U	4	2H	2x(3300-4200)	17.8	65	998 x 180 x 115	56
G2WB-21	6	1L2H	(698-960) 2 x (1695-2690)	12.5 / 14.6	65	889 x 350 x 200	59
G2WC-21	6	1L2H	(698-960) 2 x (1695-2690)	14.5 / 17.5	65	1449 x 350 x 200	62

Model	Port	Antenna Type	Frequency(MHz)	Gain(dBi)	3dB HBW	L x W x D(mm)	Page
G2WD-21	6	1L2H	(698-960) 2 x (1695-2690)	15.8 / 18.3	65	1995 x 300 x 190	65
G2WF-21	6	1L2H	(698-960) 2 x (1695-2690)	16.9 / 18.3	65	2690 x 350 x 200	68
3WC-21	6	3H	3 x (1710-2690)	18	65	1480 x 379 x 115	71
G3WC-21	8	1L3H	(698-960) 3 x (1695-2690)	14.4 / 17.8	65	1449 x 379 x 189	74
G3WD-21	8	1L3H	(698-960) 3 x (1695-2690)	15.8 / 16.5	65	1995 x 350 x 190	77
G3WF-21	8	1L3H	(698-960) 3 x (1695-2690)	16.9 / 18.0	65	2690 x 350 x 200	80
2G2WC-21-N45	8	2L2H	2 x (698-960) 2 x (1695-2690)	13.8 / 17.8	65	1499 x 448 x 188	83
2G2WD-21-N45	8	2L2H	2 x (698-960) 2 x (1695-2690)	14.9 / 17.8	65	1999 x 448 x 188	86
2G2WF-21-N45	8	2L2H	2 x (698-960) 2 x (1695-2690)	15.8 / 18.2	65	2630 x 448 x 188	89
2G2WC-21-N43	8	2L2H	2 x (698-960) 2 x (1695-2690)	13.8 / 17.8	65	1530 x 429 x 199	92
2G2WD-21-N43	8	2L2H	2 x (698-960) 2 x (1695-2690)	14.9 / 17.8	65	1940 x 429 x 199	95
2G2WF-21-N43	8	2L2H	2 x (698-960) 2 x (1695-2690)	15.8 / 18.2	65	2670 x 429 x 199	98
2D2WB-21-AN	8	2L2H	2x (617-894) 2x (1695-2690)	10.8 / 15.6	65	697 x 580 x 210	101
2D2WC-21-AN	8	2L2H	2x (617-894) 2x (1695-2690)	13.1 / 18.0	65	1219 x 580 x 210	104
2D2WD-21-AN	8	2L2H	2x (617-894) 2x (1695-2690)	14.0 / 18.6	65	1770 x 580 x 210	107
2D2WE-21-AN	8	2L2H	2x (617-894) 2x (1695-2690)	15.8 / 18.5	65	2437 x 580 x 210	110

Model	Port	Antenna Type	Frequency(MHz)	Gain(dBi)	3dB HBW	L x W x D(mm)	Page
G4WC-21	10	1L4H	(698-960) 4 x (1695-2690)	14.4 / 15.6	65	1449 x 350 x 200	113
G4WD-21	10	1L4H	(698-960) 4 x (1695-2690)	15.8 / 16.5	65	1995 x 350 x 200	116
2G4WD-21-ST	12	2L4H	2 x (698-960) 4 x (1695-2690)	15.0 / 16.7	65	1999 x 448 x 188	119
2G4WF-21-ST	12	2L4H	2 x (698-960) 4 x (1695-2690)	15.7 / 17.6	65	2630 x 448 x 188	122
2G4WC-21D-N50	12	2L4H	2 x (698-960) 4 x (1695-2690)	13.6 / 17.6	65	1499 x 498 x 197	125
2G4WD-21D-N50	12	2L4H	2 x (698-960) 4 x (1695-2690)	14.8 / 17.7	65	1999 x 498 x 197	128
2G4WF-21D-N50	12	2L4H	2 x (698-960) 4 x (1695-2690)	15.7 / 17.8	65	2690 x 498 x 197	131
2D4WB-21-AN	12	2L4H	2 x (617-894) 4 x (1695-2690)	10.4 / 15.3	65	697 x 580 x 210	134
2D4WC-21-AN	12	2L4H	2 x (617-894) 4 x (1695-2690)	13.1 / 17.8	65	1219 x 580 x 210	137
2D4WD-21-AN	12	2L4H	2 x (617-894) 4 x (1695-2690)	14.0 / 18.8	65	1770 x 580 x 210	140
2D4WE-21-AN	12	2L4H	2 x (617-894) 4 x (1695-2690)	16.2 / 18.9	65	2437 x 580 x 210	143
ACJ5WF-01	14	2L5H	(698-862 / 880-960) (1427-2690) 2 x (1695-2690) 2 x (2490-2690)	16.2 / 18.1	65	2760 x 395 x 189	146
ACG4WD-01	14	3L4H	(698-862 / 880-960) (698-960) 4 x (1695-2690)	14.7 / 16.4	65	2100 x 448 x 188	149
ACG4WF-01	14	3L4H	(698-862 / 880-960) (698-960) 4 x (1695-2690)	15.5 / 17.1	65	2690 x 448 x 188	152
2G6WD-21	16	2L6H	2 x (698-960) 6 x (1695-2690)	15.0 / 16.4	65	1999 x 498 x 197	155
2G6WF-21	16	2L6H	2 x (698-960) 6 x (1695-2690)	16.0 / 17.7	65	2769 x 448 x 188	158

Model	Port	Antenna Type	Frequency(MHz)	Gain(dBi)	3dB HBW	L x W x D(mm)	Page
2G2J4WD-21	16	2L6H	2 x (698-960) 2 x (1427-2690) 4 x (1695-2690)	14.7 / 16.6	65	2019 x 498 x 219	161
3G5WD-01	16	3L5H	3 x (698-960) 5 x (1695-2690)	14.6 / 16.4	65	1999 x 580 x 190	164
DCE2J4WF-01	18	3L6H	(617-862 / 880-960) (617-960) 2 x (1427-2690) 4 x (1695-2690)	15.6 / 17.6	65	2690 x 498 x 197	167
2G8WF-01	20	2L8H	2 x (698-960) 8 x (1695-2690)	15.8 / 17.7	65	2690 x 498 x 197	170
3G7WD-01	20	3L7H	3 x (698-960) 7 x (1695-2690)	14.6 / 16.4	65	1999 x 580 x 190	173
ACG8WF-21	22	3L8H	(698-862 / 880-960) (698-960) 8 x (1695-2690)	16.2/ 17.9	65	2690 x 498 x 197	176
ACG2Z4K4R2WD-01	30	3L12H	(698-862 / 880-960) (698-960) 2 x (1427-2690) 4 x (1695-1880) 4 x (2300-2690) 2 x (1695-2690)	13.9 / 15.8	65	1619 x 498 x 197	179
ACG2Z4K4R2WF-01	30	3L12H	(698-862 / 880-960) (698-960) 2 x (1427-2690) 4 x (1695-1880) 4 x (2300-2690) 2 x (1695-2690)	16.2 / 17.9	65	2769 x 498 x 197	183
2E4WE-21	12	Panel	2 x (617-960) 4 x (1695-2690)	15.0/17.5	65-65	2070 x 498 x 197mm	187
2E4WF-21	12	Panel	2 x (617-960) 4 x (1695-2690)	16.0/17.5	65-65	2690 x 498 x 197mm	190
DCE4WC-N-21	14	Panel	1 x (617-862) 1 x (880-960) 1 x (617-960) 4 x (1695-2690)	13.0/13.7/13.5	65-65-65-65	1500 x 498 x 220mm	193
E45D-21	2	Panel	1 x (617-960)	16.9	45	1829 x 448 x 18 mm	196
2D2W45E-21	8	Panel	2 x (617-894) 2 x (1695-2690)	16.8/20.1	45-45	2437 x 630 x 220mm	199
2G4W45F-21	12	Panel	2 x (698-960) 4 x (1695-2690)	16.9/19.2	45-45	2690 x 580 x 210mm	202

- 698-960 MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960			
		698-806	790-896	880-960	
Gain R1	Mid Tilt	dBi	14.7	15.0	15.1
	Over All Tilts		14.6±0.5	14.9±0.5	15.1±0.5
Polarization		°	±45		
Horizontal Pattern					
3dB Azimuth Beamwidth		°	67±3	64±3	62±3
Front to Back Ratio, Total Power, 180°±30°		dB	> 27	> 27	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°			> 25	> 25	> 25
Over Sector ±60°			> 10	> 10	> 10
Vertical Pattern					
3dB Elevation Beamwidth		°	15.7±1.4	14.1±1.0	13.2±0.8
Electrical Downtilt			0-10		
1st Upper Sidelobe Suppression		dB	> 16		
RF Parameters					
VSWR			< 1.5		
Intra - Cluster Isolation		dB	27		
3rd PIM(2 x 43 dBm)		dBc	< -153		
Impedance		Ω	50		
Maximum Effective Power Per Port		W	500		

— Maximum Effective Power Whole Antenna: 800 W.

GC-21

2 Port Antenna / 1L / 1.45m

PROSE

Mechanical Data (BASTA11.1)

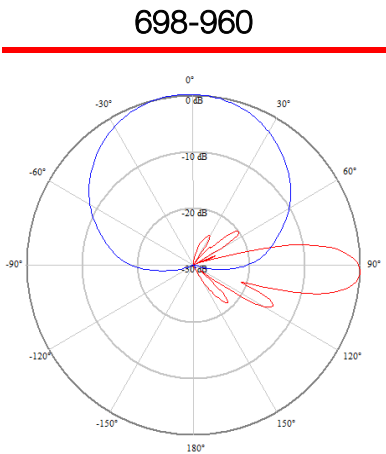
Connector Type	2 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	12.6 kg	27.8 lb
Shipping Weight	21.5 kg	47.4 lb
Antenna Dimensions (H x W x D)	1449 x 320 x 140 mm	57.0 x 12.6 x 5.5 in
Packing Size (H x W x D)	1599 x 444 x 308 mm	63.0 x 17.5 x 12.1 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	376 / 124 / 442 N	85 / 28 / 99 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

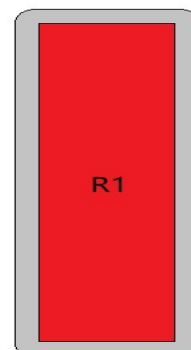
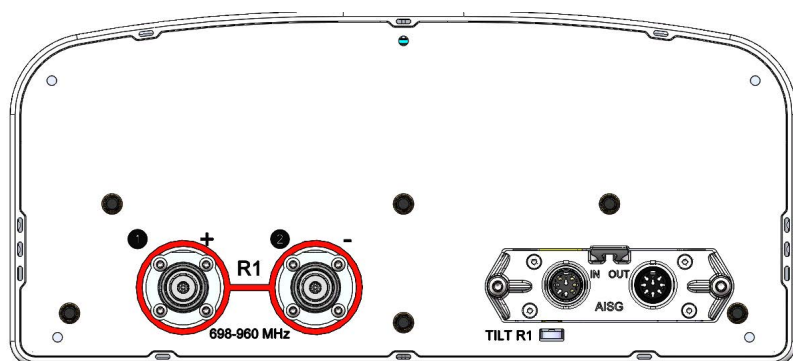


GC-21

2 Port Antenna / 1L / 1.45m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
•R1	1 - 2	698-960	/	SRET	RB.....XYyxxxx-R1

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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- 698-960 MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960			
		698-806	790-896	880-960	
Gain	Mid Tilt	dBi	15.4	15.7	15.9
	Over All Tilts		15.4±0.5	15.7±0.5	15.8±0.5
Polarization		°	±45		
Horizontal Pattern					
3dB Azimuth Beamwidth		°	67±3	64±3	62±3
Cross-Polar Discrimination		dB			
At Mechanical Boresight 0°			> 20	> 20	> 20
Over Sector ±60°			> 10	> 10	> 10
Vertical Pattern					
3dB Elevation Beamwidth		°	10.4±0.6	9.4±0.5	8.6±0.5
Electrical Downtilt			0-10		
1st Upper Sidelobe Suppression		dB	> 17		
RF Parameters					
VSWR			< 1.5		
Intra - Cluster Isolation		dB	28		
3rd PIM(2 x 43 dBm)		dBc	< -153		
Impedance		Ω	50		
Maximum Effective Power Per Port		W	500		

— Maximum Effective Power Whole Antenna: 800 W.

GD-21

2 Port Antenna / 1L / 2.0m

PROSE

Mechanical Data (BASTA11.1)

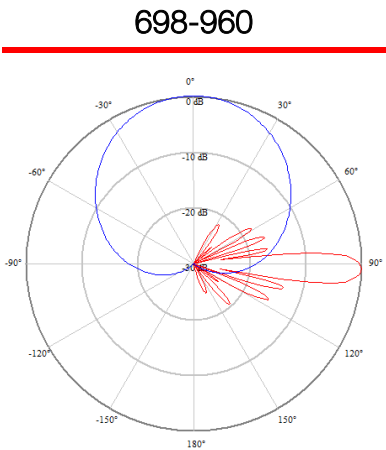
Connector Type	2 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	16 kg	35.3 lb
Shipping Weight	27.0 kg	59.5 lb
Antenna Dimensions (H x W x D)	1999 x 301 x 180 mm	78.7 x 11.9 x 7.1 in
Packing Size (H x W x D)	2149 x 378 x 338 mm	84.6 x 14.9 x 13.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	378 / 228 / 530 N	85 / 51 / 119 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



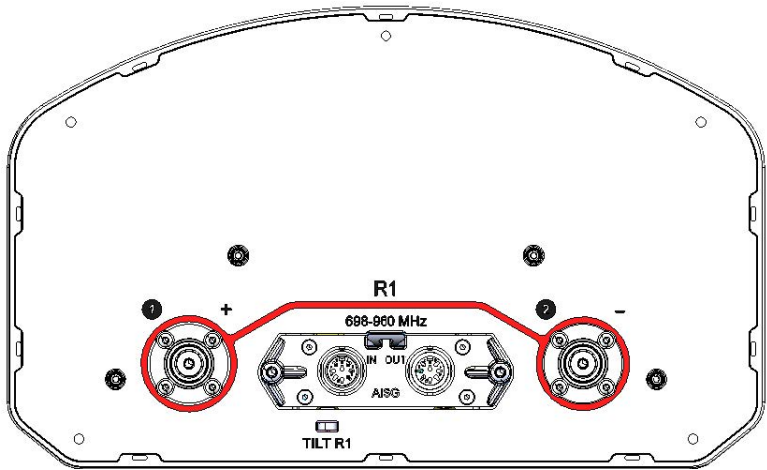
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	/	SRET	RB.....XYyxxxx-R1

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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- 698-960 MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960			
		698-824	791-894	880-960	
Gain R1	Mid Tilt	dBi	16.1	16.4	16.6
	Over All Tilts		16.0±0.6	16.3±0.5	16.5±0.5
Polarization		°	±45		
Horizontal Pattern					
3dB Azimuth Beamwidth		°	67±3	64±3	62±3
Front to Back Ratio, Total Power, 180°±30°		dB	> 28	> 27	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18		
Over Sector ±60°			> 10	> 8	> 7
Vertical Pattern					
3dB Elevation Beamwidth		°	9.8±0.7	8.8±0.7	8.0±0.6
Electrical Downtilt			0-10		
1st Upper Sidelobe Suppression		dB	> 17		
RF Parameters					
VSWR			< 1.5		
Intra - Cluster Isolation		dB	> 28		
3rd PIM(2 x 43 dBm)		dBc	< -153		
Impedance		Ω	50		
Maximum Effective Power per Port		W	500		

— Maximum Effective Power Whole Antenna: 800 W.

GE-21

2 Port Antenna / 1L / 2.3m

PROSE

Mechanical Data (BASTA11.1)

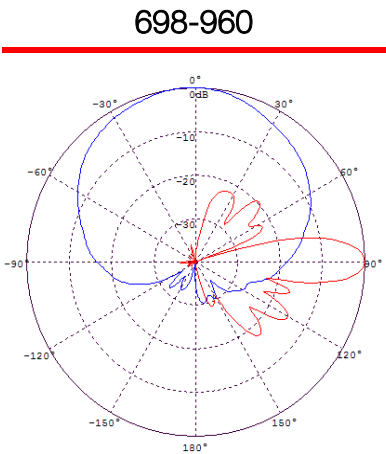
Connector Type	2 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	15 kg	33.1 lb
Shipping Weight	22.1 kg	48.7 lb
Antenna Dimensions (H x W x D)	2300 x 301 x 180 mm	90.6 x 11.9 x 7.1 in
Packing Size (H x W x D)	2450 x 378 x 338 mm	96.5 x 14.9 x 13.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	450 / 270 / 631 N	101 / 61 / 142 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



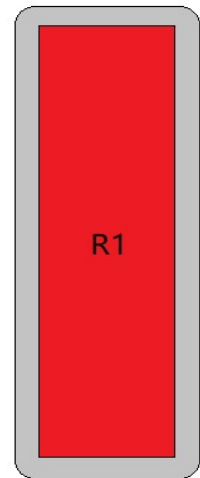
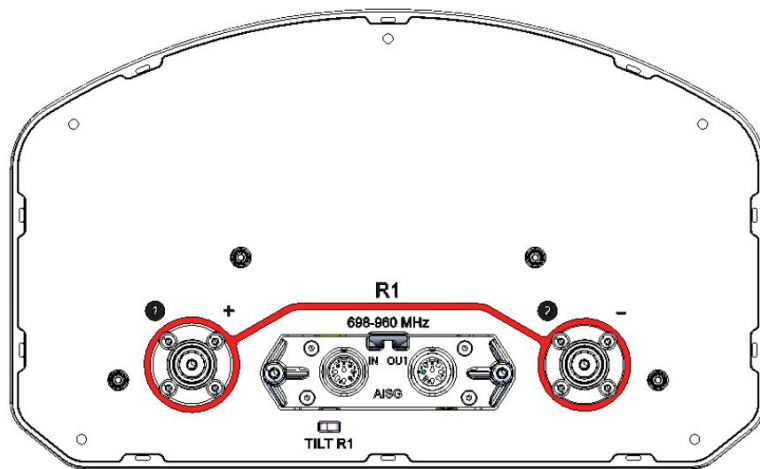
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
•R1	1 - 2	698-960	/	SRET	RB.....XYXxxxx-R1

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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- 698-960 MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		698-960			
		698-824	791-894	880-960	
Gain R1	Mid Tilt	dBi	16.6	16.7	17.2
	Over All Tilts		16.5±0.6	16.8±0.5	17.0±0.5
Polarization		°	±45°		
Horizontal Pattern					
3dB Azimuth Beamwidth		°	67±3	65±3	63±3
Front to Back Ratio, Total Power, 180°±30°		dB	> 28		
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18		
Over Sector ±60°			> 10	> 9	> 8
Vertical Pattern					
3dB Elevation Beamwidth		°	8.3±1.0	7.3±0.8	6.7±0.6
Electrical Downtilt			0-10		
1st Upper Sidelobe Suppression		dB	> 17		
RF Parameters					
VSWR			< 1.5		
Intra-Cluster Isolation		dB	28		
3rd PIM(2 x 43 dBm)		dBc	< -153		
Impedance		Ω	50		
Maximum Effective Power per Port		W	500		

GF-21

2 Port Antenna / 1L / 2.55m

PROSE

Mechanical Data (BASTA 11.1)

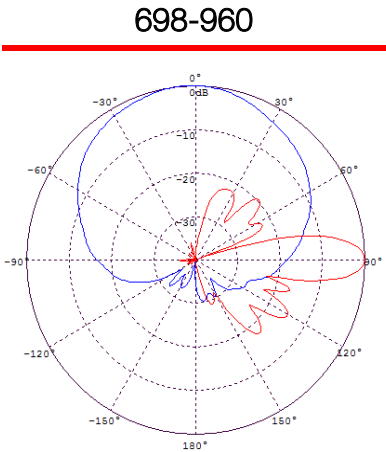
Connector Type	2 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	18 kg	39.7 lb
Shipping Weight	28.6 kg	63.1 lb
Antenna Dimensions (H x W x D)	2546 x 300 x 190 mm	100.2 x 11.8 x 7.5 in
Packing Size (H x W x D)	2665 x 369 x 337 mm	104.9 x 14.5 x 13.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	430 / 366 / 681 N	97 / 82 / 153 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



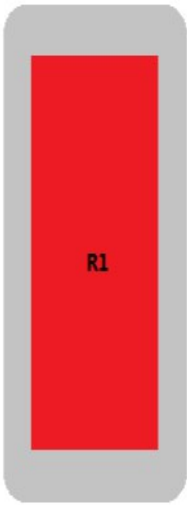
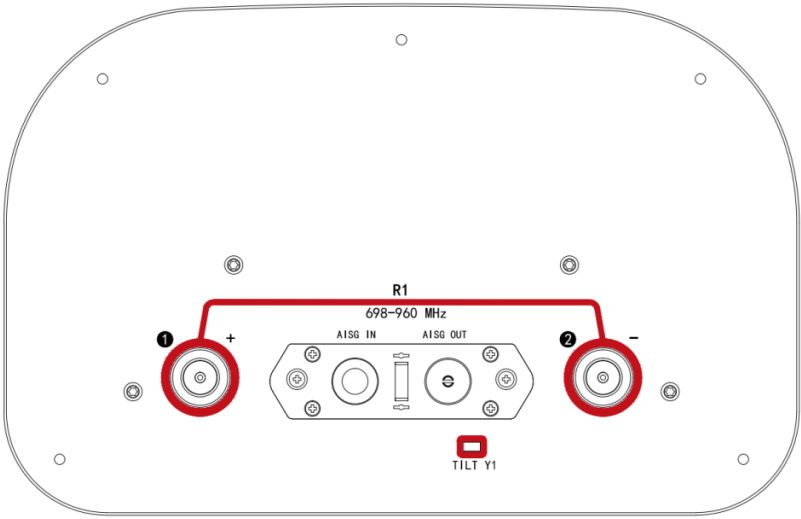
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	/	SRET	RB.....XYYxxxxx-R1

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G90F-20

2 Port Antenna / 1L / 2.5m

PROSE

- 698-960 MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 7/16 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		698-960				
		698-790	790-896	870-960		
Gain	Mid Tilt	dBi	15.1±0.5		15.5±0.5	16.0±0.5
	Over All Tilts					
Polarization		°	±45°			
Horizontal Pattern						
3dB Azimuth Beamwidth		°	93±5	90±5	89±5	
Front to Back Ratio, Total Power, 180°±30°		dB	> 27			
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 20	> 20	
Over Sector ±60°			> 10	> 10	> 10	
Vertical Pattern						
3dB Elevation Beamwidth		°	8.5±0.5	8.0±0.5	7.3±0.5	
Electrical Downtilt			0-8			
1st Upper Sidelobe Suppression		dB	> 18			
RF Parameters						
VSWR			< 1.5			
Port Isolation		dB	30			
3rd PIM(2 x 43 dBm)		dBc	< -153			
Impedance		Ω	50			
Power Handling		W	500			

G90F-20

2 Port Antenna / 1L / 2.5m

PROSE

Mechanical Data (BASTA 11.1)

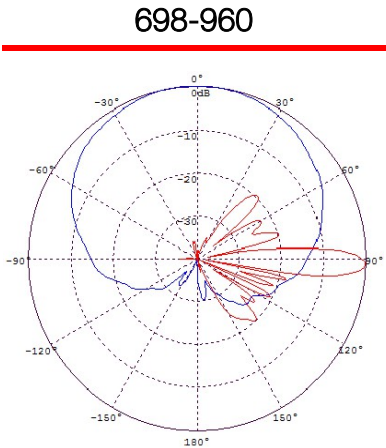
Connector Type	2 x 7/16DIN Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	18.3 kg	40.3 lb
Shipping Weight	26.3 kg	58 lb
Antenna Dimensions (H x W x D)	2500 x 300 x 180 mm	98.4 x 11.8 x 7.1 in
Packing Size (H x W x D)	2620 x 369 x 337 mm	103.1 x 14.5 x 13.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	498 / 299 / 700 N	112 / 67 / 157 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

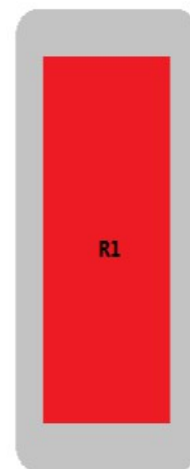
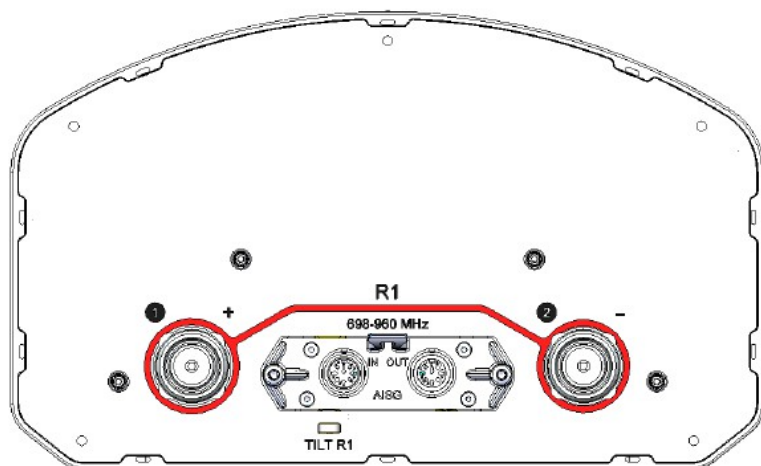


G90F-20

2 Port Antenna / 1L / 2.5m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	/	SRET	RB.....XYYxxxxx-R1

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1kg	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

- 1695-2690 MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		1695-2690					
		1695-1880	1850-1990	1990-2200	2300-2400	2500-2690	
Gain	Mid Tilt	dBi	17.2	17.6	17.9	18.0	18.2
	Over All Tilts		17.2±0.5	17.5±0.5	17.8±0.5	17.9±0.5	18.1±0.5
Polarization		°	±45°				
Horizontal Pattern							
3dB Azimuth Beamwidth		°	65±5	65±5	65±5	63±5	60±4
F/B Ratio Co-polar(180°±30°)		dB	> 28				
Cross-Polar Discrimination							
At Mechanical Boresight 0°			> 20	> 20	> 20	> 20	> 18
Over Sector ±60°			> 10	> 10	> 10	> 10	> 10
Vertical Pattern							
3dB Elevation Beamwidth		°	6.8±0.6	6.3±0.5	6.0±0.6	5.3±0.4	5.0±0.4
Electrical Downtilt			2-12				
1st Upper Sidelobe Suppression		dB	> 16	> 17	> 17	> 17	> 16
RF Parameters							
VSWR			< 1.5				
Intra - Cluster Isolation		dB	30				
3rd PIM(2 x 43 dBm)			< -153				
Impedance		Ω	50				
Maximum Effective Power Per Port		W	250				

— Maximum Effective Power Whole Antenna: 400 W.

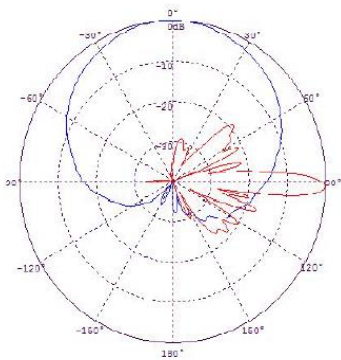
Mechanical Data (BASTA11.1)

Connector Type	2 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	UPVC	
Antenna Net Weight	7 kg	15.4 lb
Shipping Weight	14kg	30.9 lb
Antenna Dimensions (H x W x D)	1470 x 180 x 115 mm	57.9 x 7.1 x 4.5 in
Packing Size (H x W x D)	1680 x 290 x 218 mm	66.1 x 11.4 x 8.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	211 / 92 / 255 N	47 / 21 / 57 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +65 °C	-40 ~ +149 °F

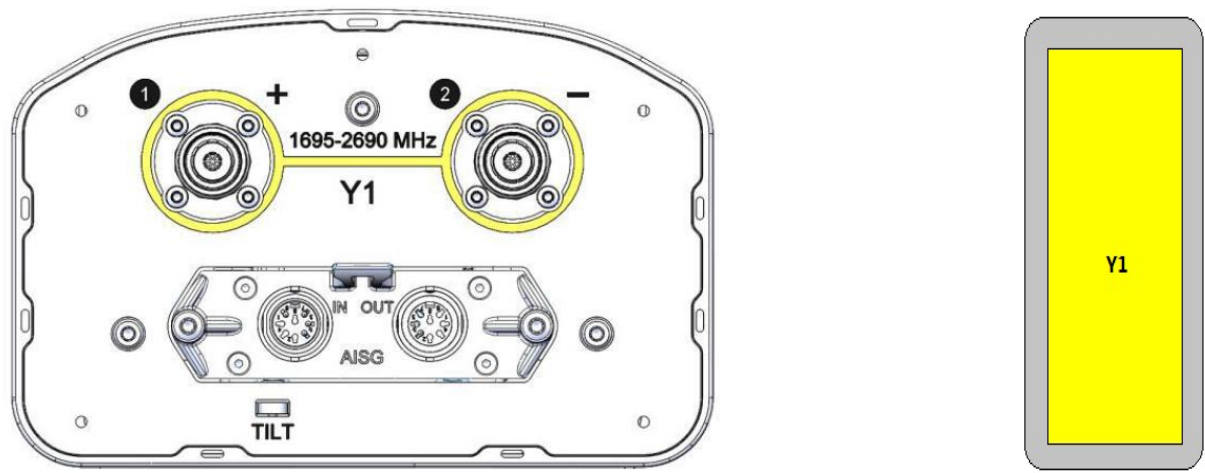


Pattern (Sample for reference)

1695-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1695-2690	/	SRET	RB.....XYYxxxx-Y1

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	70-1	2.5 kg / 5.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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- 698-960 + 1695-2690 MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960		1695-2690				
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	Mid Tilt	dBi	14.1	14.2	15.3	15.5	15.7	16.6
	Over All Tilts		14.2±0.5	14.2±0.5	15.3±0.5	15.6±0.5	15.8±0.5	16.6±0.5
Polarization		°	±45°					
Horizontal Pattern								
3dB Azimuth Beamwidth		°	67.5±3	64±3	63±3	68±5	69±5	66±4
F/B Ratio Co-polar(180°±30°)		dB	> 27	> 28	> 28	> 31	> 31	> 29
Cross-Polar Discrimination								
At Mechanical Boresight 0°			> 20	> 21	> 17	> 19	> 19	> 18
Over Sector ±60°			> 10	> 13	> 8	> 7	> 6	> 6
Vertical Pattern								
3dB Elevation Beamwidth		°	14.5±1.5	13.0±0.8	10.8±0.8	9.6±0.8	8.2±0.2	7.6±0.5
Electrical Downtilt			0-10		0-10			
1st Upper Sidelobe Suppression		dB	> 16		> 17			
RF Parameters								
VSWR			< 1.5					
Intra - Cluster Isolation		dB	> 27		> 27			
Inter - Cluster Isolation			> 28					
3rd PIM(2 x 43 dBm)		dBc	< -153					
Impedance		Ω	50					
Maximum Effective Power per Port		W	500		300			

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA11.1)

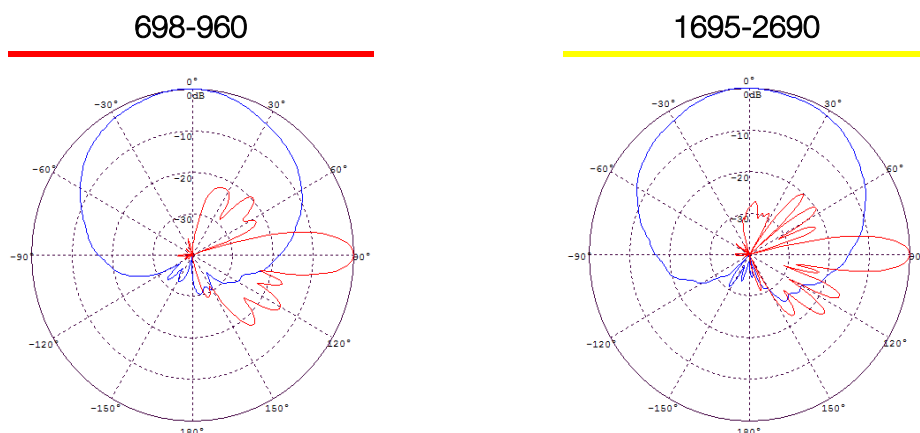
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	16.5 kg	36.4 lb
Shipping Weight	21.3 kg	47.0 lb
Antenna Dimensions (H x W x D)	1449 x 350 x 200 mm	57.0 x 13.8 x 7.9 in
Packing Size (H x W x D)	1590 x 435 x 350 mm	62.6 x 17.1 x 13.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	364 / 176 / 465 N	82 / 40 / 105 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



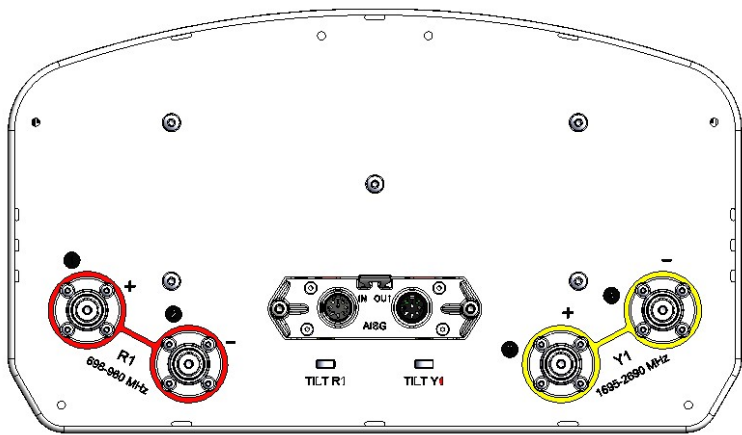
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XYyxxxx-MM
●Y1	3 - 4	1695-2690	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.24 kg / 4.9 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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GWD-21

4 Port Antenna / 1L1H / 2.0m

PROSE

- 698-960 + 1695-2690 MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)		698-960		1695-2690					
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1	Mid Tilt	dBi	15.3	15.6				
		Over All Tilts		15.2±0.5	15.6±0.5				
	Y1	Mid Tilt				16.1	16.4	16.5	17.1
		Over All Tilts				16.0±0.6	16.3±0.4	16.4±0.5	17.0±0.5
Polarization			°	±45°					
Horizontal Pattern									
3dB Azimuth Beamwidth			°	66±2	63±2	65±5	67±5	62±5	59±5
Front to Back Ratio, Total Power, 180°±30			dB	> 28	> 30	> 25	> 28	> 25	> 25
Cross-Polar Discrimination At Mechanical Boresight 0°				> 22	> 20	> 20	> 20	> 18	> 20
Over Sector ±60°				> 12	> 11	> 6	> 8	> 6	> 6
Vertical Pattern									
3dB Elevation Beamwidth			°	11.6±1.4	9.8±0.8	6.4±0.4	5.5±0.5	5.0±0.3	4.7±0.3
Electrical Downtilt				0-10		0-10			
1st Upper Sidelobe Suppression			dB	> 17		> 18			
RF Parameters									
VSWR				< 1.5					
Intra - Cluster Isolation			dB	27		27			
Inter - Cluster Isolation				27					
3rd PIM(2 x 43 dBm)			dBc	< -153					
Impedance			Ω	50					
Maximum Effective Power Per Port			W	500		300			

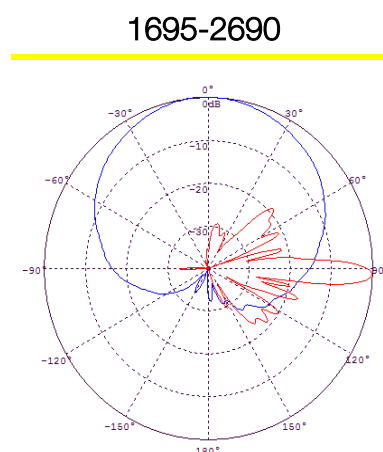
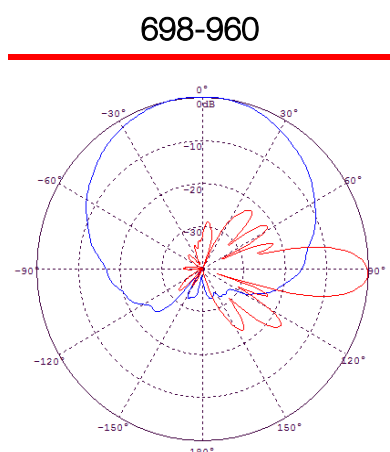
— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA)

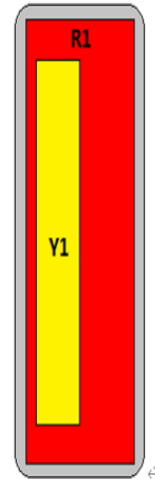
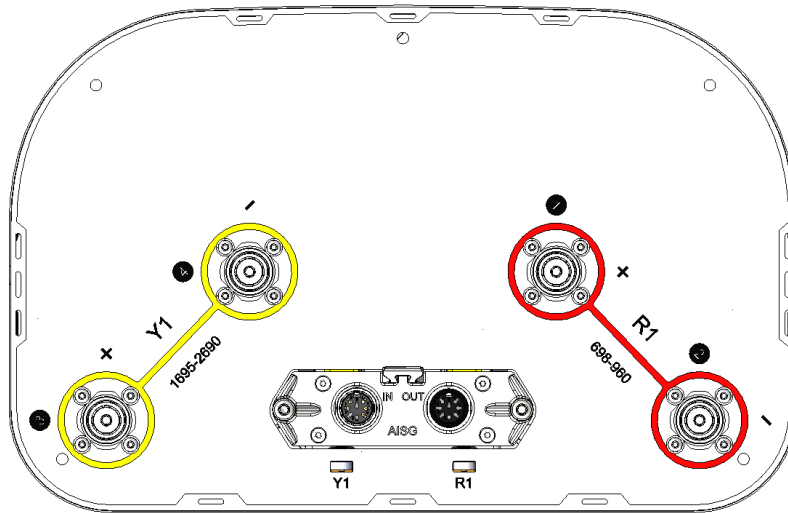
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	16.0 kg	35.3 lb
Shipping Weight	24.0 kg	52.9 lb
Antenna Dimensions (H x W x D)	1995 x 300 x 190 mm	78.5 x 11.8 x 7.5 in
Packing Size (H x W x D)	2115 x 369 x 337 mm	83.3 x 14.5 x 13.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	325 / 277 / 515 N	73 / 62 / 116 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F

RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●Y1	3 - 4	1695-2690	1	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg/9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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- 698-960+1695-2690 MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		698-960			1695-2690			
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	Mid Tilt	dBi	16.3	16.8	17.3	17.5	17.7	18.3
	Over All Tilts		16.4±0.5	16.9±0.5	17.3±0.5	17.6±0.4	17.8±0.4	18.3±0.5
Polarization		°	±45°					
Horizontal Pattern								
3dB Azimuth Beamwidth		°	66±2	63±2	62±5	68±5	69±5	64±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 23	> 24	> 24	> 25	> 24	> 24
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 20	> 17	> 18	> 18	> 20
Over Sector ±60°			> 10	> 13	> 8	> 10	> 6	> 8
Vertical Pattern								
3dB Elevation Beamwidth		°	8.0±1.0	6.9±0.4	6.4±0.4	5.5±0.5	5.0±0.3	4.7±0.3
Electrical Downtilt			0-10		0-10			
1st Upper Sidelobe Suppression		dB	> 17		> 17			
RF Parameters								
VSWR			< 1.5					
Intra - Cluster Isolation		dB	> 28		> 28			
Inter - Cluster Isolation			> 28					
3rd PIM(2 x 43 dBm)		dBc	< -153					
Impedance		Ω	50					
Maximum Effective Power per Port		W	500		250			

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA 11.1)

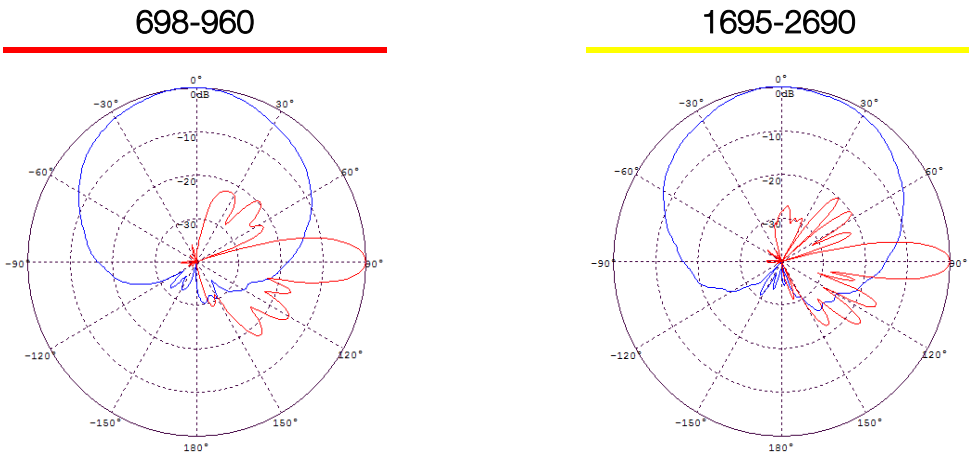
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	24.5 kg	55.1 lb
Shipping Weight	37.2 kg	82.0 lb
Antenna Dimensions (H x W x D)	2690 x 350 x 200 mm	105.9 x 13.8 x 7.9 in
Packing Size (H x W x D)	2840 x 435 x 350 mm	111.8 x 17.1 x 13.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	718 / 377 / 918 N	161 / 85 / 206 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



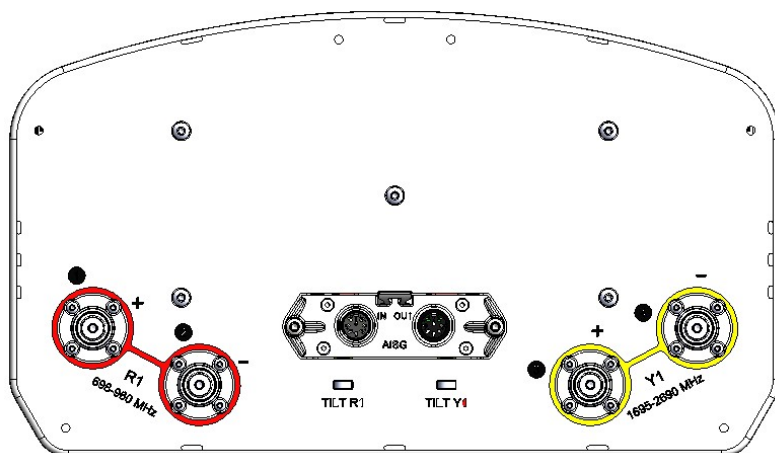
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XYyxxxx-MM
●Y1	3 - 4	1695-2690	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

— Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001

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2GD-21-N45

4 Port Antenna / 2L / 2.0m

PROSE

- 2 x (698-960) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		2 x (698-960)			
		698-806	790-896	880-960	
Gain	Mid Tilt	dBi	14.6	15.0	15.3
	Over All Tilts		14.5±0.4	14.9±0.5	15.2±0.5
Polarization		°	±45°		
Horizontal Pattern					
3dB Azimuth Beamwidth		°	66±6	60±5	57±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 20	> 21	> 21
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 23	> 22
Over Sector ±60°			> 10	> 9	> 7
Vertical Pattern					
3dB Elevation Beamwidth		°	11.3±0.9	10.0±0.8	9.0±0.7
Electrical Downtilt			0-10		
1st Upper Sidelobe Suppression		dB	> 16		
RF Parameters					
VSWR			< 1.5		
Intra - Cluster Isolation		dB	> 26		
Inter - Cluster Isolation			> 26		
3rd PIM(2 x 43 dBm)		dBc	< -153		
Impedance		Ω	50		
Maximum Effective Power Per Port		W	300		

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA 11.1)

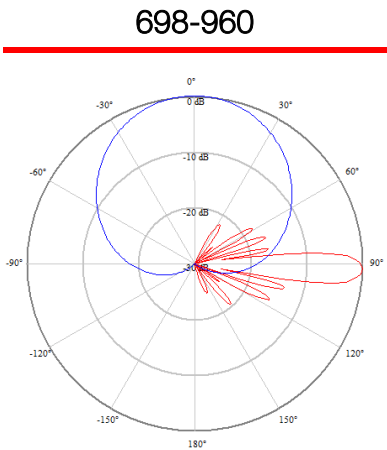
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	23.1 kg	50.9 lb
Shipping Weight	35.0 kg	77.2 lb
Antenna Dimensions (H x W x D)	1999 x 448 x 188 mm	78.7 x 17.6 x 7.4 in
Packing Size (H x W x D)	2149 x 551 x 361 mm	84.6 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	918 / 264 / 956 N	206 / 59 / 215 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

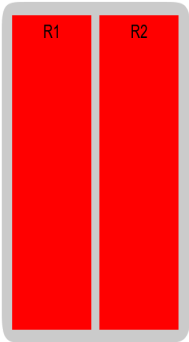
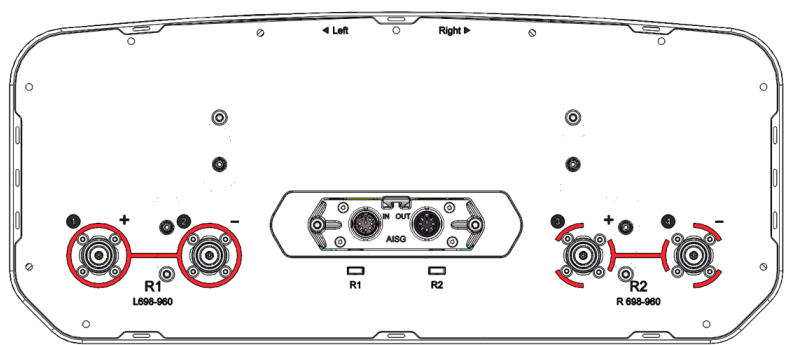


2GD-21-N45

4 Port Antenna / 2L / 2.0m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	2	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2GF-21-N45

4 Port Antenna / 2L / 2.55m

PROSE

- 2 x (698-960) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 12.0)

Frequency(MHz)		2 x (698-960)			
		698-806	790-896	880-960	
Gain	Mid Tilt	dBi	15.2	15.8	16.1
	Over All Tilts		15.1±0.6	15.8±0.5	16.0±0.5
Polarization		°	±45°		
Horizontal Pattern					
3dB Azimuth Beamwidth		°	65±6	59±5	57±5
Front to Back Ratio, Co-polar, 180°±30°		dB	> 20	> 21	> 21
Cross-Polar Discrimination At Mechanical Boresight 0°			> 22	> 23	> 22
Over Sector ±60°			> 9	> 9	> 7
Vertical Pattern					
3dB Elevation Beamwidth		°	9.2±0.8	8.2±0.6	7.5±0.5
Electrical Downtilt			0-10		
1st Upper Sidelobe Suppression		dB	> 18		
RF Parameters					
VSWR			< 1.5		
Intra - Cluster Isolation		dB	28		
Inter - Cluster Isolation			28		
3rd PIM(2 x 43 dBm)		dBc	< -153		
Impedance		Ω	50		
Maximum Effective Power Per Port		W	300		

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA 12.0)

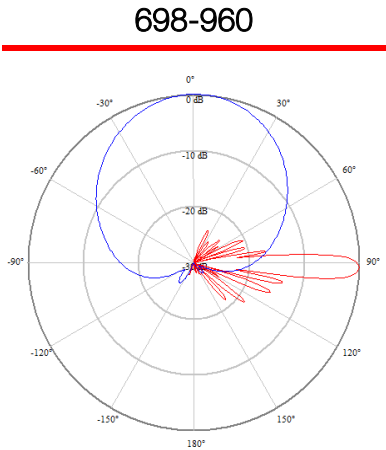
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	27.4 kg	60.4 lb
Shipping Weight	40.5 kg	89.3 lb
Antenna Dimensions (H x W x D)	2550 x 448 x 188 mm	100.4 x 17.6 x 7.4 in
Packing Size (H x W x D)	2695 x 551 x 361 mm	106.1 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1127 / 487 / 1242 N	253 / 109 / 279 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 12.0)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



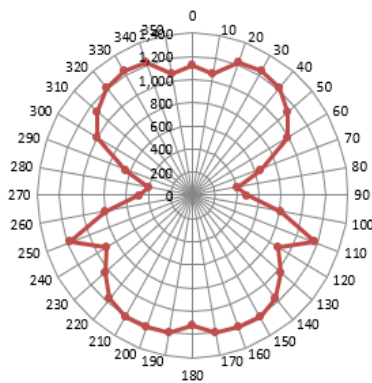
2GF-21-N45

4 Port Antenna / 2L / 2.55m

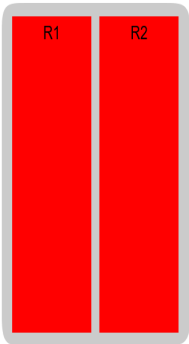
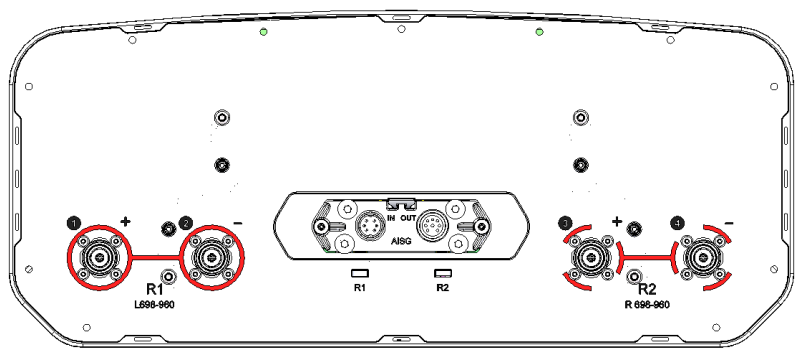
PROSE

Polar Chart

Wind Load @150 km/h



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XXYxxxx-MM
●R2	3 - 4	698-960	2	MRET	RB.....XXYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1kg / 9lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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- 2 x (1710-2690) MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2 x (1710-2690)				
		1710-1990	1920-2200	2200-2490	2490-2690	
Gain	Mid Tilt	dBi	17.4	17.5	17.7	18.1
	Over All Tilts		17.3±0.5	17.5±0.5	17.7±0.5	18.0±0.5
Polarization		°	±45			
Horizontal Pattern						
3dB Azimuth Beamwidth		°	65±5	65±5	65±5	63±5
Cross-Polar Discrimination		dB				
At Mechanical Boresight 0°			> 20	> 20	> 18	> 18
Over Sector ±60°			> 10	> 10	> 10	> 10
Vertical Pattern						
3dB Elevation Beamwidth		°	5.6±0.5	5.0±0.5	4.5±0.5	3.9±0.5
Electrical Downtilt			2-12			
1st Upper Sidelobe Suppression		dB	> 17			
RF Parameters						
VSWR			< 1.5			
Intra - Cluster Isolation		dB	28			
3rd PIM(2 x 43 dBm)		dBc	< -153			
Impedance		Ω	50			
Maximum Effective Power Per Port		W	300			

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA11.1)

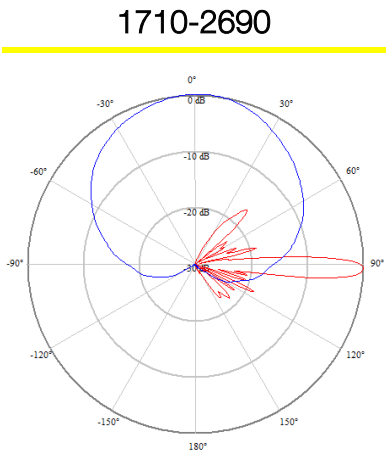
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	11 kg	24.3 lb
Shipping Weight	20.5 kg	45.2 lb
Antenna Dimensions (H x W x D)	1389 x 295 x 115 mm	54.7 x 11.6 x 4.5 in
Packing Size (H x W x D)	1719 x 375 x 241 mm	67.7 x 14.8 x 9.5 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	326 / 89 / 385 N	73 / 20 / 87 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



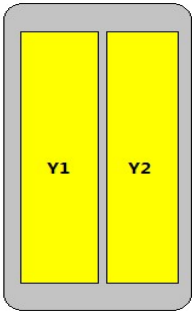
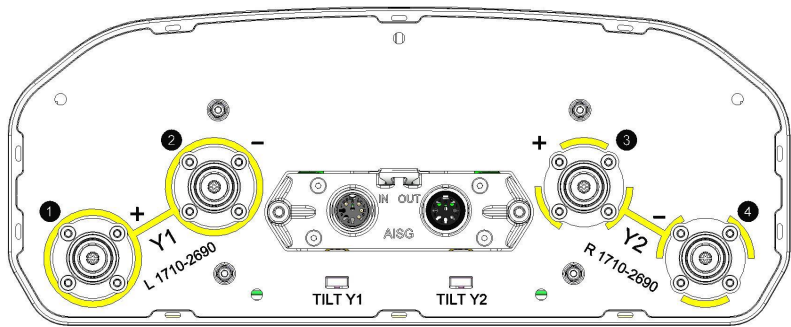
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1710-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	3 - 4	1710-2690	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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- 2 x (1710-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2 x (1710-2690)					
		1710-1990	1920-2200	2200-2490	2490-2690		
Gain	Y1/Y2	Mid Tilt	dBi	18.0	18.6	18.7	18.8
		Over All Tilts		18.3±0.5	18.6±0.5	18.8±0.5	19.0±0.5
Polarization			°	±45			
Horizontal Pattern							
3dB Azimuth Beamwidth			°	65±5	65±5	65±5	63±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 28			
Cross-Polar Discrimination At Mechanical Boresight 0°				> 20	> 20	> 18	> 16
Over Sector ±60°				> 10	> 10	> 10	> 8
Vertical Pattern							
3dB Elevation Beamwidth			°	5.0±0.5	4.5±0.5	4.0±0.5	3.5±0.5
Electrical Downtilt				0-8			
1st Upper Sidelobe Suppression			dB	> 17			
RF Parameters							
VSWR				< 1.5			
Intra - Cluster Isolation			dB	28			
Inter - Cluster Isolation				28			
3rd PIM(2 x 43 dBm)			dBc	< -153			
Impedance			Ω	50			
Maximum Effective Power per Port			W	300			

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA11.1)

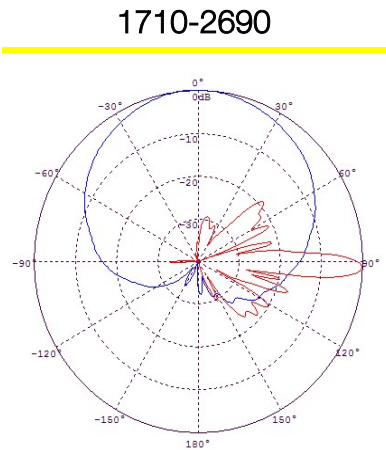
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	14.5 kg	32.0 lb
Shipping Weight	23 kg	50.7 lb
Antenna Dimensions (H x W x D)	2020 x 295 x 115 mm	79.5 x 11.6 x 4.5 in
Packing Size (H x W x D)	2160 x 370 x 280 mm	85.0 x 14.6 x 11.0 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	486 / 140 / 573 N	109 / 31 / 129 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



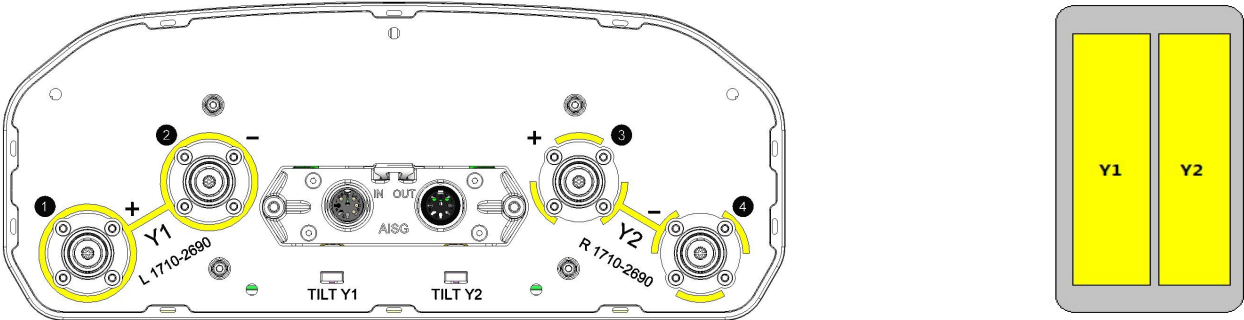
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1710-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	3 - 4	1710-2690	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2TB-21U

4 Port Antenna / 2H / 1.0m

PROSE

- 2x(3300-4200) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		3300-4200	
		3300-3800	3800-4200
Gain	Mid Tilt	17.8	17.9
	Over All Tilts	17.7±0.5	17.8±0.5
Polarization		±45	
Horizontal Pattern			
3dB Azimuth Beamwidth		64±5	64±5
Front to Back Ratio, Total Power, 180°±30°		> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°		> 18	> 18
Over Sector ±60°		> 6	> 7
Vertical Pattern			
3dB Elevation Beamwidth		5.4±0.5	5.0±0.5
Electrical Downtilt		0-10	
1st Upper Sidelobe Suppression		> 16	> 16
RF Parameters			
VSWR		< 1.5	
Intra - Cluster Isolation		26	
3rd PIM(2 x 43 dBm)		< -153	
Impedance		50	
Maximum Effective Power per Port		150	

— Maximum Effective Power Whole Antenna: 400 W.

Mechanical Data (BASTA 11.1)

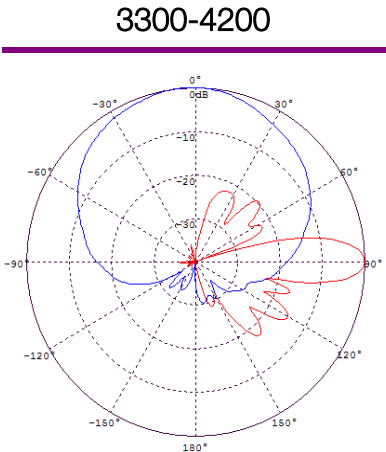
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	ASA	
Radome Color	Light Grey	
Antenna Net Weight	5.8 kg	12.8 lb
Shipping Weight	12.3 kg	26.5 lb
Antenna Dimensions (H x W x D)	998 x 180 x 115 mm	39.3 x 7.1 x 4.5 in
Packing Size (H x W x D)	1148 x 308 x 216 mm	45.2 x 12.1 x 8.5 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	130 / 57 / 157 N	29 / 13 / 35 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



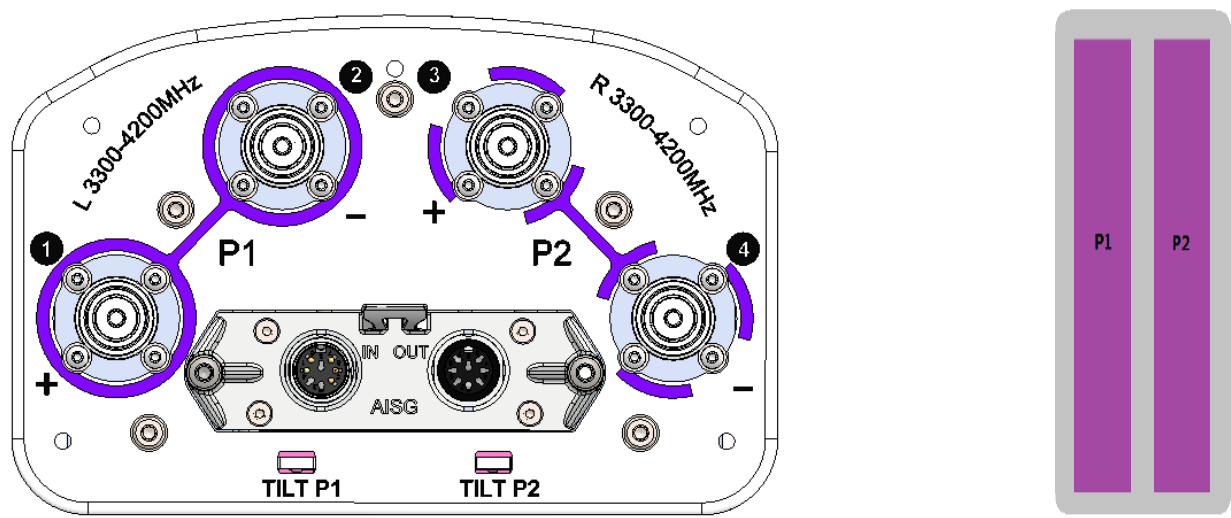
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●P1	1 - 2	3300-4200	1	MRET	RB.....XYyxxxx-MM
●P2	3 - 4	3300-4200	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	70-1	2.4kg	0-10

Compliance

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G2WB-21

6 Port Antenna / 1L2H / 0.9m

PROSE

- 698-960+2 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		698-960		2 x (1695-2690)					
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1	Mid Tilt	dBi	12.6	12.7				
		Over All Tilts		12.4±0.5	12.5±0.5				
	Y1/Y2	Mid Tilt				14.0	14.4	14.5	14.8
		Over All Tilts				13.8±0.5	14.2±0.5	14.3±0.5	14.6±0.5
Polarization			°	±45°					
Horizontal Pattern									
3dB Azimuth Beamwidth			°	66±5	65±5	60±5	64±6	68±5	62±5
Front to Back Ratio, Co-polar, 180°±30°			dB	> 25	> 26	> 25	> 25	> 25	> 25
Cross-Polar Discrimination At Mechanical Boresight 0°				> 17	> 18	> 17	> 18	> 17	> 18
Over Sector ±60°				> 10	> 10	> 8	> 10	> 6	> 7
Vertical Pattern									
3dB Elevation Beamwidth			°	25.5±4.0	21.0±2.0	16.5±1.5	14.4±1.5	13.0±1.0	12.5±1.0
Electrical Downtilt				2-12					
1st Upper Sidelobe Suppression			dB	> 15		> 15			
RF Parameters									
VSWR				< 1.5					
Intra - Cluster Isolation			dB	25		25			
Inter - Cluster Isolation				30					
3rd PIM(2 x 43 dBm)			dBc	< -153					
Impedance			Ω	50					
Maximum Effective Power Per Port			W	500		250			

— Maximum Effective Power Whole Antenna: 800 W.

G2WB-21

6 Port Antenna / 1L2H / 0.9m

PROSE

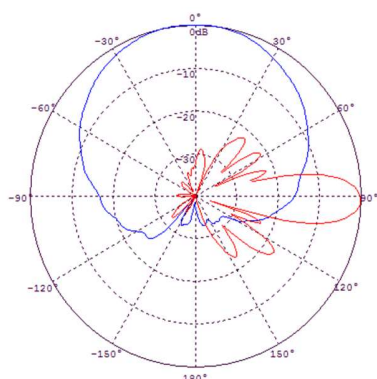
Mechanical Data (BASTA 11.1)

Connector Type	6 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	11.7 kg	25.8 lb
Shipping Weight	18.8 kg	41.4 lb
Antenna Dimensions (H x W x D)	889 x 350 x 200 mm	35.0 x 13.8 x 7.9 in
Packing Size (H x W x D)	1015 x 435 x 350 mm	40.0 x 17.1 x 13.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Rear)	216 / 105 / 277 N	49 / 24 / 62 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F

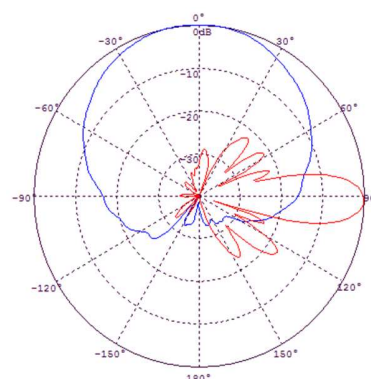


Pattern (Sample for reference)

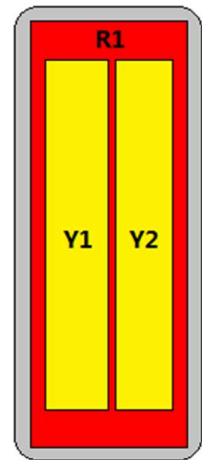
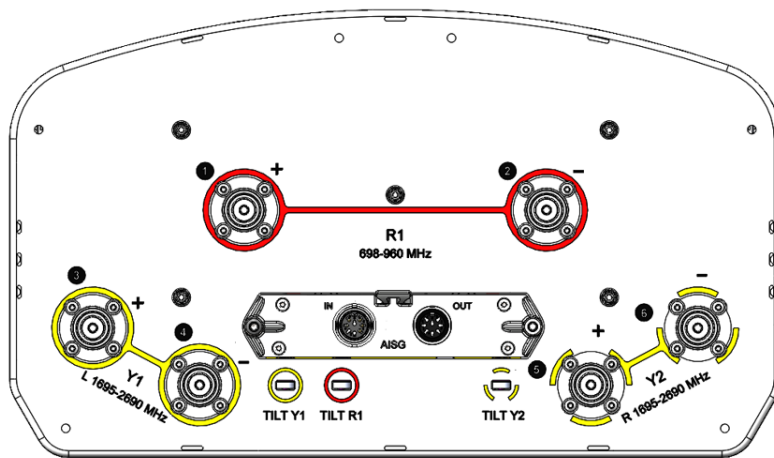
698-960



1695-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●Y1	3 - 4	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	5 - 6	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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G2WC-21

6 Port Antenna / 1L2H / 1.45m

PROSE

- 698-960+2 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960		2 x (1695-2690)					
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1	Mid Tilt	dBi	14.5	14.6				
		Over All Tilts		14.4±0.5	14.6±0.5				
	Y1/Y2	Mid Tilt				16.6	17.0	17.4	17.5
		Over All Tilts				16.6±0.5	16.9±0.5	17.3±0.5	17.4±0.5
Polarization			°	±45°					
Horizontal Pattern									
3dB Azimuth Beamwidth			°	67±3	64±3	63±3	68±5	69±5	66±4
F/B Ratio Co-polar(180°±30°)			dB	> 26	> 27	> 27	> 29	> 29	> 28
Cross-Polar Discrimination									
At Mechanical Boresight 0°				> 20	> 21	> 17	> 19	> 19	> 19
Over Sector ±60°				> 10	> 13	> 8	> 8	> 8	> 8
Vertical Pattern									
3dB Elevation Beamwidth			°	14.5±1.5	12.3±0.8	7.8±0.8	6.6±0.8	6.2±0.2	5.6±0.5
Electrical Downtilt				0-10		0-10			
1st Upper Sidelobe Suppression			dB	> 17		> 17			
RF Parameters									
VSWR				< 1.5					
Intra - Cluster Isolation			dB	> 27					
Inter - Cluster Isolation				> 28					
3rd PIM(2 x 43 dBm)			dBc	< -153					
Impedance			Ω	50					
Maximum Effective Power Per Port			W	500		300			

— Maximum Effective Power Whole Antenna: 800 W.

G2WC-21

6 Port Antenna / 1L2H / 1.45m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	6 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	14.5 kg	32.0 lb
Shipping Weight	22.1 kg	48.7 lb
Antenna Dimensions (H x W x D)	1449 x 350 x 200 mm	57.0 x 13.8 x 7.9 in
Packing Size (H x W x D)	1590 x 435 x 350 mm	62.6 x 17.1 x 13.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	364 / 176 / 465 N	82 / 40 / 105 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F

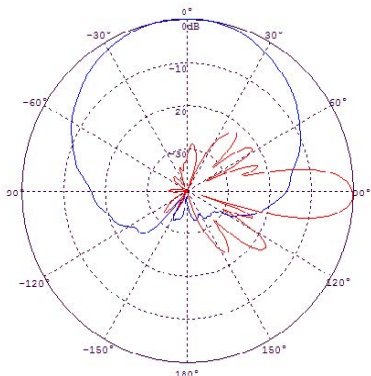


RET Specification (BASTA11.1)

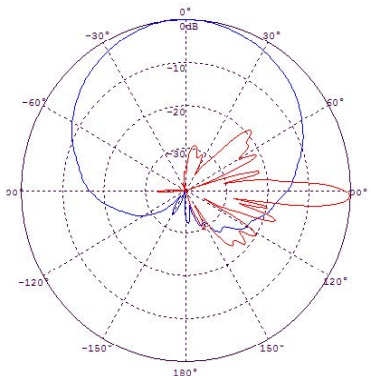
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

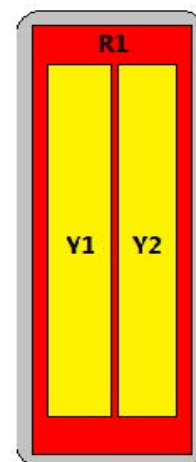
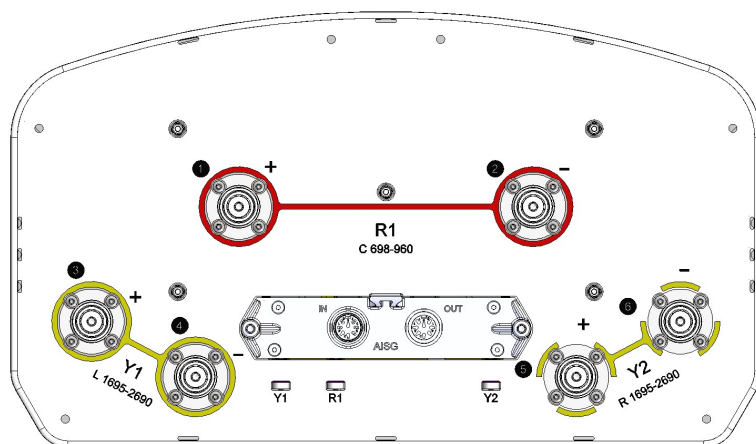
698-960



1695-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●Y1	3 - 4	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	5 - 6	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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G2WD-21

6 Port Antenna / 1L2H / 2.0m

PROSE

- 698-960 + 2 x (1695-2690) MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		698-960		2 x (1695-2690)					
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1	Mid Tilt	dBi	15.5	15.9				
		Over All Tilts		15.5±0.5	15.8±0.5				
	Y1/Y2	Mid Tilt				17.5	17.7	17.8	18.4
		Over All Tilts				17.4±0.6	17.6±0.4	17.7±0.5	18.3±0.5
Polarization			°	±45°					
Horizontal Pattern									
3dB Azimuth Beamwidth			°	67±3	65±3	62±5	69±5	69±5	65±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 27	> 28	> 27	> 28	> 28	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°				> 18	> 20	> 17	> 19	> 21	> 20
Over Sector ±60°				> 10	> 12	> 8	> 10	> 7	> 7
Vertical Pattern									
3dB Elevation Beamwidth			°	10.0±1.1	8.6±0.8	6.3±0.4	5.6±0.5	5.0±0.3	4.6±0.3
Electrical Downtilt				0-10		0-10			
1st Upper Sidelobe Suppression			dB	> 16					
RF Parameters									
VSWR				< 1.5					
Intra - Cluster Isolation			dB	27		27			
Inter - Cluster Isolation				27					
3rd PIM(2 x 43 dBm)			dBc	< -153					
Impedance			Ω	50					
Maximum Effective Power Per Port			W	500		250			

— Maximum Effective Power Whole Antenna: 800 W.

G2WD-21

6 Port Antenna / 1L2H / 2.0m

PROSE

Mechanical Data (BASTA 11.1)

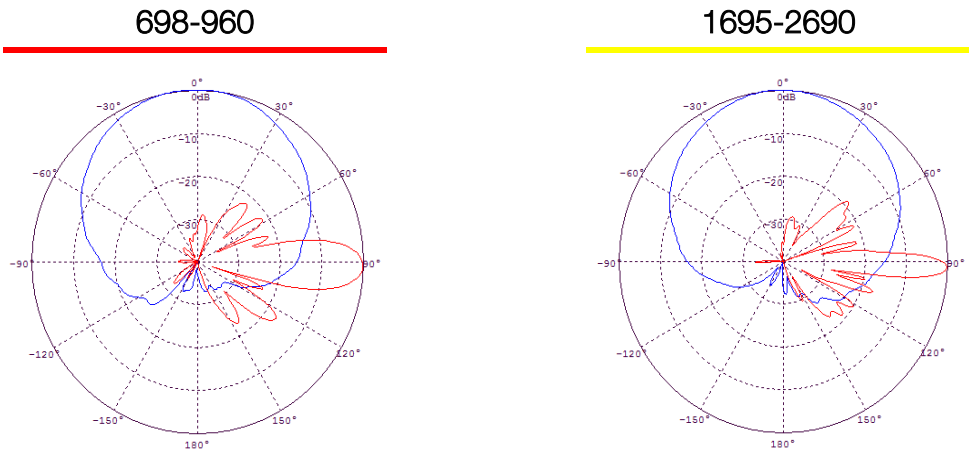
Connector Type	6 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	17.0 kg	37.5 lb
Shipping Weight	25.2 kg	55.6 lb
Antenna Dimensions (H x W x D)	1995 x 300 x 190 mm	78.5 x 11.8 x 7.5 in
Packing Size (H x W x D)	2115 x 369 x 337 mm	83.3 x 14.5 x 13.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	325 / 277 / 515 N	73 / 62 / 116 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



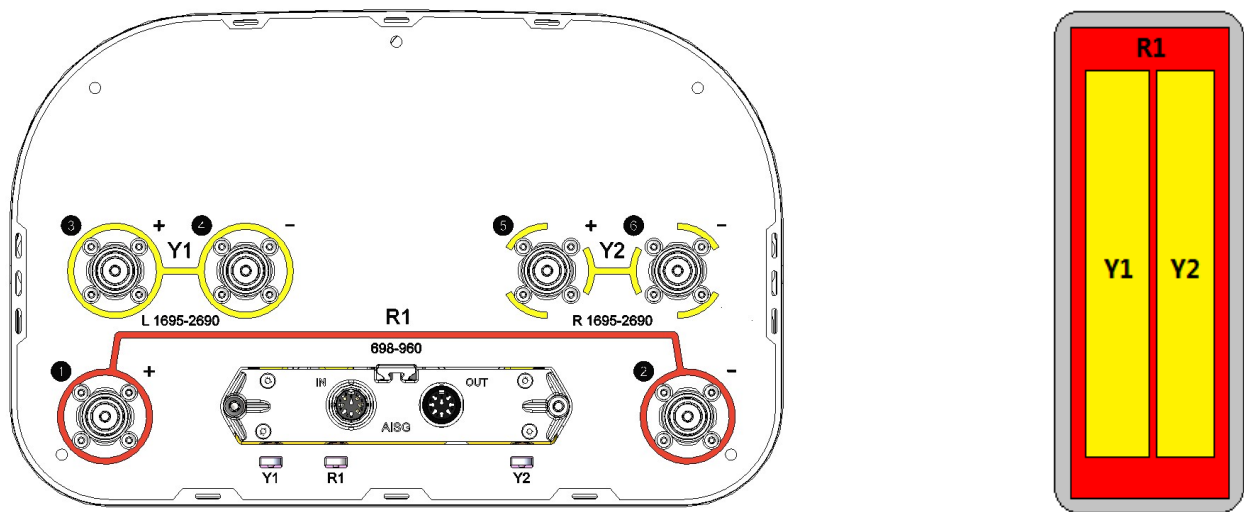
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●Y1	3 - 4	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	5 - 6	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg/9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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G2WF-21

6 Port Antenna / 1L2H / 2.69m

PROSE

- 698-960 + 2 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960		2 x (1695-2690)					
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1	Mid Tilt	dBi	16.6	16.9				
		Over All Tilts		16.5±0.5	16.9±0.5				
	Y1/Y2	Mid Tilt				17.4	17.9	18.0	18.4
		Over All Tilts				17.3±0.5	17.8±0.4	17.9±0.4	18.3±0.5
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	66±5	63±2	60±5	66±5	69±5	62±5	
Front to Back Ratio, Total Power, 180°±30°		dB	> 24	> 25	> 26	> 28	> 27	> 28	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 18	> 17	> 18	> 18	> 20	
Over Sector ±60°			> 10	> 13	> 8	> 10	> 6	> 7	
Vertical Pattern									
3dB Elevation Beamwidth		°	8.0±1.0	6.9±0.4	6.4±0.4	5.5±0.5	5.0±0.3	4.7±0.3	
Electrical Downtilt			0-10						
1st Upper Sidelobe Suppression		dB	> 17						
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	> 28						
Inter - Cluster Isolation			R1//Y1,Y2 > 28						
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power Per Port		W	500		250				

— Maximum Effective Power Whole Antenna: 800 W.

G2WF-21

6 Port Antenna / 1L2H / 2.69m

PROSE

Mechanical Data (BASTA11.1)

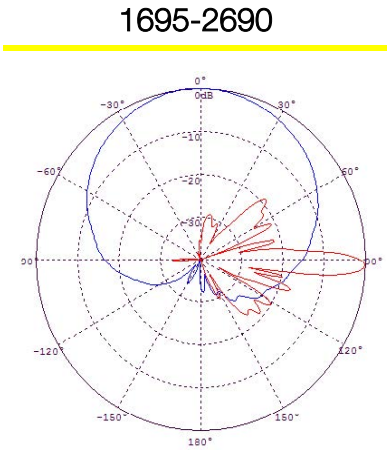
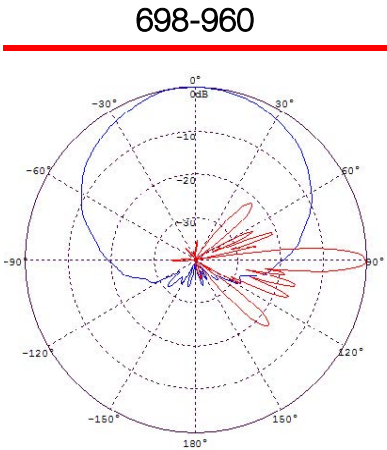
Connector Type	6 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	28 kg	61.7 lb
Shipping Weight	34.5 kg	76.0 lb
Antenna Dimensions (H x W x D)	2690 x 350 x 200 mm	105.9 x 13.8 x 7.9 in
Packing Size (H x W x D)	2840 x 435 x 350 mm	111.8 x 17.1 x 13.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	718 / 377 / 918 N	161 / 85 / 206 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



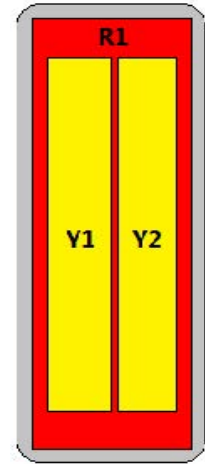
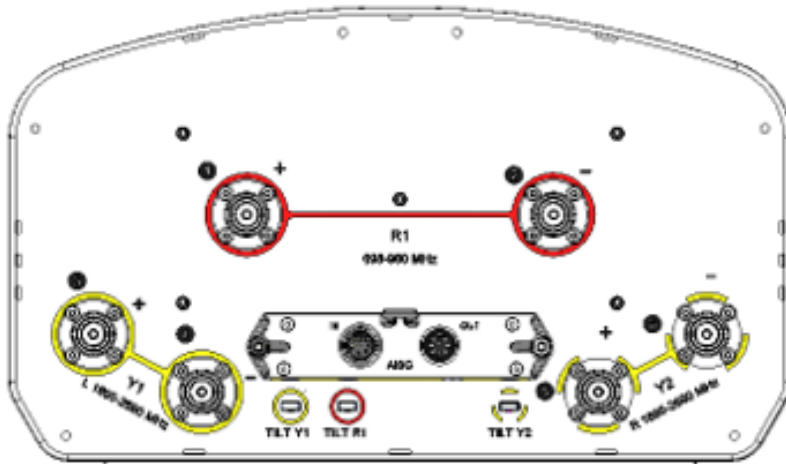
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●Y1	3 - 4	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	5 - 6	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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3WC-21

6 Port Antenna / 3H / 1.48m

PROSE

- 1710-2690 MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		1695-2690				
		1695-1920	1920-2180	2300-2400	2500-2690	
Gain Y1/Y2/Y3	Mid Tilt	dBi	17.4	17.5	17.6	17.8
	Over All Tilts		17.3±0.5	17.5±0.5	17.7±0.5	18.0±0.5
Polarization		°	±45			
Horizontal Pattern						
3dB Azimuth Beamwidth		°	65±5	65±5	63±5	60±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 25	> 26	> 30	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 20	> 18	> 18
Over Sector ±60°			> 10	> 10	> 10	> 10
Vertical Pattern						
3dB Elevation Beamwidth		°	6.8±0.6	6.0±0.6	5.2±0.5	4.8±0.5
Electrical Downtilt			2-12			
1st Upper Sidelobe Suppression		dB	> 18			
RF Parameters						
VSWR			< 1.5			
Intra - Cluster Isolation		dB	28			
Inter - Cluster Isolation			30			
3rd PIM(2 x 43 dBm)		dBc	< -153			
Impedance		Ω	50			
Maximum Effective Power per Port		W	300			

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA11.1)

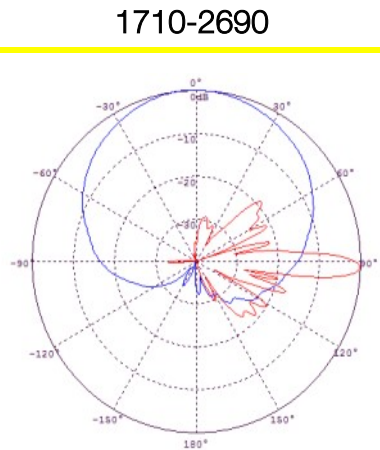
Connector Type	6 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	18 kg	39.7 lb
Shipping Weight	20.3 kg	44.1 lb
Antenna Dimensions (H x W x D)	1480 x 379 x 115 mm	58.3 x 14.9 x 4.5 in
Packing Size (H x W x D)	1620 x 455 x 271 mm	63.8 x 17.9 x 10.7 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	486 / 98 / 557 N	109 / 22 / 125 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



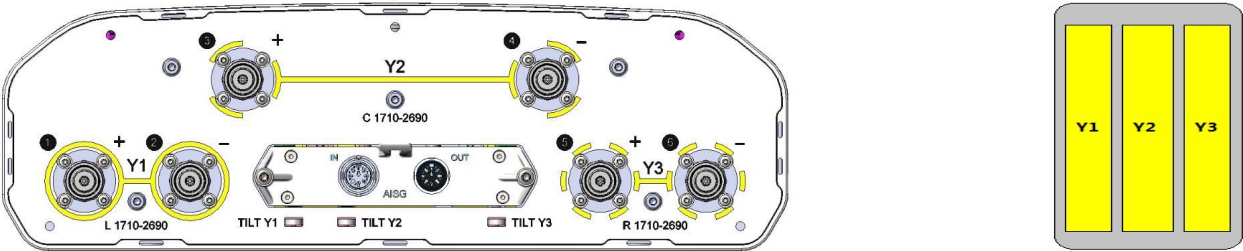
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1710-2690	/	SRET	RB.....XYYxxxxx-Y1
●Y2	3 - 4	1710-2690	/	SRET	RB.....XYYxxxxx-Y2
●Y3	5 - 6	1710-2690	/	SRET	RB.....XYYxxxxx-Y3

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-1	4.5 kg / 9.9 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G3WC-21

8 Port Antenna / 1L3H / 1.45m

PROSE

- 698-960 + 3x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		698-960		3 x (1695-2690)			
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690
Gain	R1/Y2 Mid Tilt	14.1	14.4	16.5	17.0	17.0	17.4
	Over All Tilts	14.1±0.4	14.4±0.4	16.4±0.5	16.9±0.4	17.1±0.5	17.4±0.5
	Y1/Y3 Mid Tilt	/	/	16.8	17.1	17.4	17.9
	Over All Tilts	/	/	16.7±0.4	17.2±0.4	17.4±0.3	17.8±0.5
Polarization		°	±45°				

Horizontal Pattern

3dB Azimuth Beamwidth(R1/Y2)	°	62±3	56±3	68±5	60±4	62±4	60±5
3dB Azimuth Beamwidth(Y1/Y3)	°	/	/	70±5	65±4	61±4	62±5
Front to Back Ratio, Total Power, 180°±30°		> 26	> 27	> 26	> 28	> 28	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°Over Sector ±60°	dB	> 20 > 10	> 20 > 7	> 20 > 9	> 20 > 10	> 20 > 6	> 20 > 8

Vertical Pattern

3dB Elevation Beamwidth	°	16.0±1.8	14±1.0	7.5±0.5	6.2±0.5	5.6±0.4	5.4±0.4
Electrical Downtilt		0-10		0-10			
1st Upper Sidelobe Suppression	dB	> 15		> 17			

RF Parameters

VSWR		< 1.5	
Intra - Cluster Isolation	dB	> 27	> 27
Inter - Cluster Isolation		> 28	
3rd PIM(2 x 43 dBm)	dBc	< -153	
Impedance	Ω	50	
Maximum Effective Power per Port	W	500	300

— Maximum Effective Power Whole Antenna: 1200 W.

G3WC-21

8 Port Antenna / 1L3H / 1.45m

PROSE

Mechanical Data (BASTA 11.1)

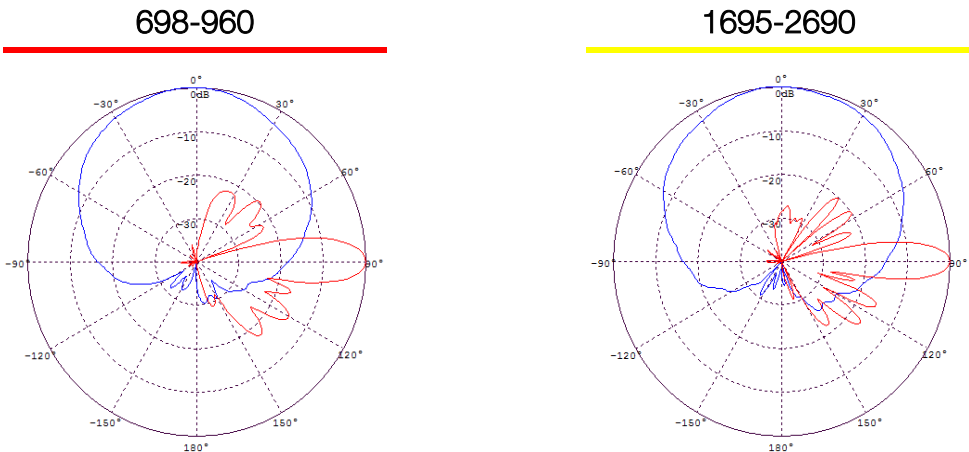
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	17.3 kg	38.1 lb
Shipping Weight	26.0 kg	57.3 lb
Antenna Dimensions (H x W x D)	1449 x 379 x 190 mm	57.0 x 14.9 x 7.5 in
Packing Size (H x W x D)	1565 x 455 x 337 mm	61.6 x 17.9 x 13.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	505 / 169 / 525 N	114 / 38 / 118 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



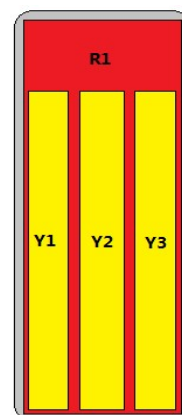
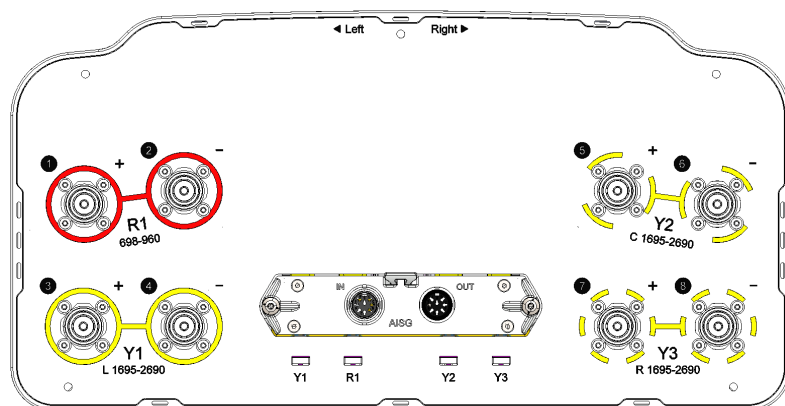
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	/	SRET	RB.....XYYxxxxx-R1
● Y1	3 - 4	1695-2690	/	SRET	RB.....XYYxxxxx-Y1
● Y2	5 - 6	1695-2690	/	SRET	RB.....XYYxxxxx-Y2
● Y3	7 - 8	1695-2690	/	SRET	RB.....XYYxxxxx-Y3

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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G3WD-21

8 Port Antenna / 1L3H / 2.0m

PROSE

- 698-960 + 3x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960		3×(1695-2690)					
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1/Y3	Mid Tilt	dBi	15.5	15.8	15.2	15.3	15.5	16.1
		Over All Tilts		15.5±0.3	15.8±0.5	15.1±0.5	15.2±0.5	15.4±0.4	16.0±0.5
	Y1/Y2	Mid Tilt		/	/	15.4	15.2	15.4	16.0
		Over All Tilts		/	/	15.4±0.5	15.2±0.5	15.4±0.4	16.0±0.5
Polarization		°	±45						
Horizontal Pattern									
3dB Azimuth Beamwidth(R1/Y2)		°	67.5±3.5	64.5±2	62±5	69±5	69±5	63±5	
Front to Back Ratio, Total Power, 180°±30°		dB	> 27	> 28	> 28	> 29	> 27	> 28	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 20	> 18	> 20	> 20	> 18	
Over Sector ±60°			> 10	> 12	> 8	> 8	> 6	> 6	
Vertical Pattern									
3dB Elevation Beamwidth		°	10.0±1.4	8.6±0.7	10.9±0.7	9.5±1.0	8.5±0.5	7.6±0.5	
Electrical Downtilt			0-10		0-10				
1st Upper Sidelobe Suppression		dB	> 16		> 17				
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	> 27		> 27				
Inter - Cluster Isolation			> 30						
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power per Port		W	500		300				

— Maximum Effective Power Whole Antenna: 800 W.

G3WD-21

8 Port Antenna / 1L3H / 2.0m

PROSE

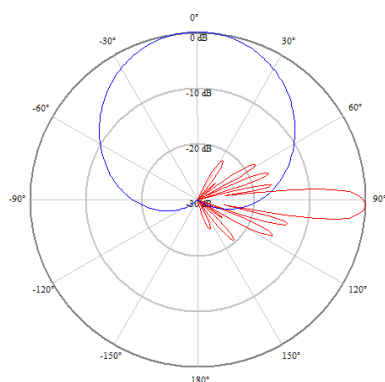
Mechanical Data (BASTA11.1)

Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	25 kg	55.1 lb
Antenna Dimensions (H x W x D)	1995 x 350 x 200 mm	78.5 x 13.8 x 7.9 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	495 / 262 / 633 N	111 / 59 / 142 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F

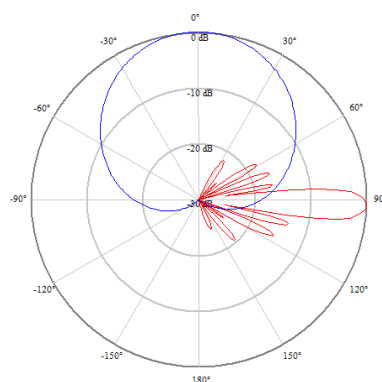


Pattern (Sample for reference)

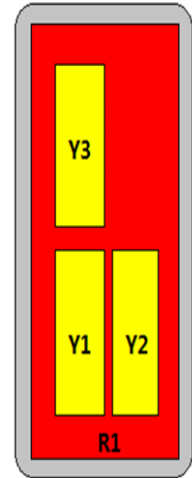
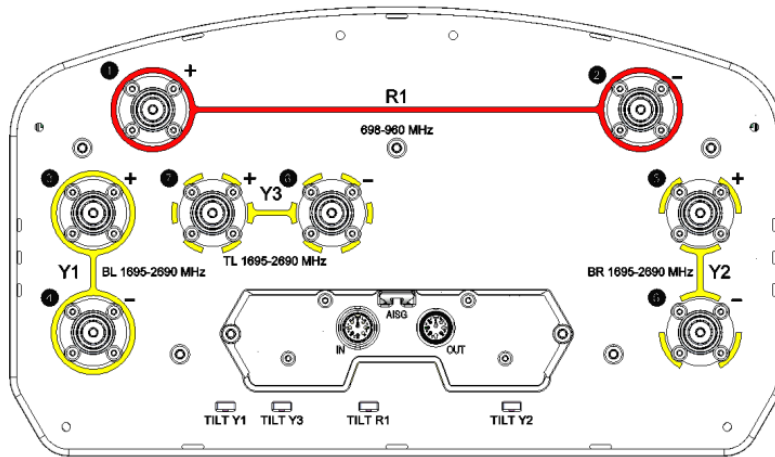
698-960



1695-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	3	MRET	RB.....XYYxxxx-MM
● Y1	3 - 4	1695-2690	1	MRET	RB.....XYYxxxx-MM
● Y2	5 - 6	1695-2690	4	MRET	RB.....XYYxxxx-MM
● Y3	7 - 8	1695-2690	2	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-1	4.5 kg / 9.9 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G3WF-21

8 Port Antenna / 1L3H / 2.69m

PROSE

- 698-960 + 3 x (1695-2690) MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		(698-960)		3 x (1695-2690)					
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1	Mid Tilt	dBi	16.5	17.0				
		Over All Tilts		16.4±0.5	16.9±0.4				
	Y1/Y2	Mid Tilt				17.0	17.4	17.7	18.1
		Over All Tilts				16.9±0.5	17.3±0.5	17.5±0.4	18.0±0.5
	Y3	Mid Tilt				16.6	17.2	17.2	17.7
		Over All Tilts				16.5±0.5	17.0±0.5	17.1±0.4	17.6±0.5
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	67±2	64±2	60±4	68±5	69±4	62±6	
Front to Back Ratio, Total Power, 180°±30°			> 27	> 28	> 28	> 29	> 28	> 28	
Cross-Polar Discrimination At Mechanical Boresight 0°		dB	> 20	> 20	> 17	> 18	> 18	> 20	
Over Sector ±60°			> 10	> 13	> 8	> 8	> 6	> 8	
Vertical Pattern									
3dB Elevation Beamwidth		dB	8.0±1.0	6.9±0.6	7.1±0.4	6.2±0.5	5.6±0.3	5.1±0.6	
Electrical Downtilt			0-10	0-10					
1st Upper Sidelobe Suppression			> 17	> 17					
RF Parameters									
VSWR		°	< 1.5						
Intra - Cluster Isolation			28	28					
Inter - Cluster Isolation		dB	28	30					
3rd PIM(2 x 43 dBm)			< -153						
Impedance		dB	50						
Maximum Effective Power Per Port			500	250					

— Maximum Effective Power Whole Antenna: 800 W.

G3WF-21

8 Port Antenna / 1L3H / 2.69m

PROSE

Mechanical Data (BASTA 11.1)

Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	28 kg	61.7 lb
Shipping Weight	34.5 kg	76.0 lb
Antenna Dimensions (H x W x D)	2690 x 350 x 200 mm	105.9 x 13.8 x 7.9 in
Packing Size (H x W x D)	2825 x 435 x 350 mm	111.2 x 17.1 x 13.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	718 / 377 / 918 N	161 / 85 / 206 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F

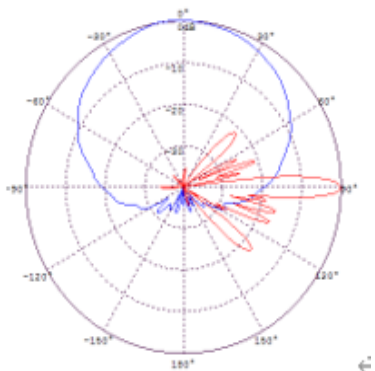


RET Specification (BASTA 11.1)

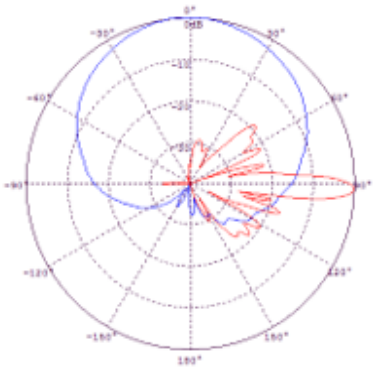
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

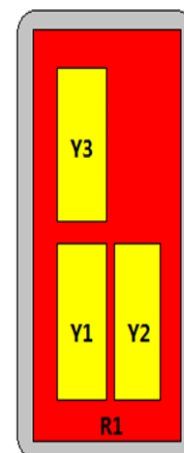
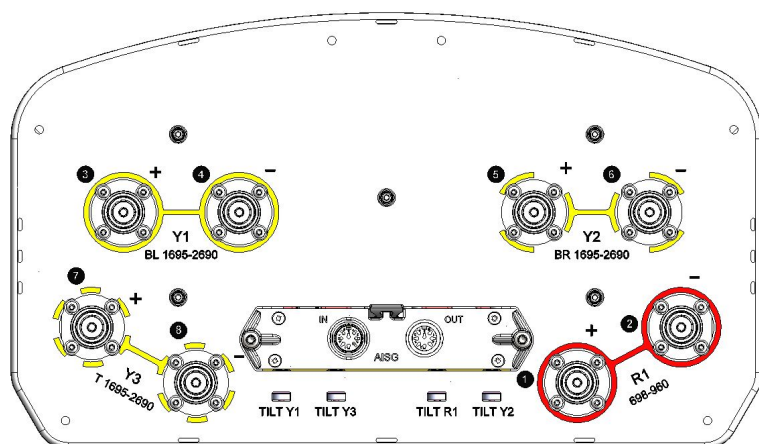
698-960



1695-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	3	MRET	RB.....XYYxxxxx-MM
● Y1	3 - 4	1695-2690	1	MRET	RB.....XYYxxxxx-MM
● Y2	5 - 6	1695-2690	4	MRET	RB.....XYYxxxxx-MM
● Y3	7 - 8	1695-2690	2	MRET	RB.....XYYxxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1kg / 9lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2G2WC-21-N45

8 Port Antenna / 2L2H / 1.5m

PROSE

- 2x(698-960) + 2x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		2×(698-960)			2×(1695-2690)				
		698-806	790-862	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	R1/R2 Mid Tilt	dBi	13.3	13.6	13.7				
	Over All Tilts		13.2±0.5	13.5±0.5	13.6±0.5				
	Y1/Y2 Mid Tilt					16.3	17.3	17.3	17.8
	Over All Tilts					16.2±0.5	17.2±0.3	17.3±0.4	17.8±0.5
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	67±5	63±5	66±5	65±5	60±5	60±5	59±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 20	> 20	> 22	> 25	> 27	> 27	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 19	> 19	> 18	> 18	> 18	> 18
Over Sector ±60°			> 8	> 7	> 8	> 9	> 8	> 6	> 6
Vertical Pattern									
3dB Elevation Beamwidth		°	15.0±1.4	14.6±1.3	13.2±1.2	6.8±0.5	6.1±0.5	5.4±0.4	4.9±0.4
Electrical Downtilt			2-12			2-12			
1st Upper Sidelobe Suppression		dB	> 16			> 16			
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	> 25			> 25			
Inter - Cluster Isolation			> 25			> 25			
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power per Port		W	300			250			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

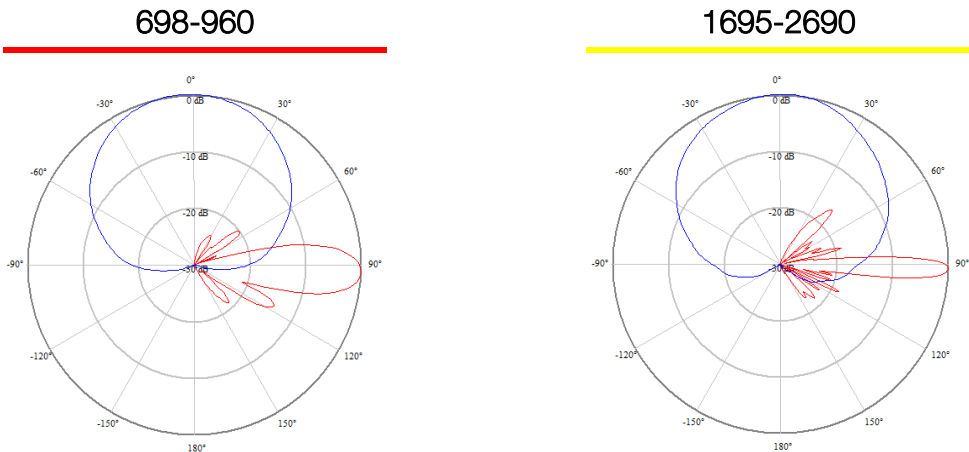
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	24 kg	52.9 lb
Shipping Weight	34.1 kg	75.2 lb
Antenna Dimensions (H x W x D)	1499 x 448 x 188 mm	59.0 x 17.6 x 7.4 in
Packing Size (H x W x D)	1649 x 551 x 361 mm	64.9 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	642 / 174 / 669 N	144 / 39 / 150 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

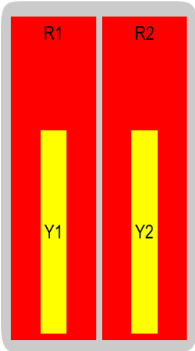
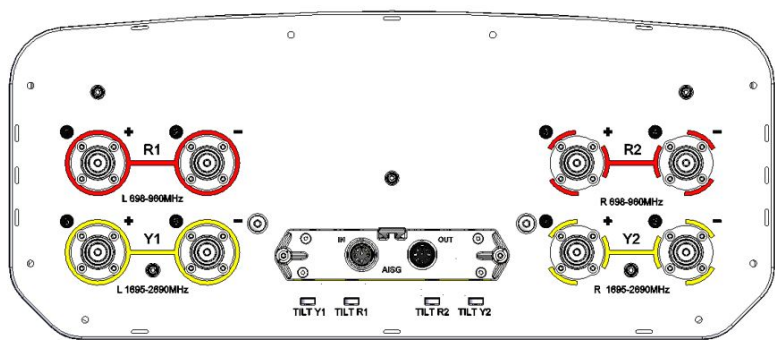


2G2WC-21-N45

8 Port Antenna / 2L2H / 1.5m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	3	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G2WD-21-N45

8 Port Antenna / 2L2H / 2.0m

PROSE

- 2x(698-960) + 2x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		2×(698-960)			2×(1695-2690)				
		698-806	790-862	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	R1/R2 Mid Tilt	dBi	14.3	14.6	14.9				
	Over All Tilts		14.2±0.5	14.6±0.5	14.8±0.5				
	Y1/Y2 Mid Tilt					16.3	17.3	17.3	17.8
	Over All Tilts					16.2±0.6	17.2±0.5	17.3±0.5	17.8±0.5
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	67±5	63±5	58±5	66±5	62±5	61±5	59±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 20	> 21	> 22	> 25	> 27	> 27	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 20	> 20	> 18	> 18	> 18	> 18
Over Sector ±60°			> 9	> 8	> 8	> 9	> 8	> 6	> 6
Vertical Pattern									
3dB Elevation Beamwidth		°	10.9±1.0	9.9±0.9	8.9±0.8	6.8±0.5	6.1±0.5	5.4±0.4	4.9±0.4
Electrical Downtilt			2-12			2-12			
1st Upper Sidelobe Suppression		dB	> 16			> 16			
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	> 25			> 26			
Inter - Cluster Isolation			> 25			> 26			
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power per Port		W	300			250			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

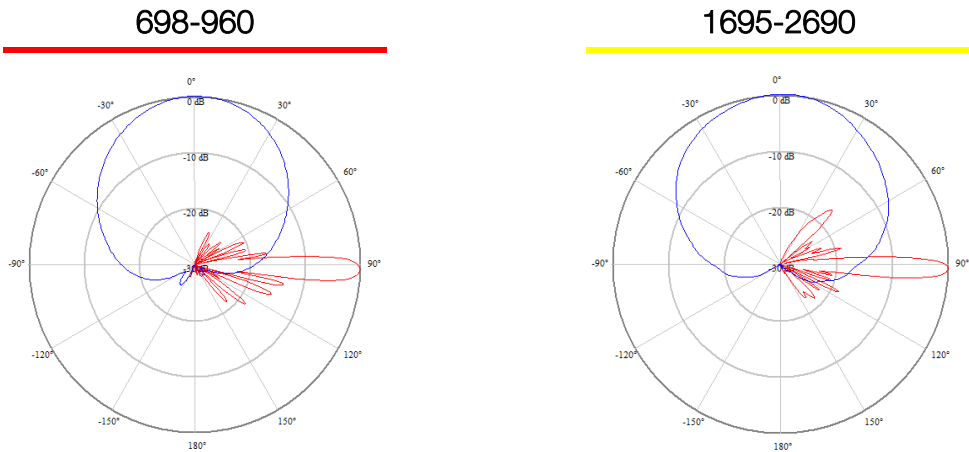
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	28 kg	61.7 lb
Shipping Weight	38 kg	83.8 lb
Antenna Dimensions (H x W x D)	1999 x 448 x 188 mm	78.7 x 17.6 x 7.4 in
Packing Size (H x W x D)	2135 x 551 x 361 mm	84.1 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	854 / 243 / 889 N	192 / 55 / 200 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



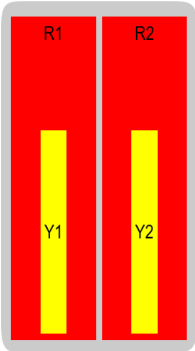
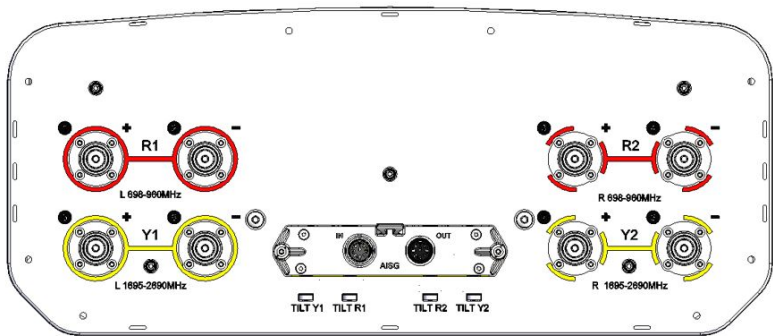
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	3	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G2WF-21-N45

8 Port Antenna / 2L2H / 2.6m

PROSE

- 2x(698-960) + 2x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		2×(698-960)			2×(1695-2690)				
		698-806	790-862	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	R1/R2 Mid Tilt	dBi	15.5	15.9	15.8				
	Over All Tilts		15.4±0.5	15.8±0.5	15.8±0.5				
	Y1/Y2 Mid Tilt					16.9	17.7	17.7	18.2
	Over All Tilts					16.8±0.6	17.6±0.5	17.6±0.5	18.2±0.5
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	66±5	60±5	58±5	65±5	59±5	62±5	59±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 21	> 22	> 22	> 26	> 27	> 27	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 20	> 20	> 17	> 18	> 16	> 18
Over Sector ±60°			> 9	> 8	> 8	> 9	> 8	> 6	> 6
Vertical Pattern									
3dB Elevation Beamwidth		°	8.8±0.8	8.1±0.7	7.2±0.6	6.4±0.5	5.6±0.5	5.0±0.4	4.6±0.4
Electrical Downtilt			2-12			2-12			
1st Upper Sidelobe Suppression		dB	> 16			> 16			
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	> 26			> 26			
Inter - Cluster Isolation			> 26			> 26			
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power per Port		W	300			250			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

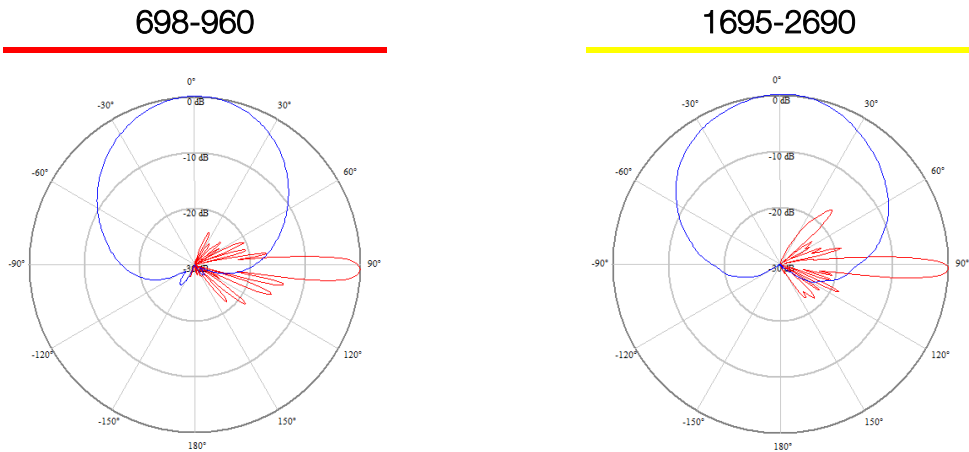
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	32.6 kg	71.9 lb
Shipping Weight	42.6 kg	93.9 lb
Antenna Dimensions (H x W x D)	2630 x 448 x 188 mm	103.5 x 17.6 x 7.4 in
Packing Size (H x W x D)	2745 x 551 x 361 mm	108.1 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1196 / 364 / 1246 N	269 / 82 / 280 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



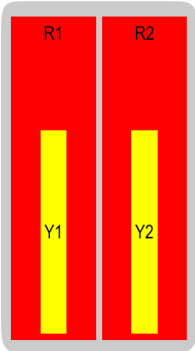
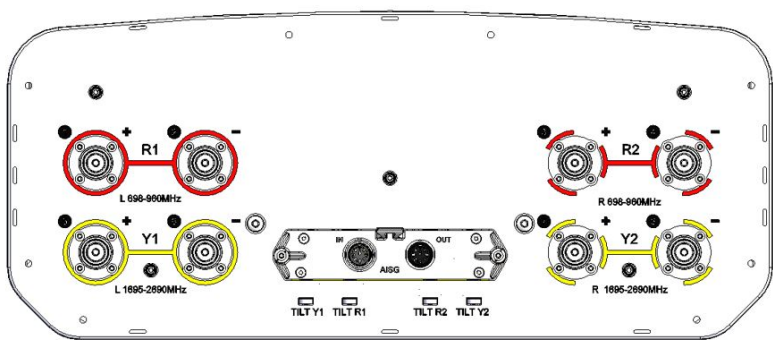
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	3	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2G2WC-21-N43

8 Port Antenna / 2L2H / 1.5m

PROSE

- 2x(698-960) + 2x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

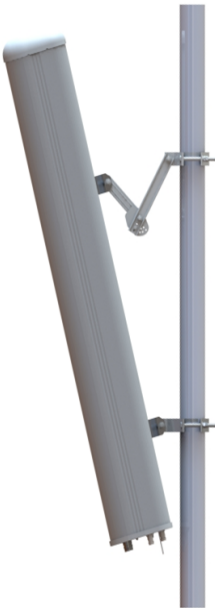
Electrical Data (BASTA)

Frequency(MHz)		2×(698-960)			2×(1695-2690)				
		698-806	790-862	880-960	1695-1880	1920-2200	2300-2400	2500-2690	
Gain	R1/R2 Mid Tilt	dBi	13.8	14.0	13.9				
	Over All Tilts		13.7±0.5	13.9±0.5	13.8±0.5				
	Y1/Y2 Mid Tilt					16.5	17.6	17.7	17.8
	Over All Tilts					16.5±0.6	17.5±0.7	17.6±0.5	17.7±0.5
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	69±6	64±5	63±5	68±6	60±6	60±6	59±6
Front to Back Ratio, Total Power, 180°±30°		dB	> 20	> 20	> 20	> 26	> 28	> 28	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 21	> 20	> 20	> 20	> 18	> 18
Over Sector ±60°			> 9	> 9	> 6	> 6	> 8	> 7	> 4
Vertical Pattern									
3dB Elevation Beamwidth		°	15.3±1.5	14.4±1.5	13.1±1.3	6.8±0.6	6.0±0.6	5.3±0.5	4.8±0.5
Electrical Downtilt			2-12			2-12			
1st Upper Sidelobe Suppression		dB	> 16			> 16			
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	> 25			> 25			
Inter - Cluster Isolation			> 25			> 25			
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power per Port		W	300			250			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA)

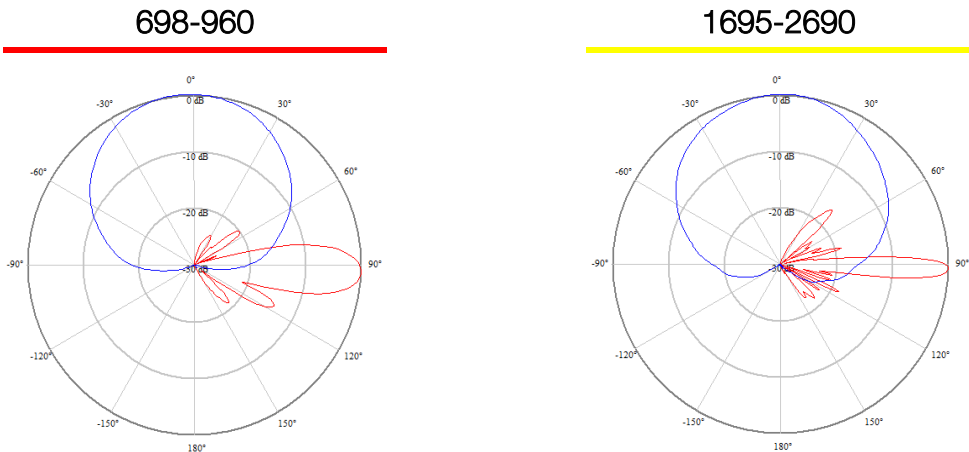
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	MRPP	
Radome Color	Light Grey	
Antenna Net Weight	19.6 kg	43.2 lb
Shipping Weight	27.0 kg	59.5 lb
Antenna Dimensions (H x W x D)	1530 x 429 x 199 mm	60.2 x 16.9 x 7.8 in
Packing Size (H x W x D)	1670 x 540 x 360 mm	65.7 x 21.3 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	408 / 225 / 540 N	92 / 51 / 121 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



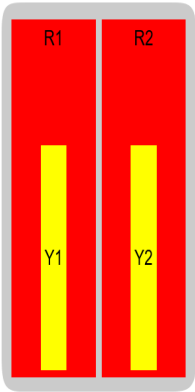
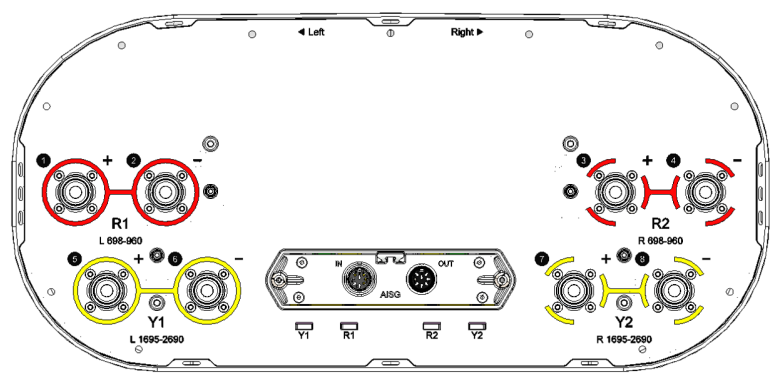
RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxxx-MM
●R2	3 - 4	698-960	3	MRET	RB.....XYYxxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxxx-MM
●Y2	7 - 8	1695-2690	4	MRET	RB.....XYYxxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2G2WD-21-N43

8 Port Antenna / 2L2H / 2.0m

PROSE

- 2x(698-960) + 2x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

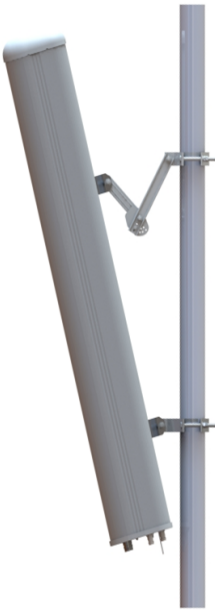
Electrical Data (BASTA)

Frequency(MHz)		2x(698-960)			2x(1695-2690)					
		698-806	790-862	880-960	1695-1880	1920-2200	2300-2400	2500-2690		
Gain	R1/R2 Mid Tilt	dBi	14.6	14.8	14.6					
	Over All Tilts		14.5±0.5	14.8±0.5	14.6±0.5					
	Y1/Y2 Mid Tilt						16.6	17.6	17.7	17.8
	Over All Tilts						16.6±0.7	17.6±0.7	17.7±0.5	17.8±0.5
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	70±6	66±5	63±5	67±6	62±6	61±6	59±6	
Front to Back Ratio, Total Power, 180°±30°		dB	> 21	> 22	> 22	> 26	> 27	> 27	> 27	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 19	> 20	> 20	> 16	> 16	> 16	> 16	
Over Sector ±60°			> 11	> 9	> 8	> 10	> 8	> 6	> 6	
Vertical Pattern										
3dB Elevation Beamwidth		°	11.0±1.0	10.1±0.8	9.2±0.8	6.9±0.6	6.1±0.6	5.4±0.5	4.8±0.5	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 16			> 16				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	> 25			> 26				
Inter - Cluster Isolation			> 25			> 26				
3rd PIM(2 x 43 dBm)		dBc	< -153							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300			250				

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA)

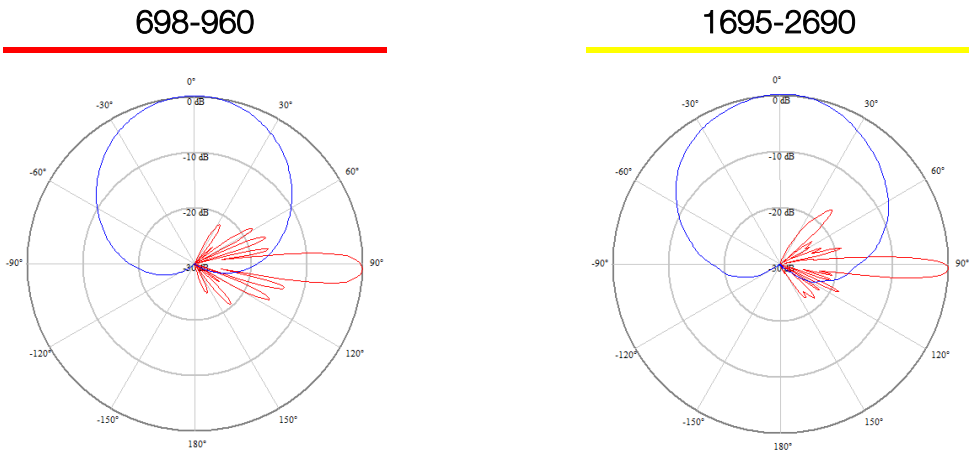
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	MRPP	
Radome Color	Light Grey	
Antenna Net Weight	22.6 kg	49.8 lb
Shipping Weight	31 kg	68.3 lb
Antenna Dimensions (H x W x D)	1940 x 429 x 199 mm	76.4 x 16.9 x 7.8 in
Packing Size (H x W x D)	2080 x 540 x 360 mm	81.9 x 21.3 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	518 / 285 / 685 N	116 / 64 / 154 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



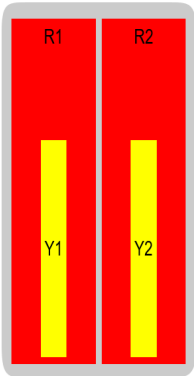
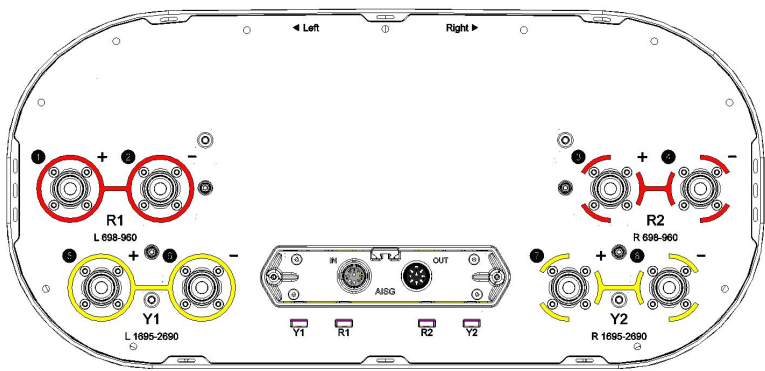
RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	3	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2G2WF-21-N43

8 Port Antenna / 2L2H / 2.7m

PROSE

- 2x(698-960) + 2x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

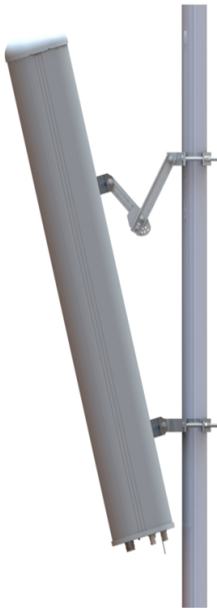
Electrical Data (BASTA)

Frequency(MHz)		2×(698-960)			2×(1695-2690)					
		698-806	790-862	880-960	1695-1880	1920-2200	2300-2400	2500-2690		
Gain	R1/R2	Mid Tilt	dBi	15.6	15.9	15.7				
		Over All Tilts		15.6±0.5	15.9±0.5	15.7±0.5				
	Y1/Y2	Mid Tilt					16.7	17.7	17.7	17.9
		Over All Tilts					16.7±0.7	17.8±0.7	18.0±0.5	18.2±0.5
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	70±6	66±5	64±5	66±6	63±6	62±6	59±6	
Front to Back Ratio, Total Power, 180°±30°		dB	> 21	> 22	> 22	> 26	> 27	> 27	> 27	
Cross-Polar Discrimination										
At Mechanical Boresight 0°			> 20	> 22	> 22	> 19	> 18	> 16	> 18	
Over Sector ±60°			> 10	> 10	> 8	> 8	> 7	> 5	> 5	
Vertical Pattern										
3dB Elevation Beamwidth		°	8.6±0.6	7.8±0.6	7.1±0.6	6.8±0.6	6.0±0.6	5.4±0.5	4.9±0.5	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 16			> 16				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	> 26			> 26				
Inter - Cluster Isolation			> 26			> 26				
3rd PIM(2 x 43 dBm)		dBc	< -153							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300			250				

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA)

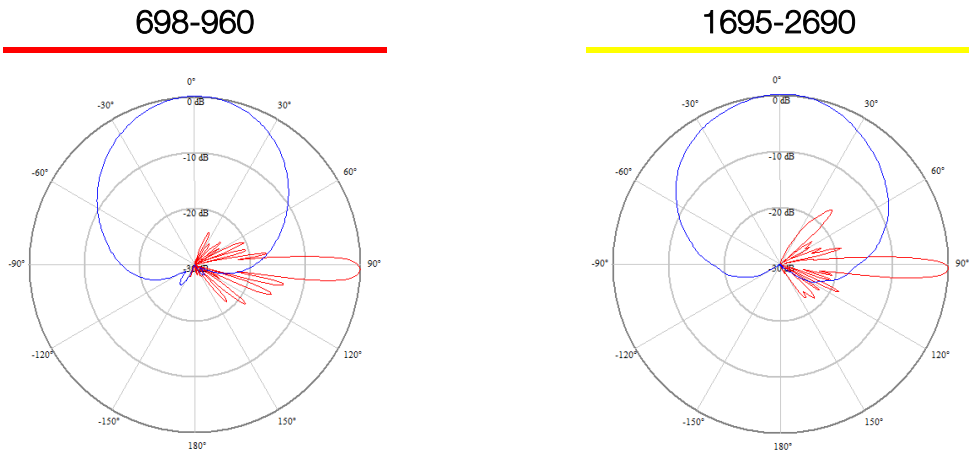
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	MRPP	
Radome Color	Light Grey	
Antenna Net Weight	27.9 kg	61.5 lb
Shipping Weight	39 kg	86.0 lb
Antenna Dimensions (H x W x D)	2720 x 429 x 199 mm	107.1 x 16.9 x 7.8 in
Packing Size (H x W x D)	2860 x 540 x 360 mm	112.6 x 21.3 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	726 / 399 / 960 N	163 / 90 / 216 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



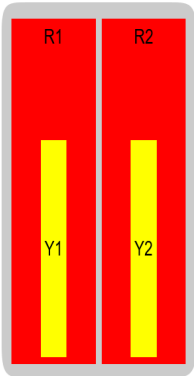
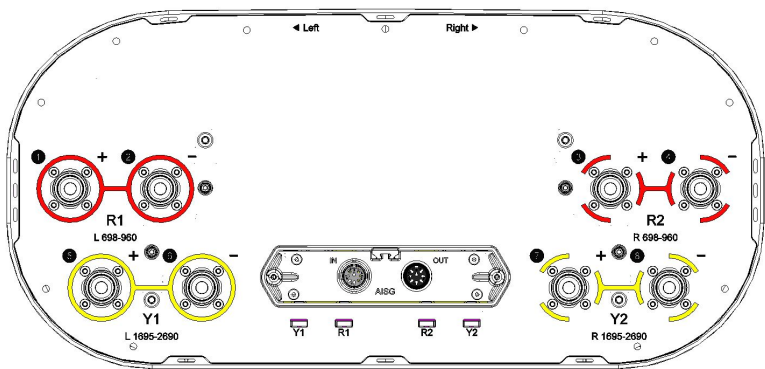
RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	3	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2D2WB-21-AN

8 Port Antenna / 2L2H / 2ft

PROSE

- 2x (617-894) + 2x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			2x (617-894)			2x (1695-2690)			
			617-698	698-806	806-894	1695-1900	1900-2180	2300-2400	2490-2690
Gain	R1/R2/Y1 Mid Tilt	dBi	10.6	10.9	10.9	14.7	15.4	15.3	15.7
	Y2 Over All Tilts		10.6±0.3	10.9±0.5	10.8±0.4	14.6±0.5	15.4±0.4	15.3±0.5	15.6±0.4
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	60±5	63±8	70±7	60±4	56±4	58±5	58±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 20	> 20	> 20	> 28	> 28	> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°			> 21	> 21	> 24	> 24	> 20	> 19	> 19
Over Sector ±60°			> 14	> 14	> 13	> 8	> 8	> 8	> 9
Vertical Pattern									
3dB Elevation Beamwidth		°	36±3	33±3	27±3	15.7±1.0	13.9±1.0	12.6±1.0	11.7±1.0
Electrical Downtilt			fixed 6			2-12			
1st Upper Sidelobe Suppression		dB	> 15	> 14	> 13	> 16	> 16	> 15	> 15
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	25			25			
Inter - Cluster Isolation			25						
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power Per Port		W	200						

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA11.1)

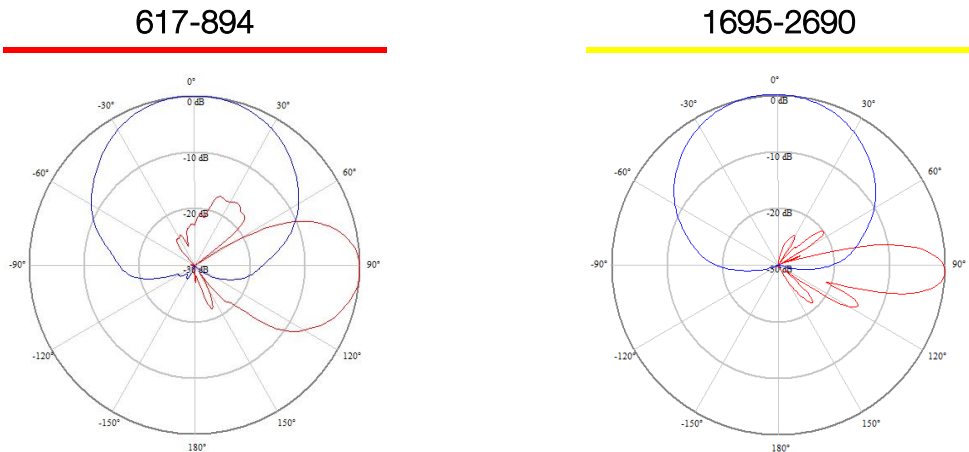
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	15.0 kg	33.1 lb
Shipping Weight	20.0 kg	44.1 lb
Antenna Dimensions (H x W x D)	697 x 580 x 210 mm	27.4 x 22.8 x 8.3 in
Packing Size (H x W x D)	840 x 680 x 360 mm	33.1 x 26.8 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	237 / 89 / 313 N	53 / 20 / 70 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



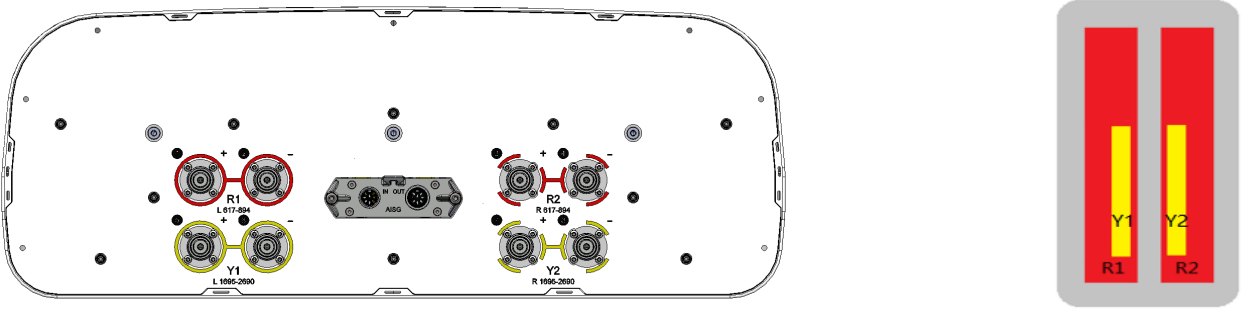
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	/	/	/
●R2	3 - 4	617-894	/	/	/
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	7 - 8	1695-2690	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2D2WC-21-AN

8 Port Antenna / 2L2H / 4ft

PROSE

- 2x (617-894) + 2x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			2x (617-894)			2x (1695-2690)				
			617-698	698-806	806-894	1695-1900	1900-2180	2300-2500	2500-2690	
Gain	R1/R2/Y1	Mid Tilt	dBi	12.6	13.5	13.1	16.8	17.7	17.9	18.1
	/Y2	Over All Tilts		12.6±0.7	13.5±0.5	13.1±0.6	16.8±0.5	17.6±0.5	17.8±0.5	18.0±0.6
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	68±5	62±6.5	65±8	60±5	58±6	60±6	60±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 21	> 23	> 23	> 29	> 29	> 29	> 29
Cross-Polar Discrimination At Mechanical Boresight 0°				> 20	> 22	> 22	> 18	> 18	> 20	> 21
Over Sector ±60°				> 11	> 10	> 9	> 7	> 6	> 6	> 8
Vertical Pattern										
3dB Elevation Beamwidth			°	20.0±2.5	17.5±2.0	15.5±1.0	7.8±0.6	6.8±0.6	5.9±0.4	5.5±0.4
Electrical Downtilt				2-16			2-12			
1st Upper Sidelobe Suppression			dB	> 17	> 15	> 14	> 17	> 18	> 18	> 17
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	25			25			
Inter - Cluster Isolation				25						
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	300			200			

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA11.1)

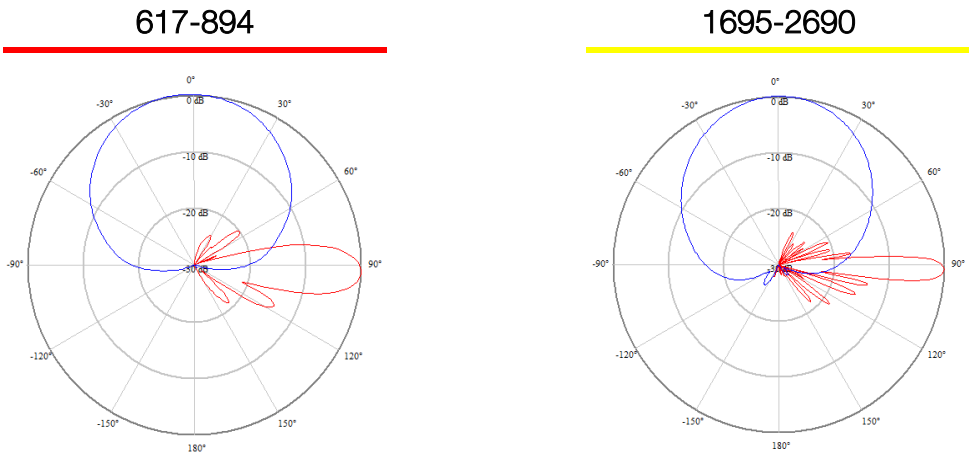
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	24.5 kg	54.0 lb
Shipping Weight	36.9 kg	81.3 lb
Antenna Dimensions (H x W x D)	1219 x 580 x 210 mm	48.0 x 22.8 x 8.3 in
Packing Size (H x W x D)	1369 x 725 x 345 mm	53.9 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	315 / 131 / 496N	71 / 29 / 112 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



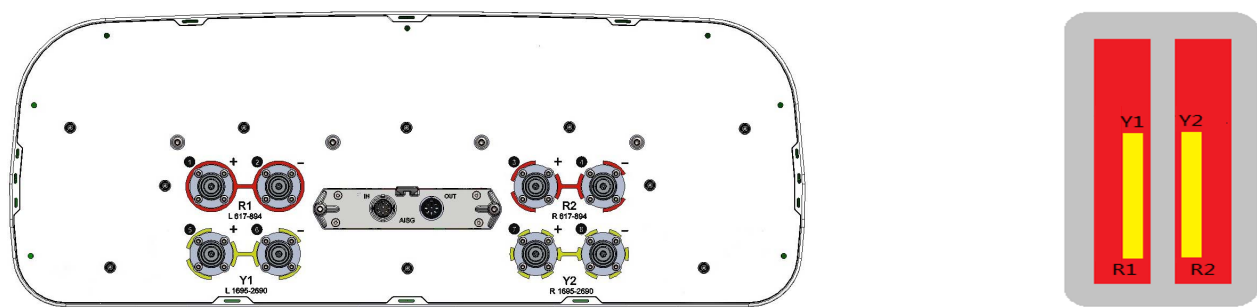
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	2	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	617-894	2	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2D2WD-21-AN

8 Port Antenna / 2L2H / 2ft

PROSE

- 2x (617-894) + 2x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			2x (617-894)			2x (1695-2690)				
			617-698	698-806	806-894	1695-1900	1900-2180	2300-2500	2500-2690	
Gain	R1/R2/Y1	Mid Tilt	dBi	13.5	14.6	14.1	17.9	18.4	18.6	18.6
	/Y2	Over All Tilts		13.5±0.7	14.5±0.5	14.0±0.5	17.8±0.4	18.4±0.4	18.6±0.5	18.6±0.5
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	69±6	66±6	66±8	60±5	58±5	60±6	60±6
Front to Back Ratio, Total Power, 180°±30°			dB	> 22	> 23	> 23	> 29	> 29	> 29	> 28
Cross-Polar Discrimination										
At Mechanical Boresight 0°				> 22	> 23	> 22	> 20	> 22	> 21	> 22
Over Sector ±60°				> 11	> 10	> 9	> 6	> 6	> 6	> 8
Vertical Pattern										
3dB Elevation Beamwidth			°	15.0±1.2	13.3±1.2	11.4±1.0	6.2±0.5	5.5±0.5	4.8±0.3	4.5±0.3
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 17	> 17	> 15	> 17	> 20	> 20	> 20
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	25			25			
Inter - Cluster Isolation				25						
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power per Port			W	300			200			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

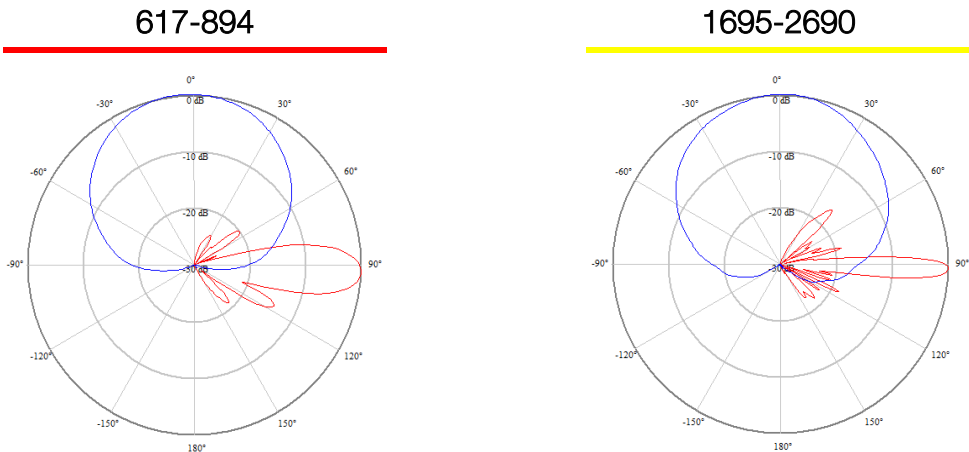
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	30.5 kg	67.2 lb
Shipping Weight	42.6 kg	93.9 lb
Antenna Dimensions (H x W x D)	1770 x 580 x 210 mm	69.7 x 22.8 x 8.3 in
Packing Size (H x W x D)	1925 x 725 x 345 mm	75.8 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	468 / 208 / 738 N	105 / 47 / 166 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



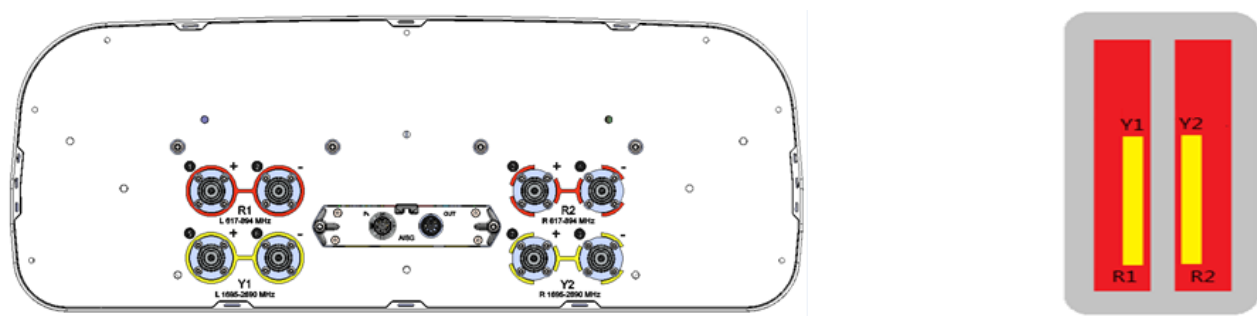
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	2	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	617-894	2	MRET	RB.....XYyxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	7 - 8	1695-2690	3	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2D2WE-21-AN

8 Port Antenna / 2L2H / 2ft

PROSE

- 2x (617-894) + 2x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			2x (617-894)			2x (1695-2690)				
			617-698	698-806	806-894	1695-1900	1900-2180	2300-2500	2500-2690	
Gain	R1/R2/Y1	Mid Tilt	dBi	15.0	15.8	15.9	17.7	18.3	18.4	18.6
	Y2	Over All Tilts		15.0±0.5	15.8±0.4	15.8±0.3	17.6±0.5	18.2±0.4	18.3±0.5	18.5±0.6
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	67±5.5	60±5.5	60±6.8	62±4.4	58±4.2	58±5	58±6.5
Front to Back Ratio, Total Power, 180°±30°			dB	> 22	> 23	> 24	> 28	> 28	> 28	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°				> 20	> 24	> 23	> 20	> 21	> 22	> 21
Over Sector ±60°				> 15	> 11	> 12	> 5	> 6	> 8	> 8
Vertical Pattern										
3dB Elevation Beamwidth			°	10.3±0.7	9.1±0.9	7.8±0.6	6.2±0.4	5.4±0.6	4.8±0.4	4.5±0.3
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 15	> 16	> 15	> 17	> 18	> 19	> 19
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	25			25			
Inter - Cluster Isolation				25						
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power per Port			W	300			200			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

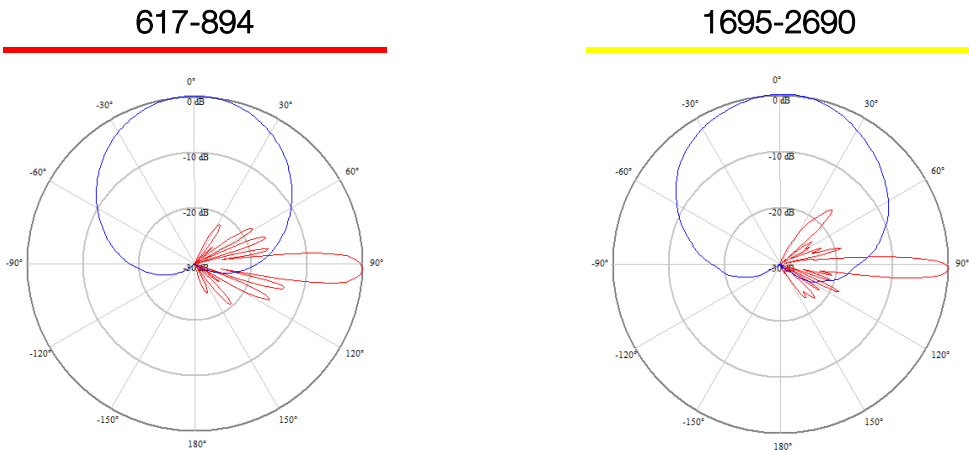
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	39.8 kg	87.7 lb
Shipping Weight	54.0 kg	119.0 lb
Antenna Dimensions (H x W x D)	2437 x 580 x 210 mm	95.9 x 22.8 x 8.3 in
Packing Size (H x W x D)	2590 x 725 x 345 mm	102.0 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	658 / 308 / 1038 N	148 / 69 / 233 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



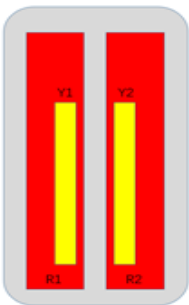
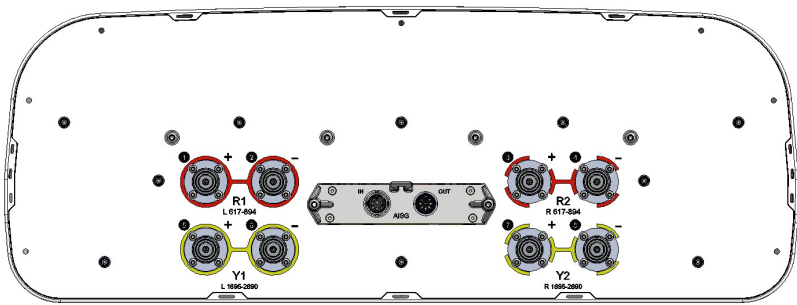
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	2	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	617-894	2	MRET	RB.....XYyxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	7 - 8	1695-2690	3	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G4WC-21

10 Port Antenna / 1L4H / 1.5m

PROSE

- 698-960 + 4 x (1695-2690) MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960		4 x (1695-2690)				
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	R1	Mid Tilt	dBi	14.3	14.6			
		Over All Tilts		14.2±0.5	14.4±0.3			
	Y1/Y2	Mid Tilt			14.7	15.0	15.1	15.8
		Over All Tilts			14.6±0.6	14.9±0.5	15.0±0.4	15.6±0.4
	Y3/Y4	Mid Tilt			14.5	14.8	14.9	15.4
		Over All Tilts			14.3±0.5	14.6±0.5	14.7±0.4	15.3±0.4
Polarization		°	±45					
Horizontal Pattern								
3dB Azimuth Beamwidth		°	68±3	66±3	62±5	69±6	69±5	64±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 27	> 28	> 27	> 27	> 26	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 20	> 17	> 18	> 18	> 18
Over Sector ±60°			> 10	> 10	> 8	> 10	> 6	> 7
Vertical Pattern								
3dB Elevation Beamwidth		°	15.2±1.6	13.2±1.0	13.7±1.0	12.1±1.2	10.6±0.8	9.7±0.6
Electrical Downtilt			2-12		2-12			
1st Upper Sidelobe Suppression		dB	> 15		> 15			
RF Parameters								
VSWR			< 1.5					
Intra - Cluster Isolation		dB	27		26			
Inter - Cluster Isolation			28					
3rd PIM(2 x 43 dBm)		dBc	< -153					
Impedance		Ω	50					
Maximum Effective Power Per Port		W	500		300			

— Maximum Effective Power Whole Antenna: 500 W.

G4WC-21

10 Port Antenna / 1L4H / 1.5m

PROSE

Mechanical Data (BASTA11.1)

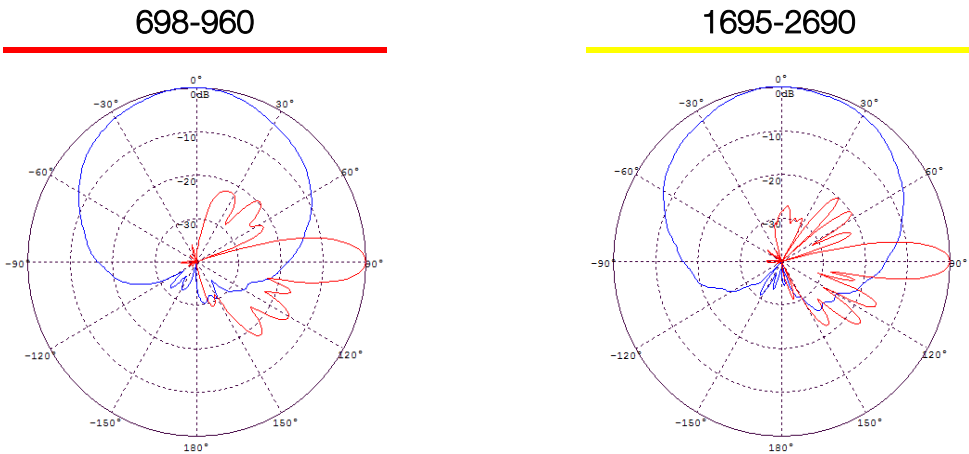
Connector Type	10 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	19 kg	41.9 lb
Shipping Weight	24.3 kg	53.6 lb
Antenna Dimensions (H x W x D)	1499 x 350 x 200 mm	59.0 x 13.8 x 7.9 in
Packing Size (H x W x D)	1649 x 435 x 350 mm	64.9 x 17.1 x 13.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	973 / 475 / 1244 N	219 / 107 / 280 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

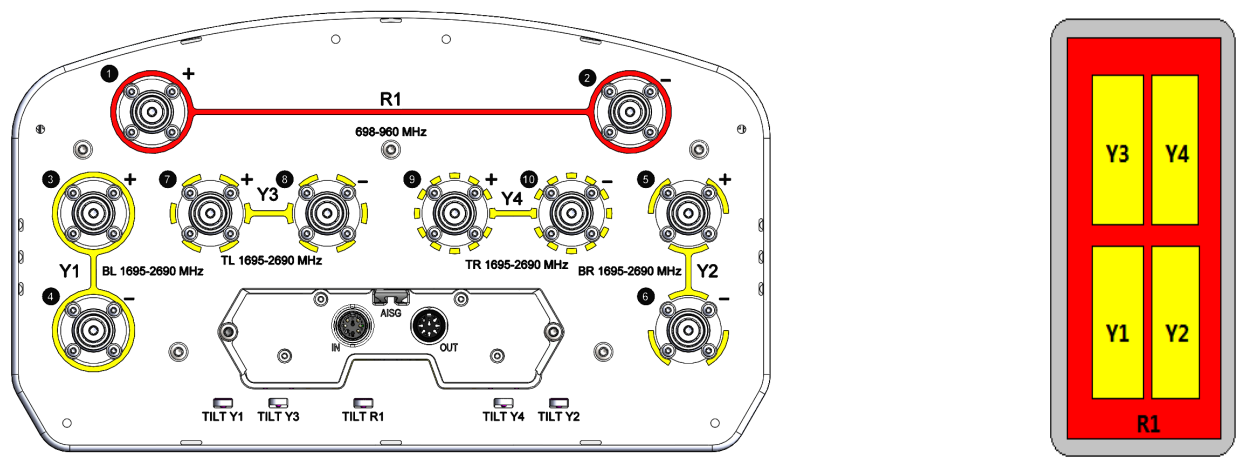


G4WC-21

10 Port Antenna / 1L4H / 1.5m

PROSE

Layout



Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.5 kg / 5.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G4WD-21

10 Port Antenna / 1L4H / 2m

PROSE

- 698-960 + 4 x (1695-2690) MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960		4 x (1695-2690)					
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1	Mid Tilt	dBi	15.6	15.8				
		Over All Tilts		15.5±0.3	15.8±0.5				
	Y1/Y2	Mid Tilt				15.5	15.7	15.9	16.6
		Over All Tilts				15.4±0.5	15.6±0.5	15.8±0.5	16.5±0.5
	Y3/Y4	Mid Tilt				15.2	15.3	15.5	16.1
		Over All Tilts				15.1±0.5	15.2±0.5	15.4±0.4	16.0±0.5
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	67.5±3.5	64.5±2	62±5	69±5	69±5	63±5	
Front to Back Ratio, Total Power, 180°±30°		dB	> 27	> 28	> 28	> 29	> 27	> 28	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 20	> 18	> 20	> 20	> 18	
Over Sector ±60°			> 10	> 12	> 8	> 8	> 6	> 6	
Vertical Pattern									
3dB Elevation Beamwidth		°	10.0±1.4	8.6±0.7	10.9±0.7	9.5±1.0	8.5±0.5	7.6±0.5	
Electrical Downtilt			0-10		0-10				
1st Upper Sidelobe Suppression		dB	> 16		> 17				
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	27		27				
Inter - Cluster Isolation			28		28				
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power Per Port		W	500		250				

— Maximum Effective Power Whole Antenna: 1000 W.

G4WD-21

10 Port Antenna / 1L4H / 2m

PROSE

Mechanical Data (BASTA11.1)

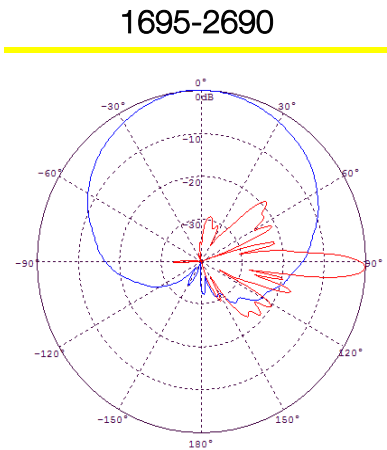
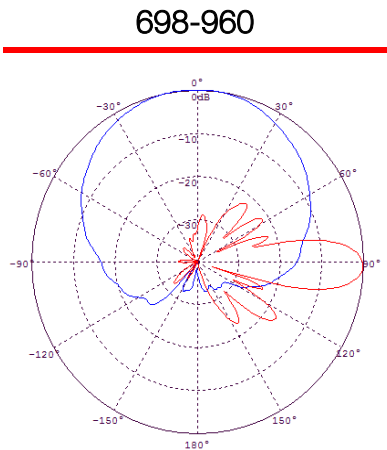
Connector Type	10 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	18.5 kg	40.8 lb
Shipping Weight	26.5 kg	58.4 lb
Antenna Dimensions (H x W x D)	1995 x 300 x 190 mm	78.5 x 11.8 x 7.5 in
Packing Size (H x W x D)	2115 x 369 x 337 mm	83.3 x 14.5 x 13.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	325 / 277 / 515 N	73 / 62 / 116 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



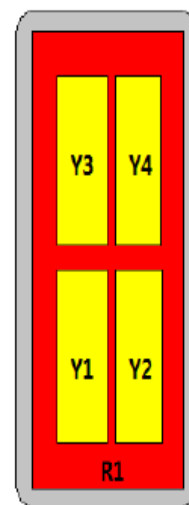
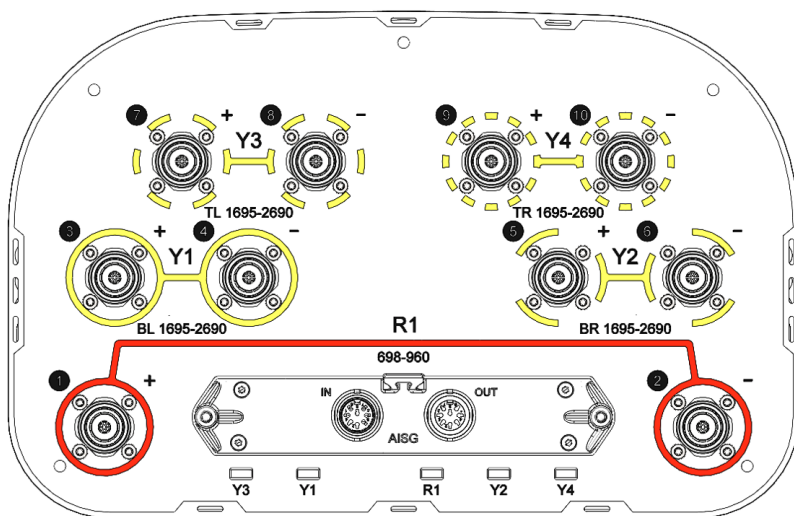
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	3	MRET	RB.....XYYxxxx-MM
● Y1	3 - 4	1695-2690	2	MRET	RB.....XYYxxxx-MM
● Y2	5 - 6	1695-2690	4	MRET	RB.....XYYxxxx-MM
● Y3	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
● Y4	9 - 10	1695-2690	5	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4WD-21-ST

12 Port Antenna / 2L4H / 2.0m

PROSE

- 2x(698-960) + 4x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)			2x(698-960)			4x(1695-2690)				
			698-806	790-862	880-960	1695-1880	1920-2170	2300-2400	2500-2690	
Gain	R1/R2/Y1	Mid Tilt	dBi	14.6	14.9	15.0	14.9	15.9	16.1	16.7
	/Y2	Over All Tilts		14.5±0.6	14.9±0.6	15.0±0.5	14.8±0.5	15.8±0.5	16.1±0.5	16.7±0.5
	Y3/Y4	Mid Tilt					14.5	15.7	15.8	16.2
		Over All Tilts					14.5±0.5	15.6±0.5	15.8±0.5	16.2±0.5
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	66±6	62±6	60±5	68±7	59±5	62±7	60±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 20	> 21	> 21	> 22	> 23	> 22	> 22
Cross-Polar Discrimination At Mechanical Boresight 0°				> 18	> 20	> 18	> 16	> 17	> 16	> 16
Over Sector ±60°				> 10	> 9	> 7	> 9	> 8	> 6	> 5
Vertical Pattern										
3dB Elevation Beamwidth			°	10.5±0.9	9.7±0.8	8.7±0.7	9.3±0.8	8.3±0.8	7.3±0.5	6.8±0.5
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 16			> 16			
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 25			> 26			
Inter - Cluster Isolation				> 25			> 26			
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power per Port			W	300			250			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

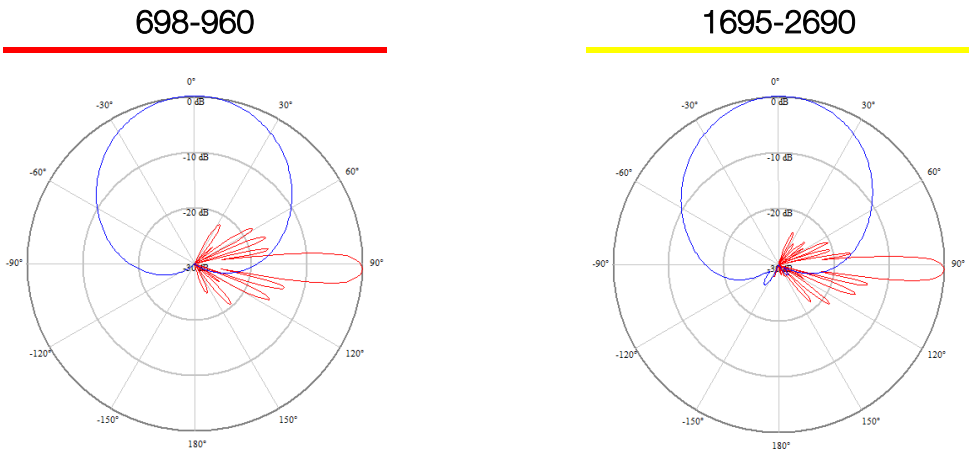
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	30.8 kg	67.9 lb
Shipping Weight	43.0 kg	94.8 lb
Antenna Dimensions (H x W x D)	1999 x 448 x 188 mm	78.7 x 17.6 x 7.4 in
Packing Size (H x W x D)	2135 x 551 x 361 mm	84.1 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	918 / 261 / 956 N	206 / 59 / 215 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

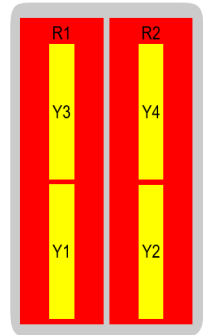
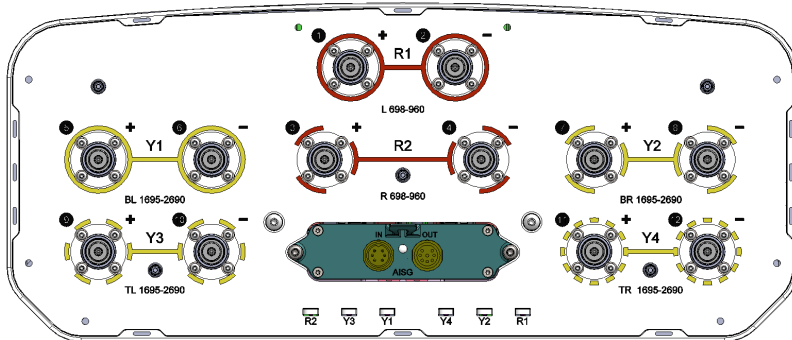


2G4WD-21-ST

12 Port Antenna / 2L4H / 2.0m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	6	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	1	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	5	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4WF-21-ST

12 Port Antenna / 2L4H / 2.6m

PROSE

- 2 x (698-960) + 4 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant)
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)			2 x (698-960)			4 x (1695-2690)				
			698-806	790-862	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	R1/R2/Y1	Mid Tilt	dBi	15.4	15.7	15.7	16.0	17.1	17.3	17.6
	/Y2	Over All Tilts		15.3±0.5	15.6±0.5	15.7±0.5	16.0±0.5	17.0±0.5	17.2±0.4	17.5±0.5
	Y3/Y4	Mid Tilt			15.6	16.6	16.8	17.0		
	Over All Tilts			15.5±0.5	16.5±0.5	16.7±0.4	17.0±0.5			
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	66±5	60±5	58±5	65±7	59±6	62±5	58±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 21	> 21	> 22	> 25	> 26	> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°				> 18	> 18	> 20	> 16	> 17	> 16	> 17
Over Sector ±60°				> 8	> 8	> 7	> 9	> 8	> 6	> 6
Vertical Pattern										
3dB Elevation Beamwidth			°	8.8±0.8	8.1±0.7	7.2±0.6	7.0±0.6	6.3±0.6	5.5±0.5	5.1±0.5
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 16			> 16			
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 26			> 27			
Inter - Cluster Isolation				> 26			> 27			
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	300			250			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

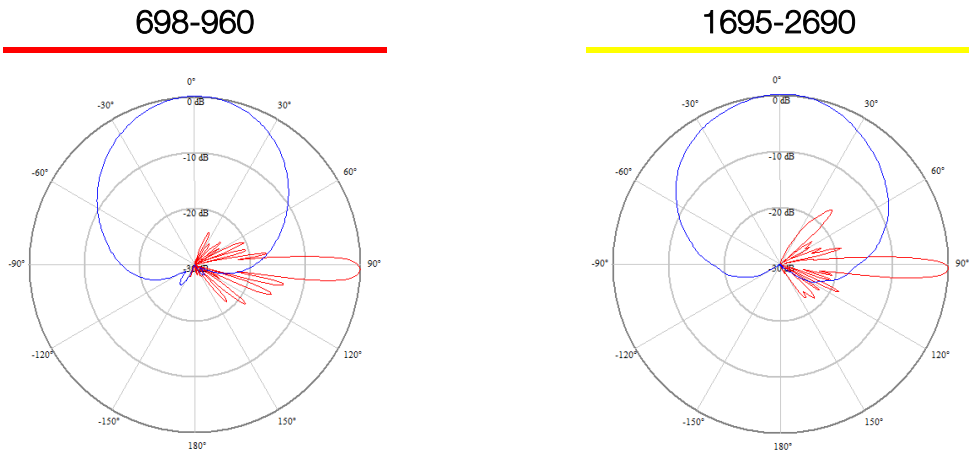
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	37.5 kg	82.7 lb
Shipping Weight	45.8 kg	101.0 lb
Antenna Dimensions (H x W x D)	2630 x 448 x 188 mm	103.5 x 17.6 x 7.4 in
Packing Size (H x W x D)	2780 x 551 x 361 mm	109.4 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1196 / 364 / 1246 N	269 / 82 / 280 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

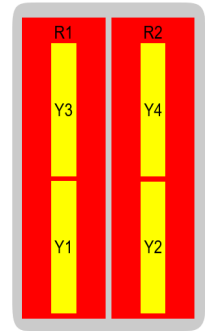
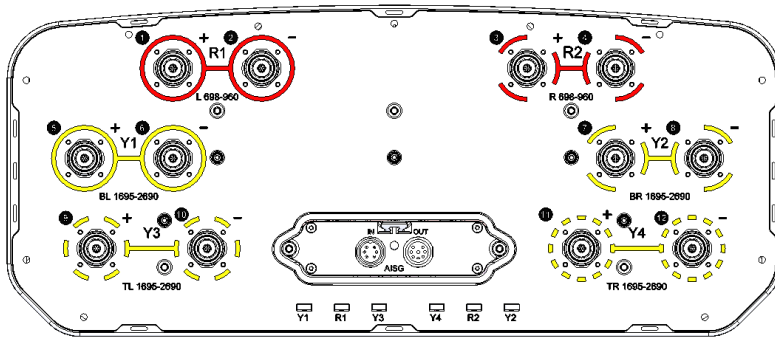


2G4WF-21-ST

12 Port Antenna / 2L4H / 2.6m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	5	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	6	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2G4WC-21D-N50

12 Port Antenna / 2L4H / 1.5m

PROSE

- 2 × (698-960) + 4 × (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

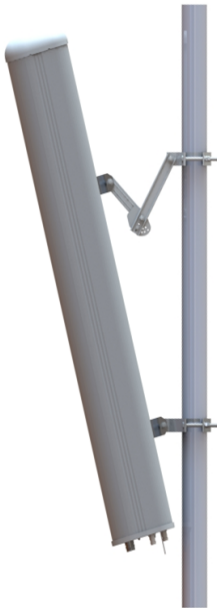
Electrical Data (BASTA 11.1)

Frequency(MHz)		2 × (698-960)			4 × (1695-2690)					
		698-806	790-862	880-960	1695-1880	1920-2200	2300-2400	2500-2690		
Gain	R1/R2	Mid Tilt	dBi	13.5	13.6	13.6				
		Over All Tilts		13.4±0.5	13.5±0.5	13.6±0.5				
	Y1/Y2/Y3	Mid Tilt					16.3	17.1	17.6	17.6
	/Y4	Over All Tilts					16.2±0.7	17.0±0.8	17.5±0.5	17.6±0.5
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	68±6	64±6	64±6	66±6	63±6	59±5	58±5	
Front to Back Ratio, Total Power, 180°±30°		dB	> 20	> 20	> 21	> 24	> 25	> 25	> 25	
Cross-Polar Discrimination										
At Mechanical Boresight 0°			> 18	> 20	> 20	> 18	> 19	> 20	> 20	
Over Sector ±60°			> 9	> 8	> 8	> 8	> 6	> 4	> 3	
Vertical Pattern										
3dB Elevation Beamwidth		°	16.3±1.3	14.7±1.2	13.5±1.2	7.1±0.5	6.2±0.5	5.5±0.5	5.0±0.5	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 16			> 16				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	> 25			> 25				
Inter - Cluster Isolation			> 25			> 25				
3rd PIM(2 x 43 dBm)		dBc	< -153							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300			250				

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

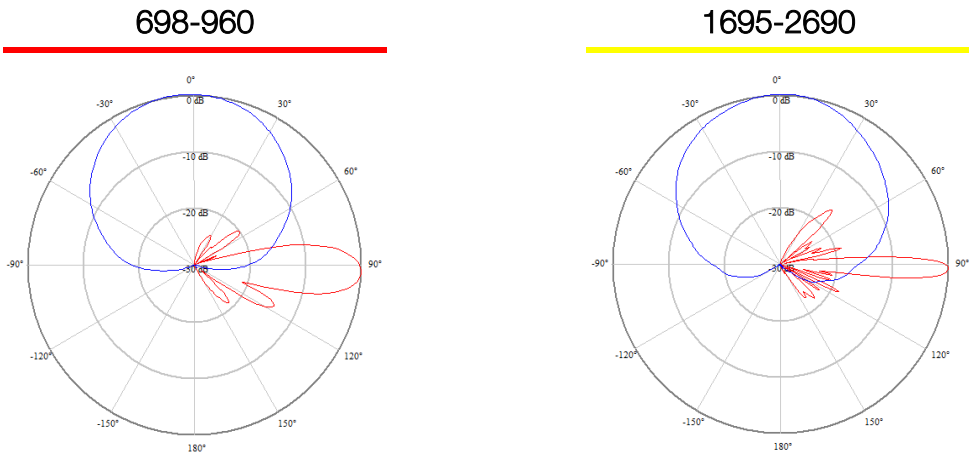
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	22.6 kg	49.8 lb
Shipping Weight	34.4 kg	75.8 lb
Antenna Dimensions (H x W x D)	1499 x 448 x 188 mm	59.0 x 17.6 x 7.4 in
Packing Size (H x W x D)	1649 x 551 x 361 mm	64.9 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	676 / 183 / 704 N	152 / 41 / 158 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

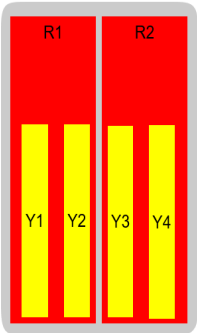
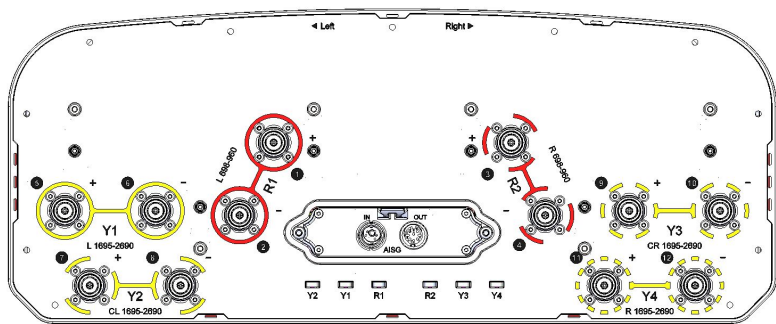


2G4WC-21D-N50

12 Port Antenna / 2L4H / 1.5m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	3	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	4	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	5	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	6	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4WD-21D-N50

12 Port Antenna / 2L4H / 2.0m

PROSE

- 2x(698-960) + 4x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		2×(698-960)			4×(1695-2690)					
		698-806	790-862	880-960	1695-1880	1920-2200	2300-2400	2500-2690		
Gain	R1/R2	Mid Tilt	dBi	14.6	14.7	14.8				
		Over All Tilts		14.5±0.5	14.6±0.5	14.8±0.5				
	Y1/Y2/Y3	Mid Tilt					16.2	17.0	17.5	17.7
	/Y4	Over All Tilts					16.2±0.7	16.9±0.7	17.5±0.5	17.6±0.5
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	65±6	63±5	64±5	66±6	63±6	59±5	58±5	
Front to Back Ratio, Total Power, 180°±30°		dB	> 21	> 22	> 22	> 24	> 25	> 25	> 25	
Cross-Polar Discrimination										
At Mechanical Boresight 0°			> 20	> 18	> 18	> 17	> 21	> 20	> 20	
Over Sector ±60°			> 10	> 8	> 8	> 9	> 6	> 4	> 5	
Vertical Pattern										
3dB Elevation Beamwidth		°	10.7±1.0	10.0±0.8	8.9±0.7	7.0±0.5	6.2±0.5	5.5±0.4	5.1±0.4	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 16			> 17				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	> 26			> 26				
Inter - Cluster Isolation			> 26			> 26				
3rd PIM(2 x 43 dBm)		dBc	< -153							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300			250				

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

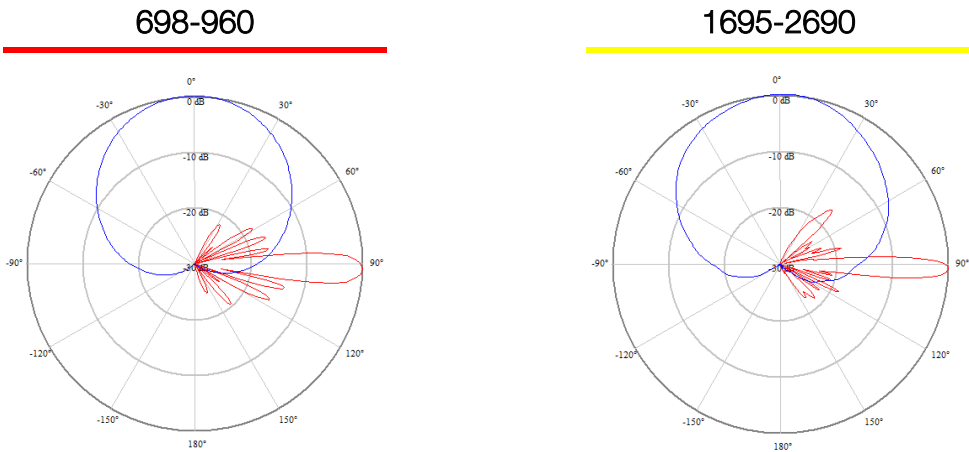
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	31 kg	68.3 lb
Shipping Weight	44.2 kg	97.4 lb
Antenna Dimensions (H x W x D)	1999 x 498 x 197 mm	78.7 x 19.6 x 7.8 in
Packing Size (H x W x D)	2140 x 575 x 370 mm	84.3 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	793 / 294 / 961 N	178 / 66 / 216 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

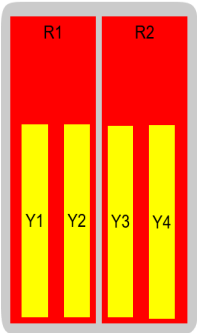
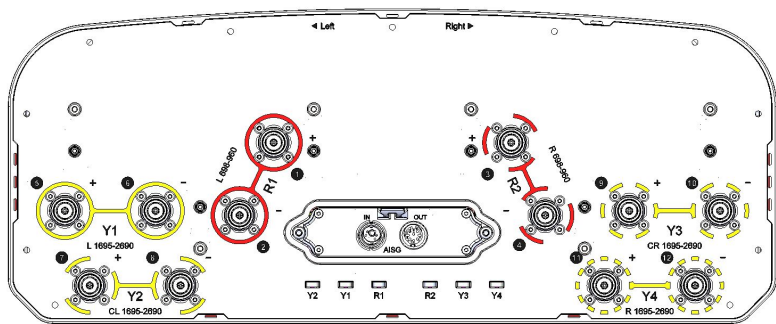


2G4WD-21D-N50

12 Port Antenna / 2L4H / 2.0m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	3	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	4	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	5	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	6	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4WF-21D-N50

12 Port Antenna / 2L4H / 2.6m

PROSE

- 2x(698-960) + 4x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		2x(698-960)			4x(1695-2690)					
		698-806	790-862	880-960	1695-1880	1920-2200	2300-2400	2500-2690		
Gain	R1/R2	Mid Tilt	dBi	15.6	15.6	15.7				
		Over All Tilts		15.5±0.6	15.6±0.5	15.7±0.5				
	Y1/Y2/Y3	Mid Tilt					16.3	17.2	17.6	17.8
	/Y4	Over All Tilts					16.2±0.7	17.1±0.7	17.5±0.6	17.7±0.5
Polarization		°	±45							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	65±6	63±5	66±5	67±6	63±6	59±6	60±5	
Front to Back Ratio, Total Power, 180°±30°		dB	> 21	> 22	> 22	> 24	> 25	> 25	> 25	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 21	> 19	> 16	> 18	> 20	> 20	
Over Sector ±60°			> 9	> 8	> 7	> 9	> 7	> 4	> 4	
Vertical Pattern										
3dB Elevation Beamwidth		°	8.7±0.6	8.0±0.6	7.2±0.5	7.0±0.5	6.2±0.5	5.5±0.4	5.1±0.4	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 16			> 17				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	> 27			> 27				
Inter - Cluster Isolation			> 27			> 27				
3rd PIM(2 x 43 dBm)		dBc	< -150							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300			250				

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

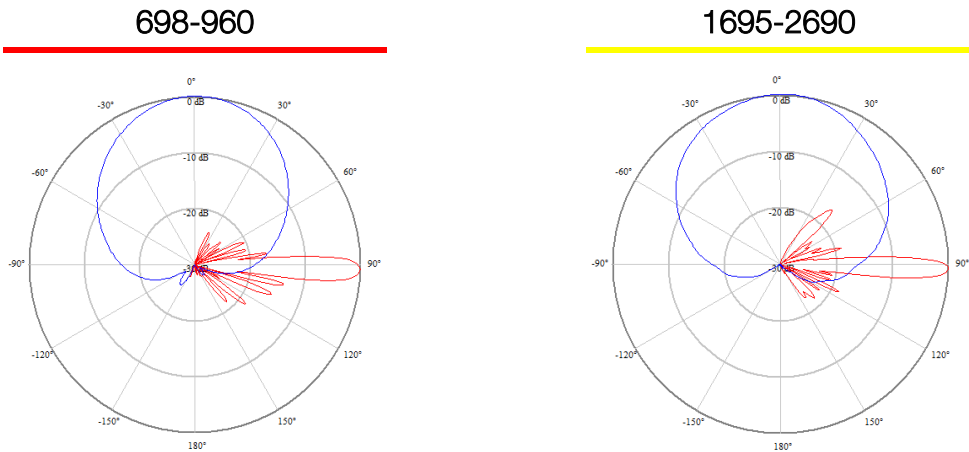
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	38.4 kg	84.7 lb
Shipping Weight	50.0 kg	110.2 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2825 x 575 x 370 mm	111.2 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

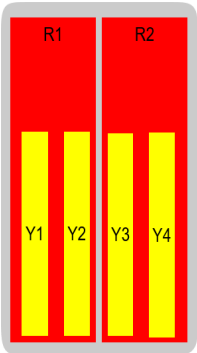
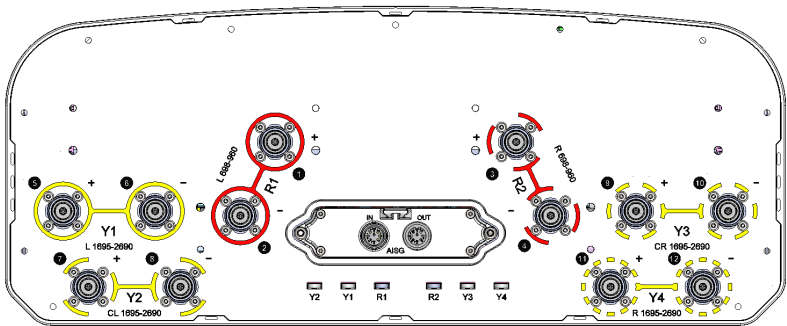


2G4WF-21D-N50

12 Port Antenna / 2L4H / 2.6m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	3	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	4	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	5	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	6	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2D4WB-21-AN

12 Port Antenna / 2L4H / 2ft

PROSE

- 2x (617-894) + 4x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2x (617-894)			4x (1695-2690)				
		617-698	698-806	806-894	1695-1900	1900-2180	2300-2400	2490-2690	
Gain	R1/R2/Y1 Mid Tilt	dBi				13.8	14.6	15.0	15.3
	Y2/Y3/Y4 Over All Tilts		10.5±0.6	10.8±0.5	10.4±0.4	13.8±0.6	14.5±0.6	14.9±0.5	15.3±0.5
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	62±6	63±7	69±8	62±6	60±5	58±6	55±4
Front to Back Ratio, Total Power, 180°±30°		dB	> 20	> 20	> 20	> 25	> 26	> 25	> 25
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 20	> 21	> 19	> 20	> 20	> 20
Over Sector ±60°			> 12	> 10	> 10	> 6	> 7	> 8	> 5
Vertical Pattern									
3dB Elevation Beamwidth		°	35±4	33±3.5	30±4	15.9±2	14.2±1.5	12.6±1.0	11.5±1.0
Electrical Downtilt			fixed 6			2-12			
1st Upper Sidelobe Suppression		dB	> 14	> 15	> 14	> 14	> 16	> 15	> 15
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	25			25			
Inter - Cluster Isolation			24						
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power Per Port		W	200						

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

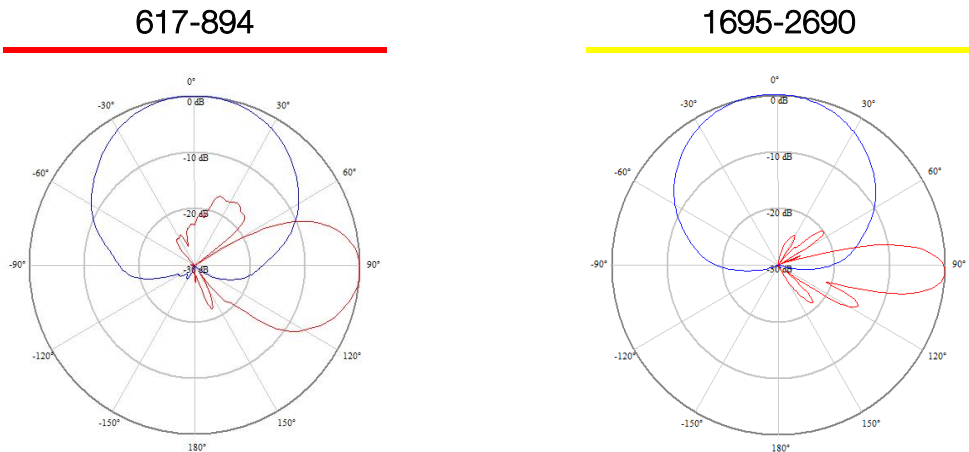
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	16.5 kg	36.4 lb
Shipping Weight	21.5 kg	47.4 lb
Antenna Dimensions (H x W x D)	697 x 580 x 210 mm	27.4 x 22.8 x 8.3 in
Packing Size (H x W x D)	840 x 680 x 360 mm	33.1 x 26.8 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	237 / 89 / 313 N	53 / 20 / 70 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

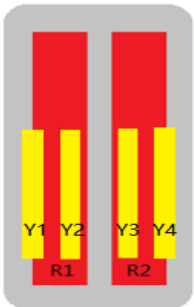
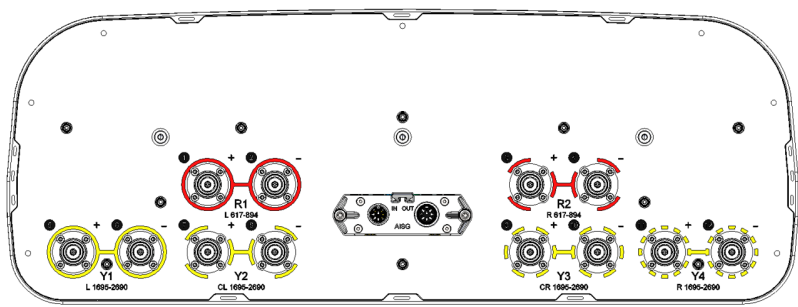


2D4WB-21-AN

12 Port Antenna / 2L4H / 2ft

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	/	MRET	/
●R2	3 - 4	617-894	/	MRET	/
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	2	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2D4WC-21-AN

12 Port Antenna / 2L4H / 4ft

PROSE

- 2x (617-894) + 4x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2x (617-894)			4x (1695-2690)			
		617-698	698-806	806-894	1695-1900	1900-2180	2300-2500	2500-2690
Gain	R1/R2/Y1 Mid Tilt	12.7	13.5	13.2	16.6	17.5	17.7	17.9
	Y2/Y3/Y4 Over All Tilts	12.6±0.7	13.5±0.5	13.1±0.6	16.5±0.5	17.4±0.5	17.6±0.5	17.8±0.6
Polarization		° ±45°						

Horizontal Pattern

3dB Azimuth Beamwidth	°	68±5	62±6.5	65±8	61±5	58±4	58±5	58±6
Front to Back Ratio, Total Power, 180°±30°	dB	> 21	> 23	> 23	> 29	> 29	> 30	> 29
Cross-Polar Discrimination								
At Mechanical Boresight 0°		> 20	> 22	> 22	> 18	> 18	> 20	> 21
Over Sector ±60°		> 11	> 10	> 9	> 6	> 6	> 6	> 8

Vertical Pattern

3dB Elevation Beamwidth	°	20.0±2.5	17.5±2.0	15.5±1.0	7.8±0.6	6.8±0.6	5.9±0.4	5.5±0.4
Electrical Downtilt		2-16			2-12			
1st Upper Sidelobe Suppression	dB	> 17	> 15	> 14	> 17	> 18	> 18	> 17

RF Parameters

VSWR		< 1.5	
Intra - Cluster Isolation	dB	25	25
Inter - Cluster Isolation		25	
3rd PIM(2 x 43 dBm)	dBc	< -153	
Impedance	Ω	50	

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

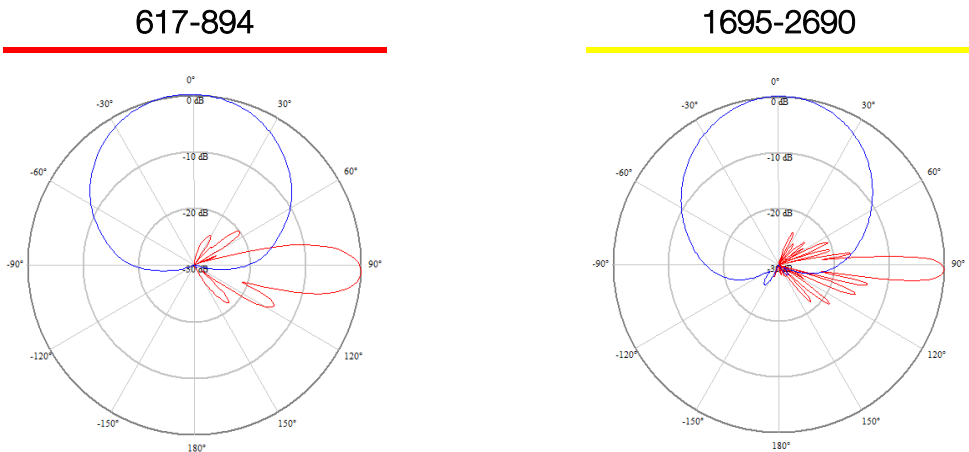
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	27.5 kg	60.6 lb
Shipping Weight	39.9 kg	88.0 lb
Antenna Dimensions (H x W x D)	1219 x 580 x 210 mm	48.0 x 22.8 x 8.3 in
Packing Size (H x W x D)	1369 x 725 x 345 mm	53.9 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	315 / 131 / 496 N	71 / 29 / 112 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

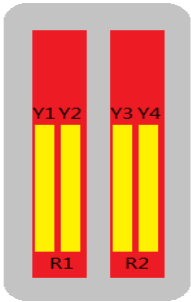
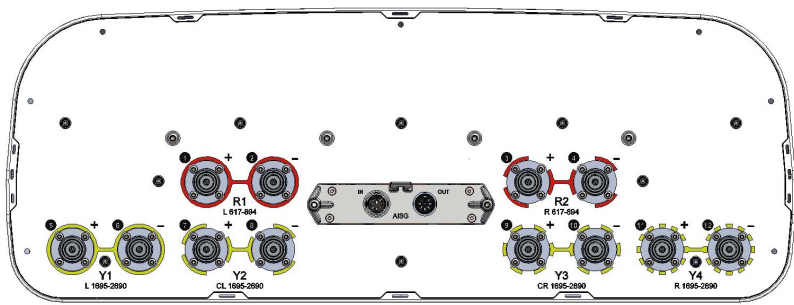


2D4WC-21-AN

12 Port Antenna / 2L4H / 4ft

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	2	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	617-894	2	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2D4WD-21-AN

12 Port Antenna / 2L4H / 6ft

PROSE

- 2x (617-894) + 4x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			2x (617-894)			4x (1695-2690)				
			617-698	698-806	806-894	1695-1900	1900-2180	2300-2500	2500-2690	
Gain	R1/R2/Y1	Mid Tilt	dBi	13.6	14.6	14.1	17.9	18.4	18.7	18.9
	Y2/Y3/Y4	Over All Tilts		13.5±0.7	14.5±0.5	14.0±0.5	17.8±0.4	18.4±0.4	18.6±0.5	18.8±0.5
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	69±6	65±6	66±8	61±5	58±5	58±6	58±6
Front to Back Ratio, Total Power, 180°±30°			dB	> 22	> 23	> 23	> 28	> 29	> 29	> 28
Cross-Polar Discrimination										
At Mechanical Boresight 0°				> 22	> 25	> 22	> 21	> 22	> 23	> 24
Over Sector ±60°				> 11	> 10	> 9	> 6	> 6	> 6	> 8
Vertical Pattern										
3dB Elevation Beamwidth			°	15.0±1.2	13.3±1.2	11.4±1.0	6.2±0.5	5.5±0.5	4.8±0.3	4.5±0.3
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 17	> 17	> 15	> 17	> 20	> 20	> 20
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	25			25			
Inter - Cluster Isolation				25						
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power per Port			W	300			200			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

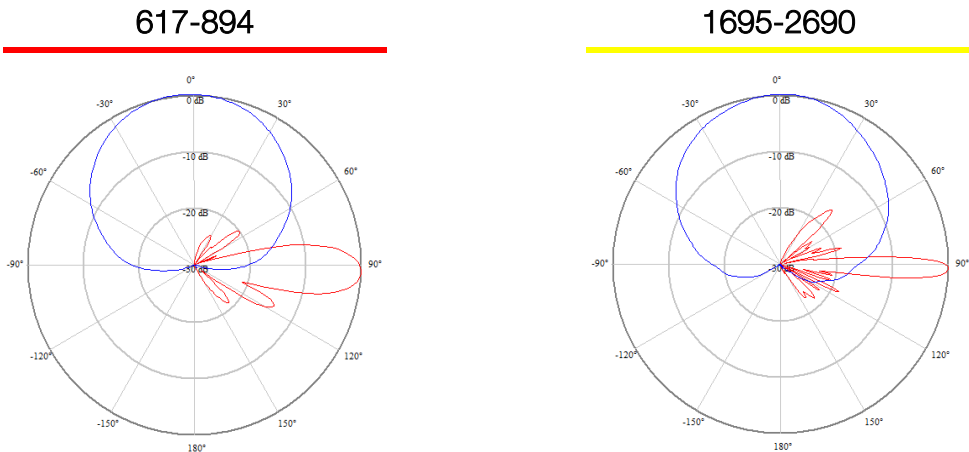
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	33.5 kg	73.9 lb
Shipping Weight	45.7 kg	100.7 lb
Antenna Dimensions (H x W x D)	1770 x 580 x 210 mm	69.7 x 22.8 x 8.3 in
Packing Size (H x W x D)	1925 x 725 x 345 mm	75.8 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	468 / 208 / 738 N	105 / 47 / 166 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



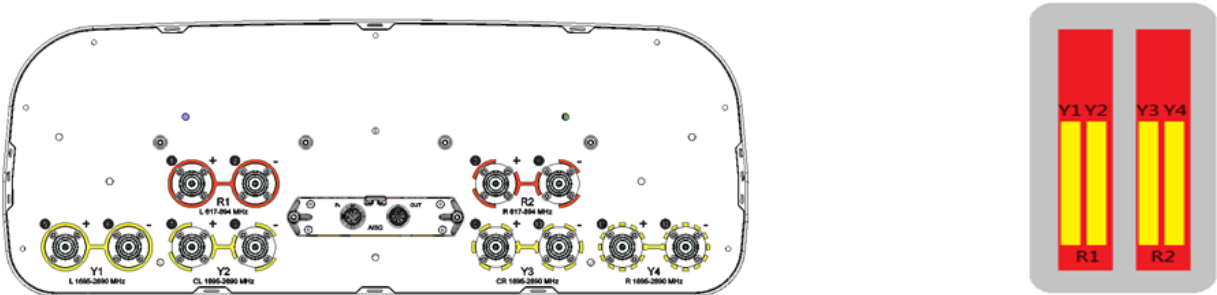
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	2	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	617-894	2	MRET	RB.....XYyxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y3	9 - 10	1695-2690	3	MRET	RB.....XYyxxxx-MM
●Y4	11 - 12	1695-2690	3	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2D4WE-21-AN

12 Port Antenna / 2L4H / 8ft

PROSE

- 2x (617-894) + 4x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			2x (617-894)			4x (1695-2690)				
			617-698	698-806	806-894	1695-1900	1900-2180	2300-2500	2500-2690	
Gain	R1/R2/Y1	Mid Tilt	dBi	14.8	15.8	16.3	17.7	18.1	18.6	18.9
	Y2/Y3/Y4	Over All Tilts		14.8±0.5	15.8±0.4	16.2±0.3	17.7±0.5	18.0±0.4	18.5±0.3	18.9±0.5
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	62±4.1	62±4.4	63±3.8	63±3.4	63±5.2	60±4.9	56±4.9
Front to Back Ratio, Total Power, 180°±30°			dB	> 23	> 28	> 29	> 31	> 32	> 29	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°				> 20	> 24	> 30	> 19	> 21	> 21	> 21
Over Sector ±60°				> 11.3	> 10	> 11.6	> 7	> 8.6	> 4.2	> 5.2
Vertical Pattern										
3dB Elevation Beamwidth			°	10.9±0.7	9.7±0.9	8.4±0.6	6.2±0.5	5.5±0.6	4.8±0.5	4.5±0.3
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 22	> 18	> 17	> 20	> 20	> 19	> 19
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	25			25			
Inter - Cluster Isolation				25						
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power per Port			W	300			200			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

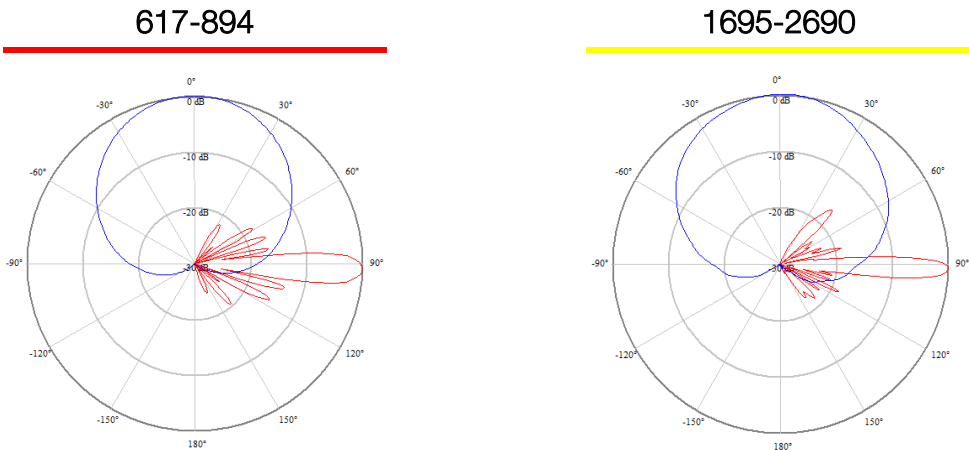
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	42.5 kg	93.7 lb
Shipping Weight	56.7 kg	125.0 lb
Antenna Dimensions (H x W x D)	2437 x 580 x 210 mm	95.9 x 22.8 x 8.3 in
Packing Size (H x W x D)	2590 x 725 x 345 mm	102.0 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	658 / 308 / 1038 N	148 / 69 / 233 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

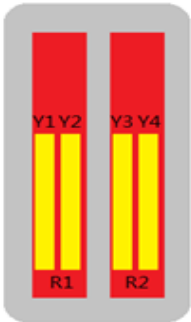
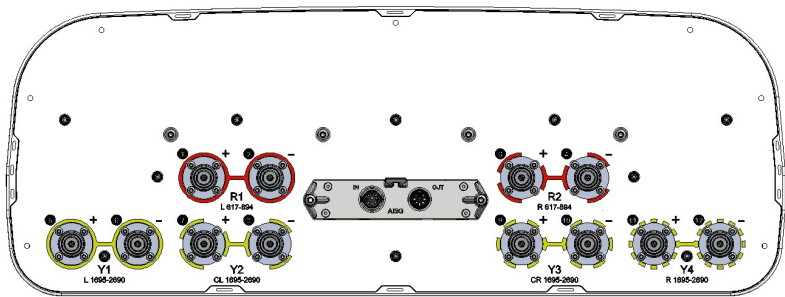


2D4WE-21-AN

12 Port Antenna / 2L4H / 8ft

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	2	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	617-894	2	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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- 698-862 + 880-960 + (1427-1518+1695-2690) + 5 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)			698-862		880-960	1 x (1427-1518+1695-2690) / 5 x (1695-2690)				
			698-803	790-862	880-960	1427-1518	1695-1900	1900-2180	2300-2500	2500-2690
Gain	R1/R2	Mid Tilt	15.8	16.1	16.2					
		Over All Tilts	15.8±0.6	16.0±0.6	16.2±0.6					
	Y2	Mid Tilt				15.9	16.7	17.0	17.3	17.7
		Over All Tilts				15.9±0.5	16.6±0.4	17.0±0.5	17.2±0.5	17.6±0.5
	Y1/Y3/Y5	Mid Tilt					16.9	17.3	17.6	18.2
		Over All Tilts					16.8±0.4	17.2±0.5	17.6±0.5	18.1±0.5
	Y4/Y6	Mid Tilt					16.5	17.0	17.3	17.7
		Over All Tilts					16.5±0.4	16.9±0.5	17.2±0.5	17.6±0.5
Polarization		°	±45°							

Horizontal Pattern

3dB Azimuth Beamwidth	°	62±3.8	61±3.6	63±4	68±5	69±6	66±6	59±6	56±5
Front to Back Ratio, Total Power, 180°±30°		> 28	> 28	> 28	> 26	> 28	> 28	> 28	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°	dB	> 18	> 18	> 18	> 18	> 18	> 18	> 18	> 18
Over Sector ±60°		> 9	> 8	> 8	> 11	> 10	> 10	> 6	> 5

Vertical Pattern

3dB Elevation Beamwidth	°	8.1±0.9	7.5±0.7	6.7±0.5	7.8±0.8	7.0±0.4	6.2±0.5	5.6±0.3	5.1±0.3
Electrical Downtilt		2-12							
1st Upper Sidelobe Suppression	dB	> 16	> 16	> 16	> 17	> 18	> 18	> 18	> 17

RF Parameters

VSWR		< 1.5		
Intra - Cluster Isolation	dB	28	Y2,Y3,Y4>27; Y1, Y5, Y6>28	
Inter - Cluster Isolation		R1, R2//Y1, Y2, Y3, Y4, Y5, Y6 >30		
3rd PIM(2 x 43 dBm)	dBc	< -150		
Impedance	Ω	50		
Maximum Effective Power Per Port	W	250	250	300

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

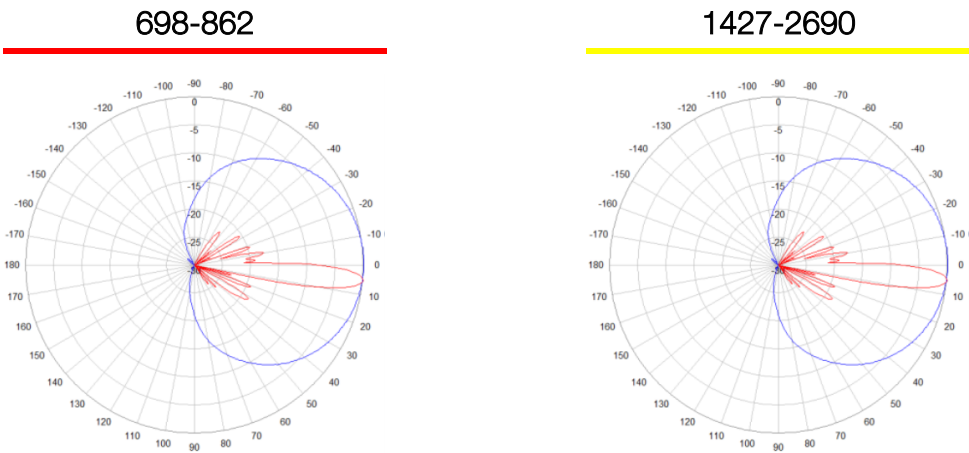
Connector Type	16 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	49.5 kg	109.1 lb
Antenna Dimensions (H x W x D)	2760 x 395 x 189 mm	108.7 x 15.6 x 7.5 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	929 / 381 / 1089 N	209 / 86 / 245 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



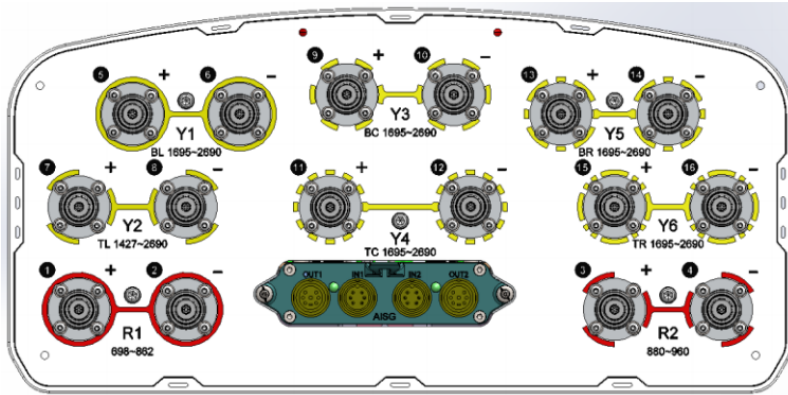
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-862	AISG1-2	MRET	RB.....XYyxxxx-M1
●R2	3 - 4	880-960	AISG1-3	MRET	RB.....XYyxxxx-M1
●Y1	5 - 6	1695-2690	AISG1-1	MRET	RB.....XYyxxxx-M1
●Y2	7 - 8	1427-2690	AISG2-1	MRET	RB.....XYyxxxx-M2
●Y3	9 - 10	1695-2690	AISG2-3	MRET	RB.....XYyxxxx-M2
●Y4	11 - 12	1695-2690	AISG2-2	MRET	RB.....XYyxxxx-M2
●Y5	13 - 14	1695-2690	AISG1-4	MRET	RB.....XYyxxxx-M1
●Y6	15 - 16	1695-2690	AISG2-4	MRET	RB.....XYyxxxx-M2

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-3	7.3 kg / 16.1 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

ACG4WD-01

14 Port Antenna / 3L4H / 2.1m

PROSE

- 1× (698-862) +1× (880-960) +1× (698-960)
+4× (1695-2690)
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		(698-862)//(880-960)//(698-960)			4 x (1695-2690)					
		698-806	790-862	880-960	1695-1880	1900-2180	2300-2400	2500-2690		
Gain	R1/Y1/Y2	Mid Tilt	dBi	14.4	14.6	14.6	15.8	16.1	16.4	
		Over All Tilts		14.4±0.6	14.6±0.5	14.6±0.5	15.8±0.5	16.1±0.5	16.4±0.5	
	R2/Y3/Y4	Mid Tilt		14.4			14.3	15.6	15.9	16.0
		Over All Tilts		14.4±0.5			14.3±0.5	15.6±0.5	15.9±0.5	16.0±0.5
	R3	Mid Tilt		14.7	14.9	14.7				
		Over All Tilts		14.7±0.6	14.9±0.6	14.7±0.6				
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	65±6	57±5	59±5	67±6	60±6	62±6	63±5	
F/B Co-polar(180°±30°)		dB	> 25	> 25	> 25	> 25	> 26	> 26	> 26	
Cross-Polar Discrimination										
At Mechanical Boresight 0°			> 18	> 18	> 18	> 18	> 18	> 18	> 18	
Over Sector ±60°			> 12	> 8	> 10	> 10	> 8	> 5	> 5	
Vertical Pattern										
3dB Elevation Beamwidth		°	10.7±1.0	9.7±1.0	8.8±+0.6	11.2±0.9	9.8±0.8	8.5±0.5	7.8±0.5	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 16			> 17				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	25			25				
Inter - Cluster Isolation			26			26				
3rd PIM(2 x 43 dBm)		dBc	< -150							
Impedance		Ω	50							
Maximum Effective Power Per Port		W	300			250				

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

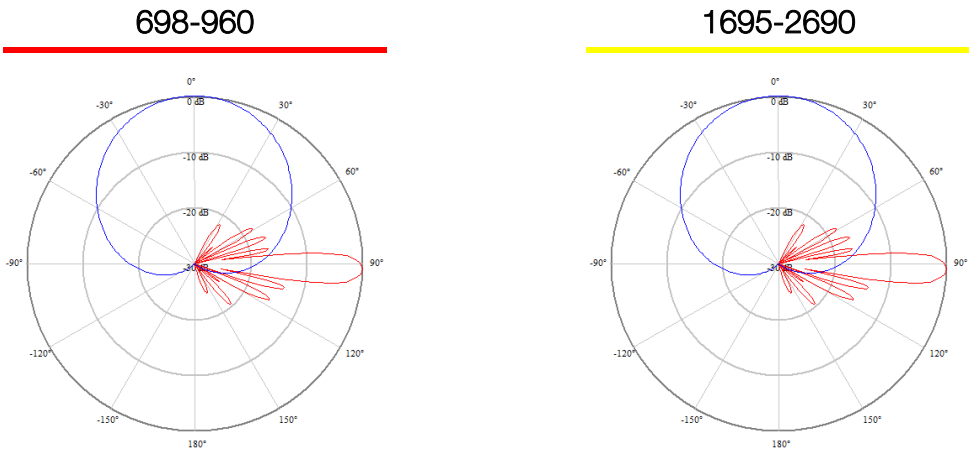
Connector Type	14 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	35 kg	77.2 lb
Shipping Weight	44.1 kg	97.2 lb
Antenna Dimensions (H x W x D)	2100 x 448 x 188 mm	82.7 x 17.6 x 7.4 in
Packing Size (H x W x D)	2250 x 551 x 361 mm	88.6 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	967 / 277 / 1008 N	217 / 62 / 227 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



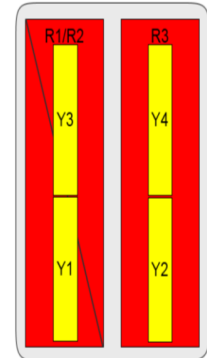
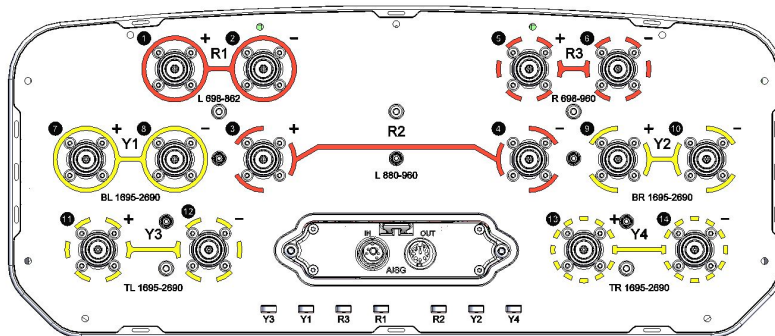
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-862	4	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	880-960	5	MRET	RB.....XYYxxxx-MM
●R3	5 - 6	698-960	3	MRET	RB.....XYYxxxx-MM
●Y1	7 - 8	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y2	9 - 10	1695-2690	6	MRET	RB.....XYYxxxx-MM
●Y3	11 - 12	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y4	13 - 14	1695-2690	7	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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ACG4WF-01

14 Port Antenna / 3L4H / 2.6m

PROSE

- (698-862) +(880-960) +(698-960) + 4 x (1695-2690)
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		(698-862) // (880-960) // (698-960)				4 x (1695-2690)				
		698-806	790-862	880-960	1695-1880	1900-2180	2300-2400	2500-2690		
Gain	R1/Y1/Y2	Mid Tilt	dBi	15.2	15.4	16.1	16.9	17.2	17.5	
		Over All Tilts		15.1±0.6	15.3±0.5	16.0±0.5	16.8±0.5	17.1±0.5	17.4±0.5	
	R2/Y3/Y4	Mid Tilt		15.4		15.8	16.6	16.9	17.2	
		Over All Tilts		15.2±0.5		15.7±0.5	16.5±0.5	16.8±0.5	17.1±0.5	
	R3	Mid Tilt		15.5	15.7	15.7				
		Over All Tilts		15.4±0.6	15.6±0.6	15.5±0.6				
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	69±6	62±5	64±5	67±6	61±6	64±6	66±5	
F/B Co-polar(180°±30°)		dB	> 25	> 25	> 25	> 25	> 26	> 26	> 26	
Cross-Polar Discrimination										
At Mechanical Boresight 0°			> 18	> 18	> 18	> 18	> 18	> 18	> 18	
Over Sector ±60°			> 12	> 8	> 10	> 10	> 8	> 5	> 5	
Vertical Pattern										
3dB Elevation Beamwidth		°	8.7±0.8	8.0±0.6	7.3±0.6	7.2±0.5	6.3±0.5	5.6±0.4	5.1±0.4	
Electrical Downtilt			2-12		2-12					
1st Upper Sidelobe Suppression		dB	> 16			> 17				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	26			26				
Inter - Cluster Isolation			26			26				
3rd PIM(2 x 43 dBm)		dBc	< -150							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300			250				

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

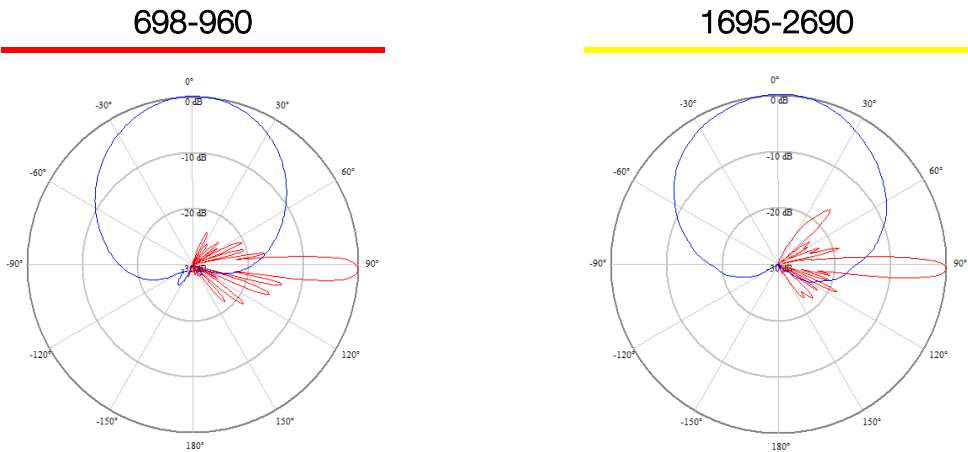
Connector Type	14 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	42.8 kg	94.4 lb
Shipping Weight	55.3 kg	121.9 lb
Antenna Dimensions (H x W x D)	2690 x 448 x 188 mm	105.9 x 17.6 x 7.4 in
Packing Size (H x W x D)	2825 x 551 x 361 mm	111.2 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1230 / 374 / 1282 N	277 / 84 / 288 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



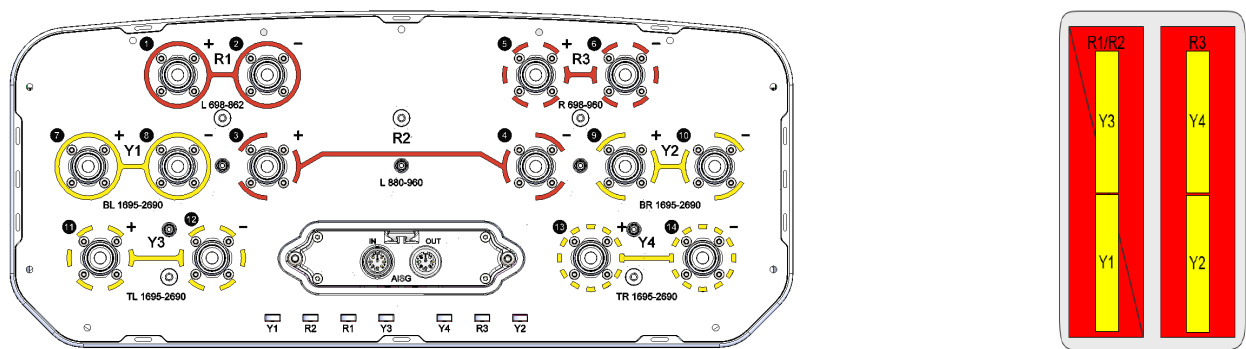
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-862	3	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	880-960	2	MRET	RB.....XYYxxxx-MM
●R3	5 - 6	698-960	6	MRET	RB.....XYYxxxx-MM
●Y1	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	9 - 10	1695-2690	7	MRET	RB.....XYYxxxx-MM
●Y3	11 - 12	1695-2690	4	MRET	RB.....XYYxxxx-MM
●Y4	13 - 14	1695-2690	5	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G6WD-21

16 Port Antenna / 2L6H / 2.0m

PROSE

- 2 x (698-960) + 6 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			2 x (698-960)		6 x (1695-2690)				
			698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	R1/R2/Y1 /Y2/Y3/Y	Mid Tilt	dBi	14.8	14.9	14.7	15.6	16.3	16.9
	4	Over All Tilts		14.7±0.5	14.8±0.5	14.7±0.5	15.6±0.5	16.2±0.5	16.8±0.5
	Y5/Y6	Mid Tilt				14.5	15.4	15.9	16.4
		Over All Tilts				14.5±0.6	15.4±0.5	15.8±0.4	16.3±0.5
Polarization			°	±45°					
Horizontal Pattern									
3dB Azimuth Beamwidth			°	60±5	62±5	67±6	64±5	60±5	58±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 22	> 23	> 24	> 25	> 25	> 25
Cross-Polar Discrimination At Mechanical Boresight 0°				> 18	> 18	> 18	> 18	> 18	> 18
Over Sector ±60°				> 9	> 8	> 9	> 8	> 6	> 6
Vertical Pattern									
3dB Elevation Beamwidth			°	10.0±1.1	8.6±0.6	11.0±1.0	9.6±1.0	8.5±0.5	7.9±0.5
Electrical Downtilt				2-12		2-12			
1st Upper Sidelobe Suppression			dB	> 16		> 16			
RF Parameters									
VSWR				< 1.5					
Intra - Cluster Isolation			dB	25		26			
Inter - Cluster Isolation				25		26			
3rd PIM(2 x 43 dBm)			dBc	< -153					
Impedance			Ω	50					
Maximum Effective Power Per Port			W	300		250			

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA11.1)

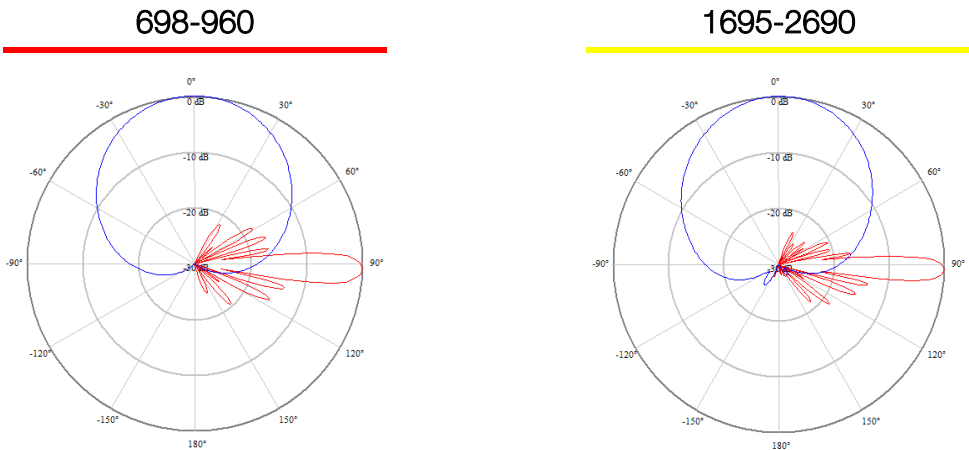
Connector Type	16 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	34 kg	75.0 lb
Shipping Weight	46.4 kg	102.3 lb
Antenna Dimensions (H x W x D)	2000 x 498 x 197 mm	78.7 x 19.6 x 7.8 in
Packing Size (H x W x D)	2195 x 553 x 307 mm	86.4 x 22.2 x 12.1 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	794 / 294 / 962 N	178 / 66 / 216 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



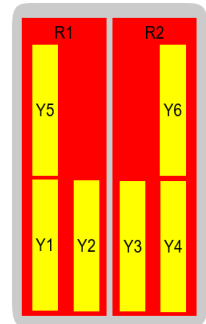
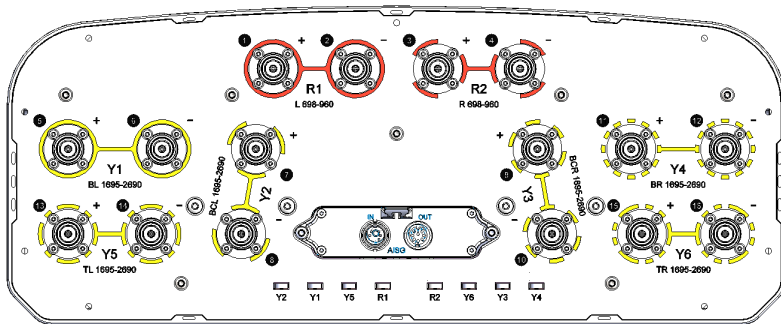
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	690-960	4	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	690-960	5	MRET	RB.....XYyxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYyxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y3	9 - 10	1695-2690	7	MRET	RB.....XYyxxxx-MM
●Y4	11 - 12	1695-2690	8	MRET	RB.....XYyxxxx-MM
●Y5	13 - 14	1695-2690	3	MRET	RB.....XYyxxxx-MM
●Y6	15 - 16	1695-2690	6	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G6WF-21

16 Port Antenna / 2L6H / 2.7m

PROSE

- 2 x (698-960) + 6 x (1695-2690) MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)		2 x (698-960)		6 x (1695-2690)						
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690			
Gain	R1/R2	Mid Tilt	dBi	15.1	15.8					
		Over All Tilts		15.0±0.5	15.8±0.5					
	Y1/Y2/Y3	Mid Tilt					15.9	16.6	17.2	17.6
		Over All Tilts					15.8±0.5	16.6±0.5	17.1±0.4	17.5±0.5
	Y4/Y5/Y6	Mid Tilt					15.2	16.2	16.5	17.0
		Over All Tilts					15.2±0.5	16.1±0.5	16.5±0.4	16.9±0.5
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	69±5	60±5	69±7	64±7	66±6	64±5		
Front to Back Ratio, Total Power, 180°±30°		dB	> 21	> 22	> 24	> 25	> 24	> 24		
Cross-Polar Discrimination At Mechanical Boresight 0°			> 16	> 18	> 18	> 18	> 18	> 20		
Over Sector ±60°			> 9	> 9	> 6	> 6	> 6	> 5		
Vertical Pattern										
3dB Elevation Beamwidth		°	8.2±1.2	7.1±0.5	7.4±0.7	6.6±0.7	5.8±0.3	5.3±0.4		
Electrical Downtilt			2-12		2-12					
1st Upper Sidelobe Suppression		dB	> 16		> 16					
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	27		26					
Inter - Cluster Isolation			27		26					
3rd PIM(2 x 43 dBm)		dBc	< -153							
Impedance		Ω	50							
Maximum Effective Power Per Port		W	300		250					

— Maximum Effective Power Whole Antenna: 1200 W.

2G6WF-21

16 Port Antenna / 2L6H / 2.7m

PROSE

Mechanical Data (BASTA)

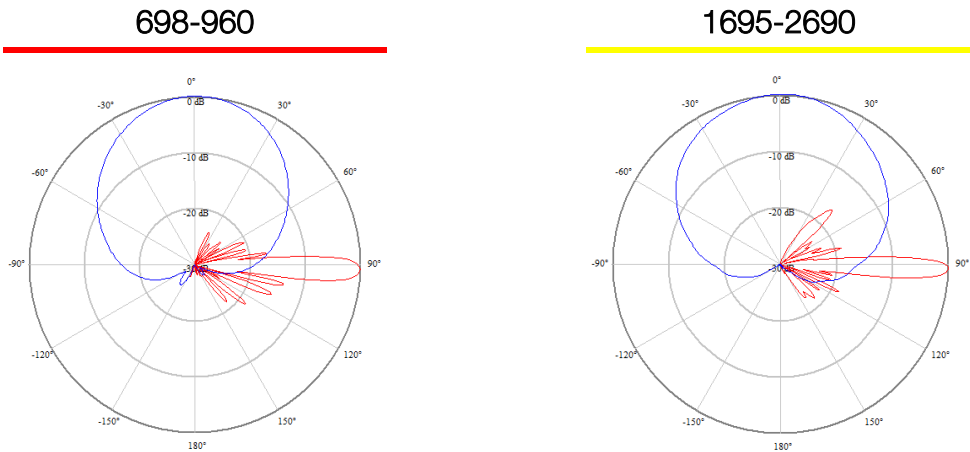
Connector Type	16 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	40.1 kg	88.4 lb
Shipping Weight	49.4 kg	108.9 lb
Antenna Dimensions (H x W x D)	2769 x 448 x 188 mm	109.0 x 17.6 x 7.4 in
Packing Size (H x W x D)	2890 x 551 x 337 mm	113.8 x 21.7 x 13.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1275 / 387 / 1329 N	287 / 87 / 299 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



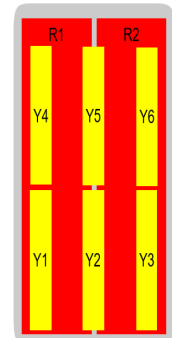
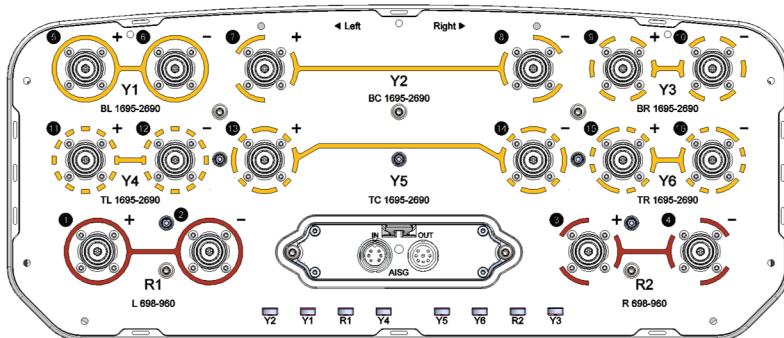
RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	3	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	7	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	8	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	4	MRET	RB.....XYYxxxx-MM
●Y5	13 - 14	1695-2690	5	MRET	RB.....XYYxxxx-MM
●Y6	15 - 16	1695-2690	6	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

2G2J4WD-21

16 Port Antenna / 2L6H / 2.0m

PROSE

- 2 x (698-960) + 2 x (1427-2690) + 4 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			2 x (698-960)			2 x (1427-2690) // 4 x (1695-2690)					
			698-806	790-862	880-960	1427-1518	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	R1/R2/Y1 /Y2/Y3/Y	Mid Tilt	dBi	14.6	14.8	14.8	15.4	16.1	16.7	16.6	
	4	Over All Tilts		14.6±0.5	14.7±0.5	14.7±0.5	15.3±0.5	16.2±0.5	16.6±0.5	16.6±0.5	
	Y5/Y6	Mid Tilt					14.3	15.2	15.6	15.8	16.1
	Over All Tilts					14.2±0.6	15.1±0.6	15.5±0.5	15.7±0.5	16.1±0.5	
Polarization			°	±45°							
Horizontal Pattern											
3dB Azimuth Beamwidth			°	66±5	60±5	66±6	64±6	66±10	62±7	60±5	60±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 20	> 21	> 23	> 21	> 23	> 25	> 25	> 24
Cross-Polar Discrimination At Mechanical Boresight 0°				> 18	> 18	> 18	> 18	> 16	> 17	> 18	> 18
Vertical Pattern											
3dB Elevation Beamwidth			°	11±1.1	10±0.9	9.0±0.7	11.5±1	9.6±0.8	8.4±0.8	7.5±0.6	7.0±0.6
Electrical Downtilt				2-12			2-12				
1st Upper Sidelobe Suppression			dB	> 16			> 16				
RF Parameters											
VSWR				< 1.5							
Intra - Cluster Isolation			dB	25			25				
Inter - Cluster Isolation				25			26				
3rd PIM(2 x 43 dBm)			dBc	< -153							
Impedance			Ω	50							
Maximum Effective Power Per Port			W	300			250				

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA11.1)

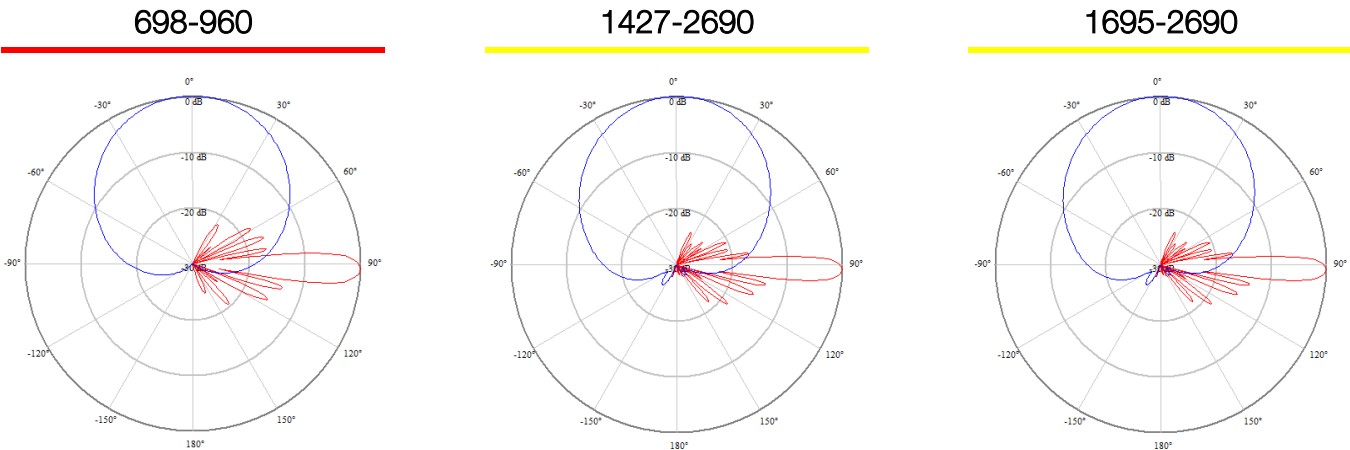
Connector Type	16 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	32.6 kg	71.9 lb
Shipping Weight	45.4 kg	100.1 lb
Antenna Dimensions (H x W x D)	2019 x 498 x 219 mm	79.5 x 19.6 x 8.6 in
Packing Size (H x W x D)	2140 x 575 x 370 mm	84.3 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	586 / 275 / 873 N	132 / 62 / 196 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



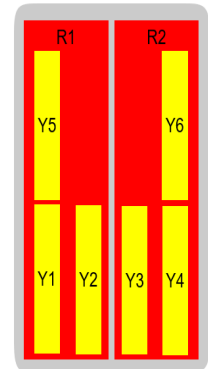
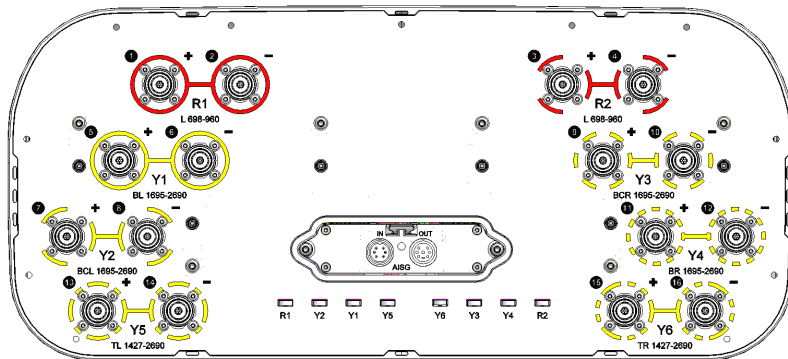
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	690-960	1	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	690-960	8	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	6	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	7	MRET	RB.....XYYxxxx-MM
●Y5	13 - 14	1427-2690	4	MRET	RB.....XYYxxxx-MM
●Y6	15 - 16	1427-2690	5	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary. For environmental information, please refer to

3G5WD-01

16 Port Antenna / 3L5H / 2.0m

PROSE

- 3 x (698-960) + 5 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)			3 x (698-960)			5 x (1695-2690)				
			698-806	790-862	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	R1-R3/Y1	Mid Tilt	dBi	14.5	14.6	14.7	15.2	16.1	16.3	16.4
	-Y3	Over All Tilts		14.4±0.5	14.5±0.5	14.6±0.5	15.2±0.7	16.0±0.7	16.2±0.5	16.4±0.5
	Y4/Y5	Mid Tilt					14.9	15.6	15.9	16.1
		Over All Tilts					14.8±0.5	15.6±0.5	15.8±0.5	16.0±0.5
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	68±6	67±6	65±5	66±6	63±6	64±4	60±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 23	> 23	> 23	> 23	> 24	> 24	> 25
Cross-Polar Discrimination At Mechanical Boresight 0°				> 16	> 20	> 20	> 16	> 16	> 16	> 16
Over Sector ±60°				> 11	> 8	> 8	> 10	> 6	> 5	> 4
Vertical Pattern										
3dB Elevation Beamwidth			°	10.7±1.0	9.8±1.0	9.0±0.6	9.4±0.8	8.3±0.6	7.4±0.5	7.0±0.5
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 16			> 16			
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	25			25			
Inter - Cluster Isolation				25			25			
3rd PIM(2 x 43 dBm)			dBc	< -150						
Impedance			Ω	50						

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA 11.1)

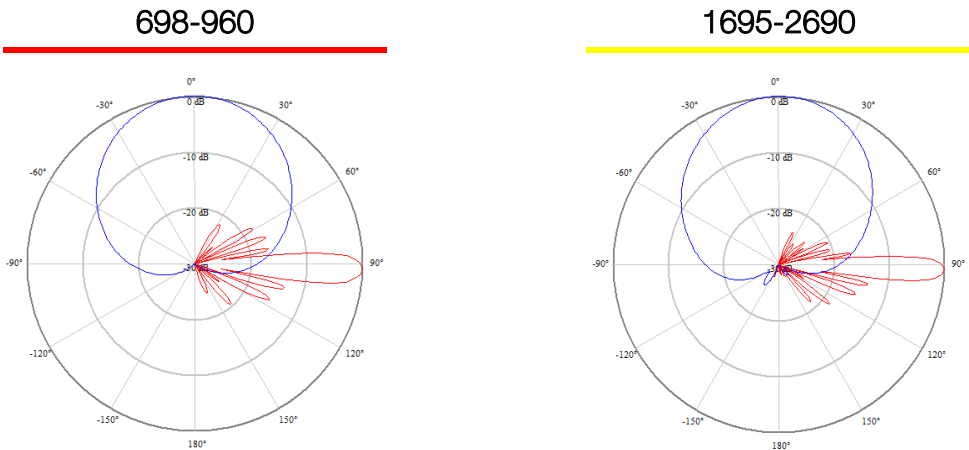
Connector Type	16 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	38 kg	83.8 lb
Shipping Weight	48 kg	105.8 lb
Antenna Dimensions (H x W x D)	1999 x 580 x 190 mm	78.7 x 22.8 x 7.5 in
Packing Size (H x W x D)	2155 x 725 x 330 mm	84.8 x 28.5 x 13.0 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1302 / 231 / 1397 N	293 / 52 / 314 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



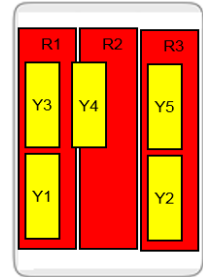
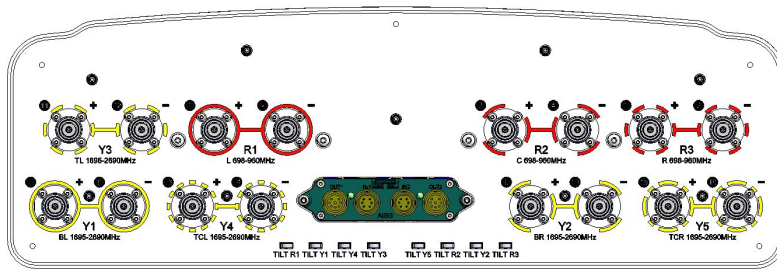
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	AISG2-1	MRET	RB.....XYyxxxx-M2
●R2	3 - 4	698-960	AISG1-1	MRET	RB.....XYyxxxx-M1
●R3	5 - 6	698-960	AISG2-6	MRET	RB.....XYyxxxx-M2
●Y1	7 - 8	1695-2690	AISG2-2	MRET	RB.....XYyxxxx-M2
●Y2	9 - 10	1695-2690	AISG1-2	MRET	RB.....XYyxxxx-M1
●Y3	11 - 12	1695-2690	AISG2-4	MRET	RB.....XYyxxxx-M2
●Y4	13 - 14	1695-2690	AISG2-3	MRET	RB.....XYyxxxx-M2
●Y5	15 - 16	1695-2690	AISG2-5	MRET	RB.....XYyxxxx-M2

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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DCE2J4WF-01

18 Port Antenna / 3L6H / 2.69m

PROSE

- (617-862) +(880-960) +(617-960) + 2 x (1427-2690) + 4 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		(617-862) // (880-960) // (617-960)				2 x (1427-2690) // 4 x (1695-2690)					
		617-806	790-862	880-960	1427-1518	1695-1880	1900-2180	2300-2400	2500-2690		
Gain	R1/Y5/Y6	Mid Tilt	dBi	15.0	15.3	/	15.3	16.1	16.5	16.9	17.6
		Over All Tilts		14.9±0.6	15.2±0.5	/	15.2±0.5	16.0±0.5	16.5±0.5	16.8±0.5	17.5±0.5
	R2/Y1-Y4	Mid Tilt		/	/	15.4	/	16.3	16.8	17.3	17.7
		Over All Tilts		/	/	15.3±0.5	/	16.3±0.5	16.8±0.5	17.3±0.5	17.6±0.5
	R3	Mid Tilt		15.3	15.6	15.6	/	/	/	/	/
		Over All Tilts		15.2±0.6	15.5±0.5	15.6±0.5	/	/	/	/	/
Polarization		°	±45°								
Horizontal Pattern											
3dB Azimuth Beamwidth		°	67±6	66±6	65±6	69±6	67±6	60±6	62±6	59±5	
Front to Back Ratio, Total Power, 180°±30°		dB	> 21	> 25	> 25	> 25	> 25	> 26	> 26	> 26	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 18	> 18	> 18	> 18	> 18	> 18	> 18	
Over Sector ±60°			> 8	> 8	> 8	> 8	> 8	> 5	> 5	> 5	
3dB Elevation Beamwidth(R1-R3/Y5/Y6)		°	9.8±0.8	8.9±0.8	7.8±0.8	7.5±0.6	6.5±0.5	5.7±0.5	4.9±0.5	4.5±0.5	
3dB Elevation Beamwidth(Y1-Y4)			/	/	/	/	7.0±0.5	6.2±0.5	5.6±0.5	5.2±0.5	
Electrical Downtilt			2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	
1st Upper Sidelobe Suppression		dB	> 16	> 16	> 16	> 16	> 16	> 16	> 16	> 16	
Vertical Pattern											
VSWR			< 1.5								
Intra - Cluster Isolation		dB	25								
Inter - Cluster Isolation			26								
3rd PIM(2 x 43 dBm)		dBc	< -150								
Impedance		Ω	50								
Maximum Effective Power per Port		W	LB:300 / HB:250								

— Maximum Effective Power Whole Antenna: 1200 W.

DCE2J4WF-01

18 Port Antenna / 3L6H / 2.69m

PROSE

Mechanical Data (BASTA 11.1)

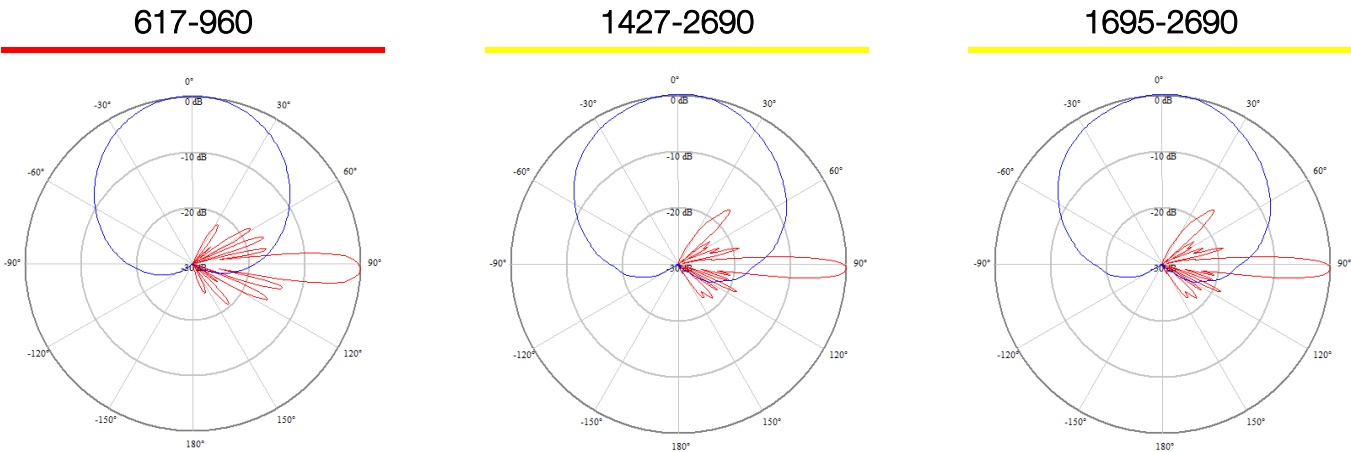
Connector Type	18 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	55 kg	121.3 lb
Shipping Weight	76 kg	167.5 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



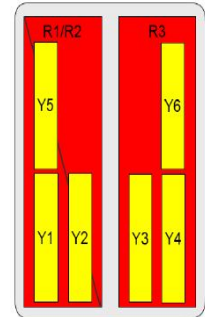
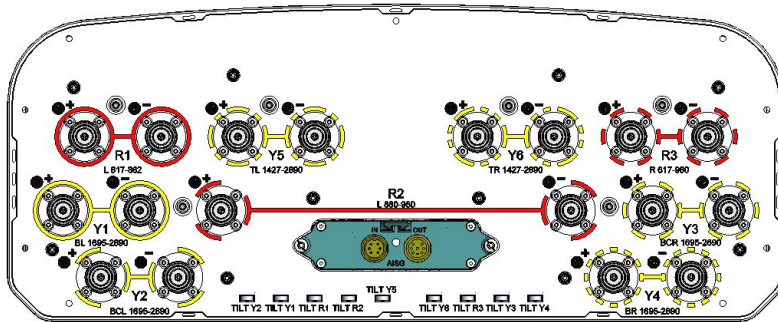
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-862	3	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	880-960	4	MRET	RB.....XYyxxxx-MM
●R3	5 - 6	617-960	7	MRET	RB.....XYyxxxx-MM
●Y1	7 - 8	1695-2690	2	MRET	RB.....XYyxxxx-MM
●Y2	9 - 10	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y3	11 - 12	1695-2690	8	MRET	RB.....XYyxxxx-MM
●Y4	13 - 14	1695-2690	9	MRET	RB.....XYyxxxx-MM
●Y5	15 - 16	1427-2690	5	MRET	RB.....XYyxxxx-MM
●Y6	17 - 18	1427-2690	6	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G8WF-01

20 Port Antenna / 2L8H / 2.7m

PROSE

- 2 x (698-960) + 8 x (1695-2690) MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2 x (698-960)		8 x (1695-2690)					
		698-896	880-960	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1/R2/Y1	Mid Tilt	dBi	15.4	15.8	16.0	16.7	17.4	17.8
	Y2/Y3/Y4	Over All Tilts		15.3±0.5	15.8±0.5	16.0±0.7	16.7±0.7	17.4±0.6	17.7±0.5
	Y5-Y8	Mid Tilt			15.6	16.3	17.0	17.4	
		Over All Tilts			15.5±0.7	16.3±0.7	17.0±0.6	17.3±0.5	
Polarization			°	±45					
Horizontal Pattern									
3dB Azimuth Beamwidth			°	63±5	58±6	68±7	64±7	60±7	59±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 22	> 23	> 25	> 25	> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°				> 18	> 18	> 17	> 18	> 20	> 20
Over Sector ±60°				> 9	> 10	> 8	> 6	> 3	> 4
Vertical Pattern									
3dB Elevation Beamwidth			°	8.4±0.8	7.2±0.3	7.2±0.5	6.3±0.5	5.6±0.2	5.1±0.4
Electrical Downtilt				2-12		2-12			
1st Upper Sidelobe Suppression			dB	> 17		> 18			
RF Parameters									
VSWR				< 1.5:1					
Intra - Cluster Isolation			dB	> 27		> 28			
Inter - Cluster Isolation				> 27		> 25			
3rd PIM(2 x 43 dBm)			dBc	< -150					
Impedance			Ω	50					
Maximum Effective Power Per Port			W	300		250			

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA11.1)

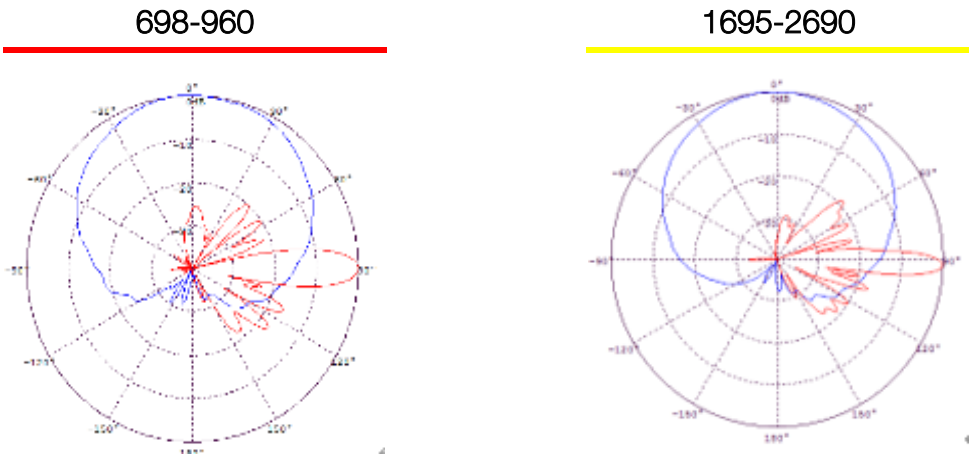
Connector Type	20 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	47.9 kg	105.6 lb
Shipping Weight	56.2 kg	123.9 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



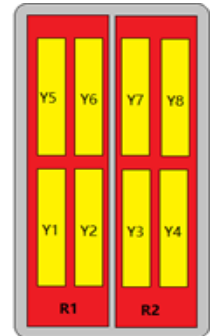
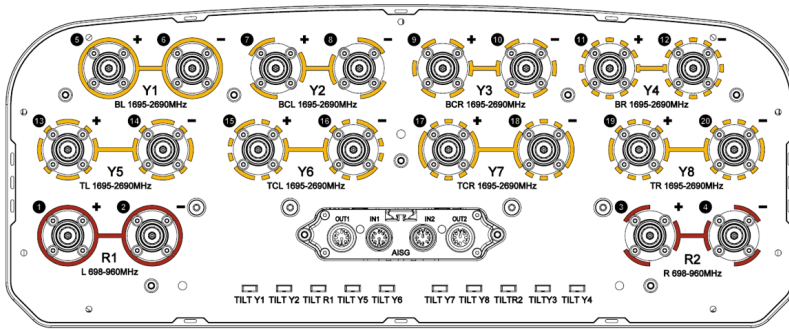
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	ASG1-3	MRET	RB.....XYyxxxx-M1
●R2	3 - 4	698-960	ASG1-8	MRET	RB.....XYyxxxx-M1
●Y1	5 - 6	1695-2690	ASG1-1	MRET	RB.....XYyxxxx-M1
●Y2	7 - 8	1695-2690	ASG1-2	MRET	RB.....XYyxxxx-M1
●Y3	9 - 10	1695-2690	ASG1-9	MRET	RB.....XYyxxxx-M1
●Y4	11 - 12	1695-2690	ASG1-10	MRET	RB.....XYyxxxx-M1
●Y5	13 - 14	1695-2690	ASG1-4	MRET	RB.....XYyxxxx-M1
●Y6	15 - 16	1695-2690	ASG1-5	MRET	RB.....XYyxxxx-M1
●Y7	17 - 18	1695-2690	ASG1-6	MRET	RB.....XYyxxxx-M1
●Y8	19 - 20	1695-2690	ASG1-7	MRET	RB.....XYyxxxx-M1

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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3G7WD-01

20 Port Antenna / 3L7H / 2.0 m

PROSE

- 3 x (698-960) + 7 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			3 x (698-960)			7 x (1695-2690)				
			698-806	790-862	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	R1-R3/Y1	Mid Tilt	dBi	14.5	14.6	14.7	15.3	16.1	16.3	16.5
	-Y4	Over All Tilts		14.4±0.5	14.5±0.5	14.6±0.5	15.2±0.7	16.0±0.7	16.2±0.5	16.4±0.5
	Y5-Y7	Mid Tilt					14.9	15.7	15.9	16.1
		Over All Tilts					14.8±0.5	15.6±0.5	15.8±0.5	16.0±0.5
Polarization			°	±45						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	68±6	67±6	65±5	66±6	63±6	64±4	60±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 25	> 25	> 25	> 25	> 26	> 26	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°				> 16	> 20	> 20	> 16	> 16	> 16	> 16
Over Sector ±60°				> 11	> 8	> 8	> 10	> 6	> 5	> 4
Vertical Pattern										
3dB Elevation Beamwidth			°	10.7±1.0	9.8±1.0	9.0±0.6	9.4±0.8	8.3±0.6	7.4±0.5	7.0±0.5
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 16			> 17			
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 25			> 25			
Inter - Cluster Isolation				> 25			> 25			
3rd PIM(2 x 43 dBm)			dBc	< -150						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	300			250			

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA11.1)

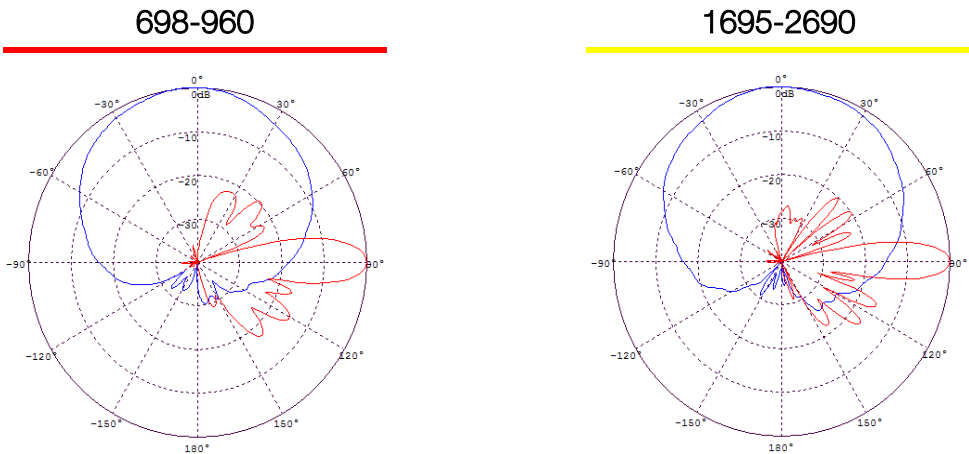
Connector Type	20 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	40 kg	88.2 lb
Shipping Weight	50 kg	110.2 lb
Antenna Dimensions (H x W x D)	1999 x 580 x 190 mm	78.7 x 22.8 x 7.5 in
Packing Size (H x W x D)	2155 x 725 x 330 mm	84.7 x 28.5 x 13.0 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1302 / 231 / 1397 N	293 / 52 / 314 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



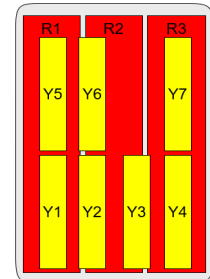
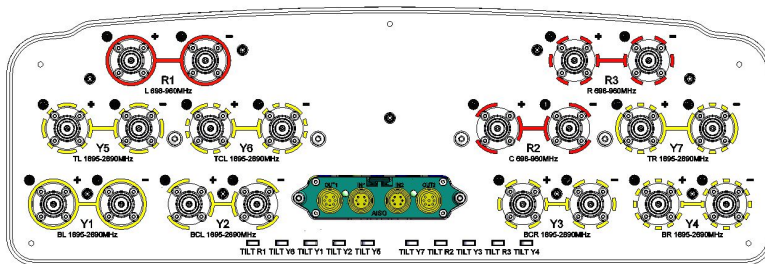
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	AISG2-1	MRET	RB.....XYyxxxx-M2
●R2	3 - 4	698-960	AISG1-2	MRET	RB.....XYyxxxx-M1
●R3	5 - 6	698-960	AISG2-7	MRET	RB.....XYyxxxx-M2
●Y1	7 - 8	1695-2690	AISG2-3	MRET	RB.....XYyxxxx-M2
●Y2	9 - 10	1695-2690	AISG1-1	MRET	RB.....XYyxxxx-M1
●Y3	11 - 12	1695-2690	AISG2-6	MRET	RB.....XYyxxxx-M2
●Y4	13 - 14	1695-2690	AISG2-8	MRET	RB.....XYyxxxx-M2
●Y5	15 - 16	1695-2690	AISG2-4	MRET	RB.....XYyxxxx-M2
●Y6	17 - 18	1695-2690	AISG2-2	MRET	RB.....XYyxxxx-M2
●Y7	19 - 20	1695-2690	AISG2-5	MRET	RB.....XYyxxxx-M2

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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- (698-862) + (880-960) + (698-960) + 8 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			698-862 / 880-960 / 698-960			7 x (1695-2690)				
			698-806	790-862	880-960	1695-1880	1900-2200	2300-2400	2500-2690	
Gain	R1/Y1/Y2	Mid Tilt	dBi	15.7	16.0	16.3	16.4	16.9	17.4	18.0
	/Y3Y4	Over All Tilts		15.6±0.5	15.9±0.5	16.2±0.5	16.3±0.5	16.8±0.5	17.3±0.5	17.9±0.5
	R2/R3/Y5	Mid Tilt		15.4	15.7	15.9	15.8	16.2	16.7	17.3
	/Y6/Y7/Y	Over All Tilts		15.3±0.5	15.6±0.5	15.8±0.5	15.7±0.5	16.1±0.5	16.6±0.5	17.2±0.5
8										
Polarization			°	±45						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	71±6	62±5	60±5	69±6	68±6	64±4	59±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 25	> 25	> 25	> 27	> 27	> 25	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°				> 17	> 18	> 18	> 18	> 19	> 19	> 18
Over Sector ±60°				> 10	> 8	> 8	> 8	> 7	> 6	> 6
Vertical Pattern										
3dB Elevation Beamwidth			°	8.6±0.6	7.5±0.6	6.9±0.5	7.0±0.5	6.2±0.5	5.6±0.3	5.1±0.3
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 17			> 17			
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 25			> 26			
Inter - Cluster Isolation				R2//R3 >28; R1// R2,R3>26; R1,R2,R3// Y1~Y8 >28						
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	300			250			

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA11.1)

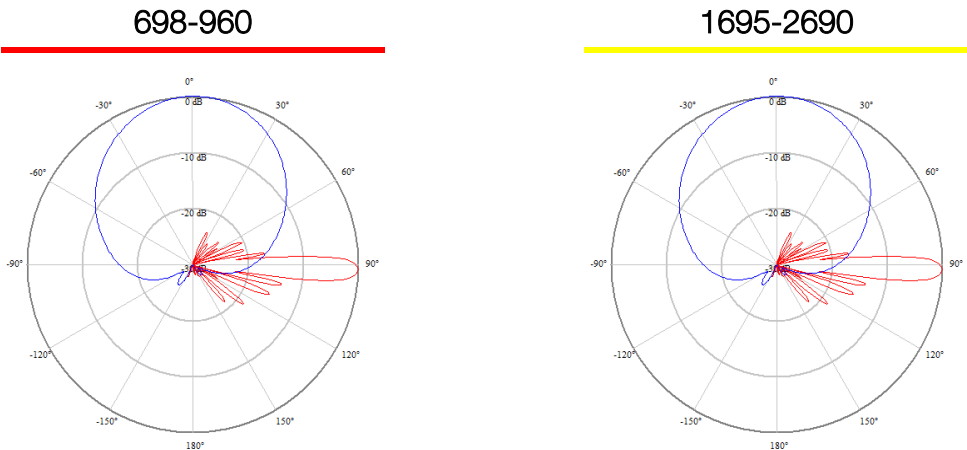
Connector Type	22 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	61.5 kg	135.6 lb
Shipping Weight	82.0 kg	180.8 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



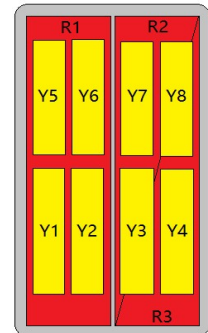
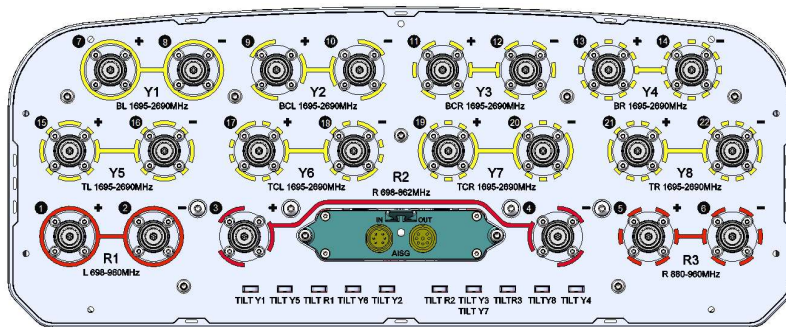
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	3	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	6	MRET	RB.....XYYxxxx-MM
●R3	5 - 6	698-960	8	MRET	RB.....XYYxxxx-MM
●Y1	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	9 - 10	1695-2690	5	MRET	RB.....XYYxxxx-MM
●Y3	11 - 12	1695-2690	7	MRET	RB.....XYYxxxx-MM
●Y4	13 - 14	1695-2690	7	MRET	RB.....XYYxxxx-MM
●Y5	15 - 16	1695-2690	10	MRET	RB.....XYYxxxx-MM
●Y6	17 - 18	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y7	19 - 20	1695-2690	4	MRET	RB.....XYYxxxx-MM
●Y8	21 - 22	1695-2690	9	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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ACG2Z4K4R2WD-01

30 Port Antenna / 3L12H / 1.6m

PROSE

- (698-862)+(880-960)+(698-960)+2x(1427-2180)+4x(1695- 1880)+4x(2300-2690)+2x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			698-862 / 880-960 / 698-960			2 x (1427-2690) // 4 x (1695-2690)					
			698-806	790-862	880-960	1427-1518	1695-1880	1900-2180	2300-2400	2500-2690	
Gain	R1/B5/B6	Mid Tilt	dBi	13.7	14.0	13.9	11.7	12.9	13.6	/	/
		Over All Tilts		13.6±0.5	13.9±0.5	13.8±0.5	11.6±0.5	12.8±0.5	13.5±0.5	/	/
	R2/Y5/Y6	Mid Tilt		13.4	14.7	/	/	14.7	15.1	15.3	15.9
		Over All Tilts		13.3±0.5	13.6±0.5	/	/	14.6±0.5	15.0±0.5	15.2±0.5	15.8±0.5
	R3/B1/B2	Mid Tilt		/	/	14.6	/	14.3	/	14.9	15.4
		/Y1/Y2		Over All Tilts	/	/	13.5±0.5	/	14.2±0.5	/	14.8±0.5
	B3/B4/Y3	Mid Tilt		/	/	/	/	14.0	/	14.6	15.1
		/Y4		Over All Tilts	/	/	/	/	13.9±0.5	/	14.5±0.5
Polarization			°	±45							

Horizontal Pattern

3dB Azimuth Beamwidth	°	65±6	63±5	67±5	73±6	69±6	68±6	65±5	58±5
Front to Back Ratio, Total Power, 180°±30°	dB	> 25	> 26	> 26	> 25	> 27	> 27	> 25	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°		> 17	> 18	> 18	> 18	> 18	> 19	> 19	> 18
Over Sector ±60°		> 10	> 8	> 8	> 10	> 9	> 6	> 6	> 5
3dB Elevation Beamwidth(R1/R2/R3/B5/B6)	°	15.3±1.2	14.1±1.0	12.7±0.8	19.0±1.5	15.8±1.5	14.0±1.5	/	/
3dB Elevation Beamwidth(Y5/Y6)		/	/	/	/	14.0±1.0	12.0±1.2	10.5±0.7	9.6±0.3
3dB Elevation Beamwidth(B1~B4/Y1~Y4)		/	/	/	/	14.0±1.0	/	10.5±0.7	9.6±0.3
Electrical Downtilt		2-12			2-12				
1st Upper Sidelobe Suppression	dB	> 15			> 15				

Vertical Pattern

VSWR		< 1.5	
Intra - Cluster Isolation	dB	> 25	> 25
Inter - Cluster Isolation		LB//LB >23; HB//LB >28; HB//HB >25	
3rd PIM(2 x 43 dBm)	dBc	< -150	
Impedance	Ω	50	
Maximum Effective Power per Port	W	300	250

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA11.1)

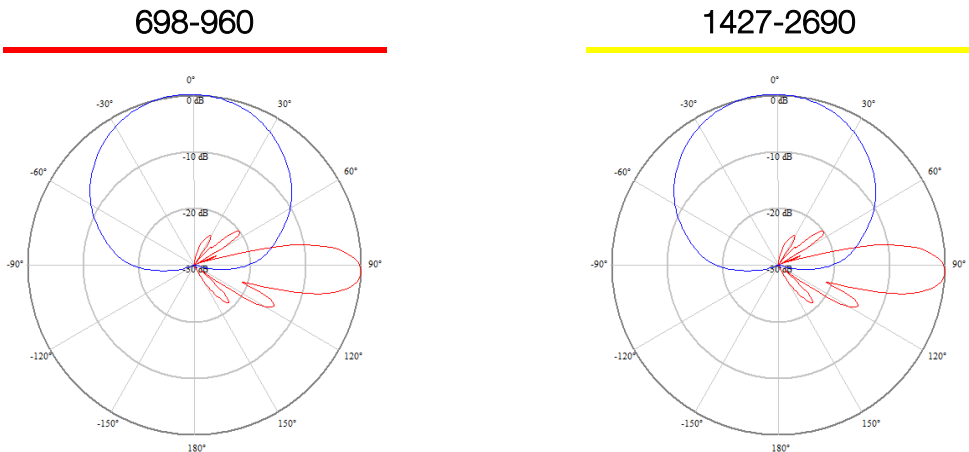
Connector Type	30 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	40.5 kg	89.3 lb
Shipping Weight	55.2 kg	121.7 lb
Antenna Dimensions (H x W x D)	1619 x 498 x 197 mm	63.7 x 19.6 x 7.8 in
Packing Size (H x W x D)	1769 x 575 x 370 mm	69.6 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	634 / 226 / 768 N	143 / 51 / 173 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

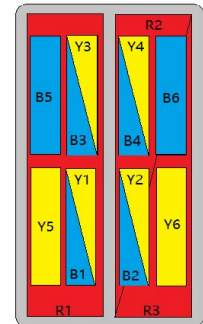
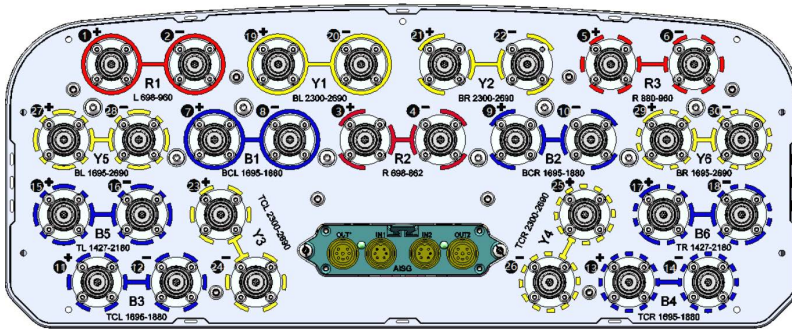


ACG2Z4K4R2WD-01

30 Port Antenna / 3L12H / 1.6m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	AISG1-4	MRET	RB.....XYyxxxx-M1
●R2	3 - 4	698-862	AISG1-3	MRET	RB.....XYyxxxx-M1
●R3	5 - 6	880-960	AISG1-5	MRET	RB.....XYyxxxx-M1
●B5	15 - 16	1427-2180	AISG1-1	MRET	RB.....XYyxxxx-M1
●B6	17 - 18	1427-2180	AISG1-6	MRET	RB.....XYyxxxx-M1
●Y5	27 - 28	1695-2690	AISG1-2	MRET	RB.....XYyxxxx-M1
●Y6	29 - 30	1695-2690	AISG1-2	MRET	RB.....XYyxxxx-M1
●B1	7 - 8	1695-1880	AISG2-2	MRET	RB.....XYyxxxx-M2
●B2	9 - 10	1695-1880	AISG2-2	MRET	RB.....XYyxxxx-M2
●B3	11 - 12	1695-1880	AISG2-1	MRET	RB.....XYyxxxx-M2
●B4	13 - 14	1695-1880	AISG2-1	MRET	RB.....XYyxxxx-M2
●Y1	19 - 20	2300-2690	AISG2-4	MRET	RB.....XYyxxxx-M2
●Y2	21 - 22	2300-2690	AISG2-4	MRET	RB.....XYyxxxx-M2
●Y3	23 - 24	2300-2690	AISG2-3	MRET	RB.....XYyxxxx-M2
●Y4	25 - 26	2300-2690	AISG2-3	MRET	RB.....XYyxxxx-M2

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-2	6.5 kg / 14.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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ACG2Z4K4R2WF-01

30 Port Antenna / 3L12H / 2.7m

PROSE

- (698-862)+(880-960)+(698-960)+2x(1427-2180)+4x(1695- 1880)+4x(2300-2690)+2x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-862 / 880-960 / 698-960			2 x (1427-2690) // 4 x (1695-2690)				
		698-806	790-862	880-960	1427-1518	1695-1880	1900-2180	2300-2400	2500-2690
Gain	R1/B5/B6 Mid Tilt	dBi	15.7	16.0	16.3	15.7	16.9	17.4	
	Over All Tilts		15.6±0.5	15.9±0.5	16.2±0.5	15.6±0.5	16.8±0.5	17.3±0.5	
	R2/Y5/Y6 Mid Tilt		15.4	15.7	/	/	16.4	16.9	17.4
	Over All Tilts		15.3±0.5	15.6±0.5	/	/	16.3±0.5	16.8±0.5	17.3±0.5
	R3/B1/B2 Mid Tilt		/	/	15.9	/	16.1	/	17.1
	/Y1/Y2 Over All Tilts		/	/	15.8±0.5	/	16.0±0.5	/	17.0±0.5
	B3/B4/Y3 Mid Tilt		/	/	/	/	15.9	/	16.8
	/Y4 Over All Tilts		/	/	/	/	15.8±0.5	/	16.7±0.5
Polarization		°	±45						

Horizontal Pattern

3dB Azimuth Beamwidth	°	71±6	62±5	60±5	73±6	69±6	68±6	64±4	59±5
Front to Back Ratio, Total Power, 180°±30°	dB	> 25	> 25	> 25	> 25	> 27	> 27	> 25	> 27
Cross-Polar Discrimination At Mechanical Boresight 0°		> 17	> 18	> 18	> 18	> 18	> 19	> 19	> 18
Over Sector ±60°		> 10	> 8	> 8	> 10	> 8	> 7	> 6	> 6
3dB Elevation Beamwidth(R1/R2/R3/B5/B6)	°	8.6±0.6	7.5±0.6	6.9±0.5	8.1±0.6	6.7±0.4	6±0.4	/	/
3dB Elevation Beamwidth(Y5/Y6)		/	/	/	/	7.0±0.5	6.2±0.5	5.6±0.3	5.1±0.3
3dB Elevation Beamwidth(B1~B4/Y1~Y4)		/	/	/	/	7.0±0.5	/	5.6±0.3	5.1±0.3
Electrical Downtilt		2-12			2-12				
1st Upper Sidelobe Suppression	dB	> 17			> 17				

Vertical Pattern

VSWR		< 1.5	
Intra - Cluster Isolation	dB	> 25	> 26
Inter - Cluster Isolation		R2//R3 >28; R1// R2,R3>26; R1,R2,R3//B1~B6,Y1~Y6 >28	
3rd PIM(2 x 43 dBm)	dBc	< -150	
Impedance	Ω	50	
Maximum Effective Power per Port	W	300	250

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA11.1)

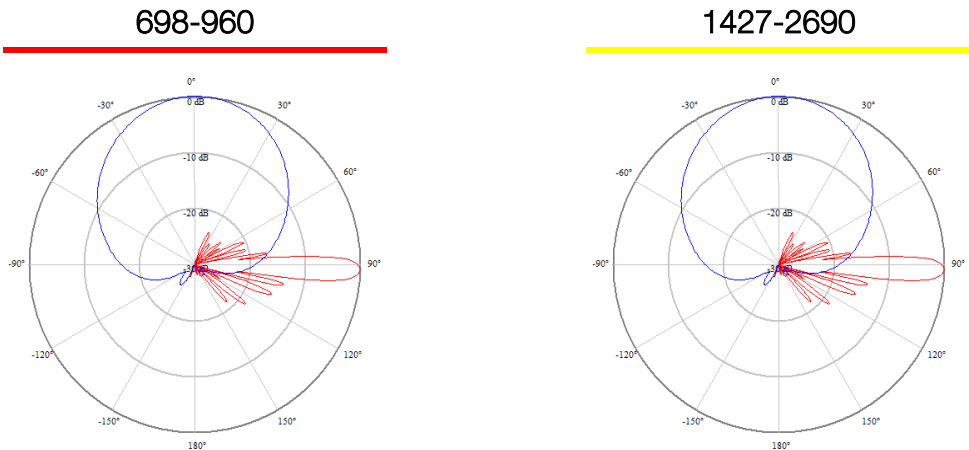
Connector Type	30 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	67 kg	147.7 lb
Shipping Weight	87.6 kg	193.1 lb
Antenna Dimensions (H x W x D)	2769 x 498 x 197 mm	109.0 x 19.6 x 7.8 in
Packing Size (H x W x D)	2919 x 575 x 370 mm	114.9 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1080 / 436 / 1309 N	243 / 98 / 294 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

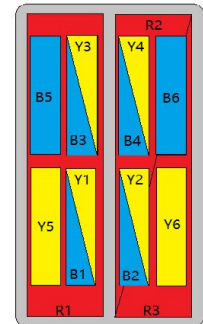
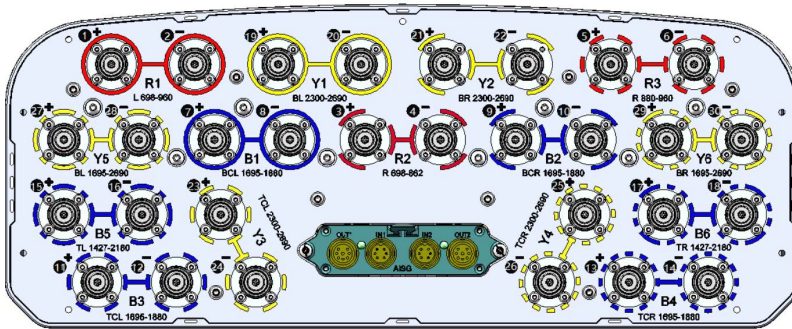


ACG2Z4K4R2WF-01

30 Port Antenna / 3L12H / 2.7m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	AISG1-2	MRET	RB.....XYyxxxx-M1
●R2	3 - 4	698-862	AISG1-3	MRET	RB.....XYyxxxx-M1
●R3	5 - 6	880-960	AISG1-6	MRET	RB.....XYyxxxx-M1
●B5	15 - 16	1427-2180	AISG1-1	MRET	RB.....XYyxxxx-M1
●B6	17 - 18	1427-2180	AISG1-7	MRET	RB.....XYyxxxx-M1
●Y5	27 - 28	1695-2690	AISG1-5	MRET	RB.....XYyxxxx-M1
●Y6	29 - 30	1695-2690	AISG1-5	MRET	RB.....XYyxxxx-M1
●B1	7 - 8	1695-1880	AISG2-1	MRET	RB.....XYyxxxx-M2
●B3	11 - 12	1695-1880	AISG2-1	MRET	RB.....XYyxxxx-M2
●B2	9 - 10	1695-1880	AISG2-3	MRET	RB.....XYyxxxx-M2
●B4	13 - 14	1695-1880	AISG2-3	MRET	RB.....XYyxxxx-M2
●Y1	19 - 20	2300-2690	AISG2-2	MRET	RB.....XYyxxxx-M2
●Y2	21 - 22	2300-2690	AISG2-2	MRET	RB.....XYyxxxx-M2
●Y3	23 - 24	2300-2690	AISG2-2	MRET	RB.....XYyxxxx-M2
●Y4	25 - 26	2300-2690	AISG2-2	MRET	RB.....XYyxxxx-M2

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2E4WE-21

12 Port Antenna / 2L4H / 2.0m

PROSE

- 2x(617-960) + 4x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2 x (617-960)				4 x (1695-2690)			
		617-698	698-790	790-862	880-960	1695-1880	1900-2180	2300-2400	2500-2690
Gain	Mid Tilt	14.2	14.6	14.7	15.0	16.6	17.1	17.5	17.9
	Over All Tilts	14.2±0.6	14.5±0.5	14.7±0.5	15.0±0.5	16.5±0.5	17.1±0.5	17.5±0.5	17.8±0.5
Polarization		±45°							

Horizontal Pattern

3dB Azimuth Beamwidth	°	67±6	66±6	66±6	65±6	67±6	60±6	62±6	59±5
Front to Back Ratio, Total Power, 180°±30°	dB	> 21	> 22	> 24	> 25	> 25	> 26	> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°		> 18	> 18	> 18	> 18	> 20	> 18	> 18	> 18
Over Sector ±60°		> 10	> 9	> 10	> 8	> 10	> 8	> 5	> 6
3dB Elevation Beamwidth	°	11.6±1.8	10.5±1.0	9.3±1.0	8.7±0.8	6.5±0.5	5.7±0.5	4.9±0.5	4.5±0.5
Electrical Downtilt		2-12				2-12			
1st Upper Sidelobe Suppression	dB	> 16	> 16	> 16	> 16	> 16	> 16	> 16	> 16

Vertical Pattern

VSWR		< 1.5							
Intra - Cluster Isolation	dB	25							
Inter - Cluster Isolation		25							
3rd PIM(2 x 43 dBm)	dBc	< -153							
Impedance	Ω	50							
Maximum Effective Power per Port	W	300				250			

— Maximum Effective Power Whole Antenna: 1200 W.

2E4WE-21

12 Port Antenna / 2L4H / 2.0m

PROSE

Mechanical Data (BASTA11.1)

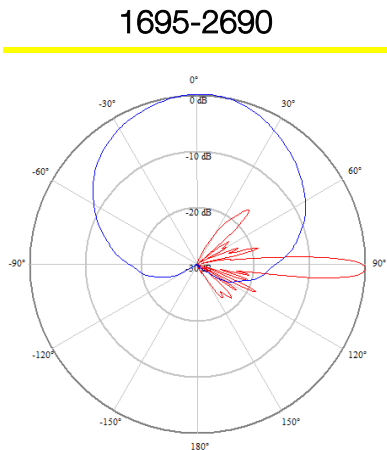
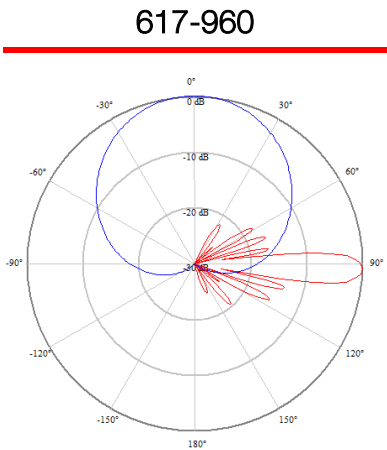
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	35 kg	77.2 lb
Shipping Weight	43.7 kg	96.4 lb
Antenna Dimensions (H x W x D)	2070 x 498 x 197 mm	81.5 x 19.6 x 7.8 in
Packing Size (H x W x D)	2220 x 575 x 370 mm	87.4 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	823 / 306 / 998 N	185 / 69 / 224 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

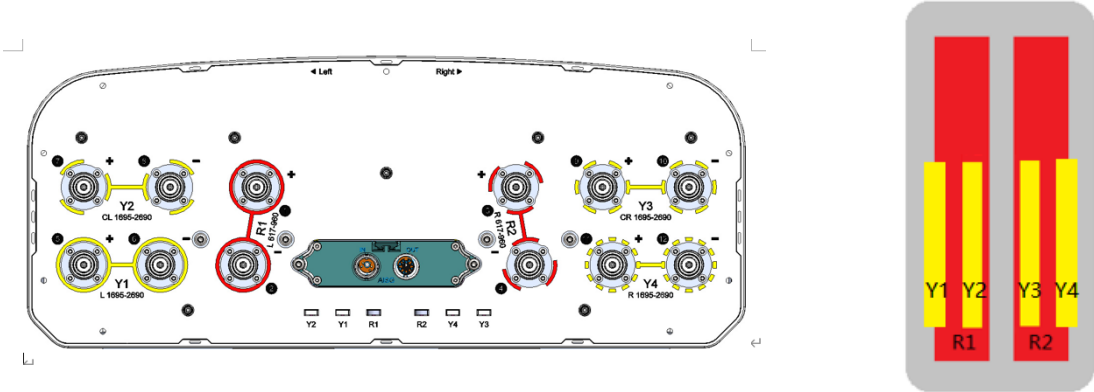


2E4WE-21

12 Port Antenna / 2L4H / 2.0m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-960	3	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	617-960	4	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	6	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	5	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2E4WF-21

12 Port Antenna / 2L4H / 2.6m

PROSE

- 2x(617-960) + 4x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2 x (617-960)				4 x (1695-2690)				
		617-698	698-790	790-862	880-960	1695-1880	1900-2180	2300-2400	2500-2690	
Gain	Mid Tilt	dBi	15.2	15.6	15.7	16.1	16.5	17.1	17.5	17.9
	Over All Tilts		15.2±0.6	15.5±0.5	15.7±0.5	16.0±0.5	16.5±0.5	17.1±0.5	17.5±0.5	17.8±0.5
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	67±6	66±6	66±6	65±6	67±6	60±6	62±6	59±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 21	> 22	> 24	> 25	> 25	> 26	> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 18	> 18	> 18	> 20	> 18	> 18	> 18
Over Sector ±60°			> 10	> 9	> 10	> 8	> 10	> 8	> 5	> 6
3dB Elevation Beamwidth		°	9.5±0.8	8.8±0.8	8.0±0.8	7.0±0.8	6.5±0.5	5.7±0.5	4.9±0.5	4.5±0.5
Electrical Downtilt			2-12				2-12			
1st Upper Sidelobe Suppression		dB	> 16	> 16	> 16	> 16	> 16	> 16	> 16	> 16
Vertical Pattern										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	25							
Inter - Cluster Isolation			25							
3rd PIM(2 x 43 dBm)		dBc	< -153							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300				250			

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA11.1)

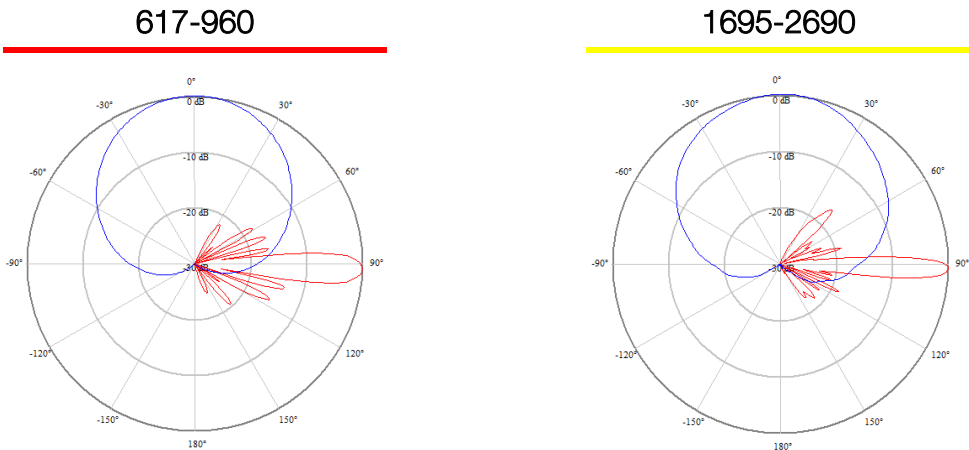
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	46 kg	101.4 lb
Shipping Weight	66.5 kg	146.6 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-960	3	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	617-960	4	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	6	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	5	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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DCE4WC-N-21

14 Port Antenna / 3L4H / 1.5m

PROSE

- (617-862) + (880-960) + (617-960) + 4x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors
- Integrated internal diplexer in one of low band array

Electrical Data (BASTA)

Frequency(MHz)			(617-862) + (880-960) + (617-960)				4x (1695-2690)				
			617-698	698-806	806-862	880-960	1695-1900	1900-2180	2300-2500	2500-2690	
Gain	R1/R2/Y1 /Y2/Y3/Y	Mid Tilt	dBi	12.5	13.6	13.8	13.7	17.5	18.2	18.5	18.6
	4	Over All Tilts		12.4±0.7	13.5±0.5	13.8±0.9	13.6±0.9	17.5±0.6	18.2±0.5	18.4±0.5	18.6±0.6
	R3	Mid Tilt		12.8	13.8	14.1	13.9				
		Over All Tilts		12.7±0.7	13.8±0.5	14.1±0.9	13.9±0.9				
Polarization			°	±45°							
Horizontal Pattern											
3dB Azimuth Beamwidth			°	69±6	66±7	64±6	61±6	61±5	57±4	57±6	55±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 20	> 22	> 22	> 23	> 25	> 26	> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°				> 22	> 20	> 19	> 18	> 19	> 18	> 17	> 18
Over Sector ±60°				> 12	> 10	> 9	> 8	> 6	> 6	> 6	> 9
Vertical Pattern											
3dB Elevation Beamwidth			°	18.6±2.0	15.7±1.5	13.5±1.1	11.8±1.1	7.8±0.6	6.8±0.6	5.9±0.4	5.4±0.4
Electrical Downtilt				2-16				2-12			
1st Upper Sidelobe Suppression			dB	> 16	> 16	> 14	> 15	> 18	> 18	> 20	> 17
RF Parameters											
VSWR				< 1.5							
Intra - Cluster Isolation			dB	25				25			
Inter - Cluster Isolation				25							
3rd PIM(2 x 43 dBm)			dBc	< -153							
Impedance			Ω	50							
Maximum Effective Power Per Port			W	300				250			

— Maximum Effective Power Whole Antenna: 1200 W.

DCE4WC-N-21

14 Port Antenna / 3L4H / 1.5m

PROSE

Mechanical Data (BASTA)

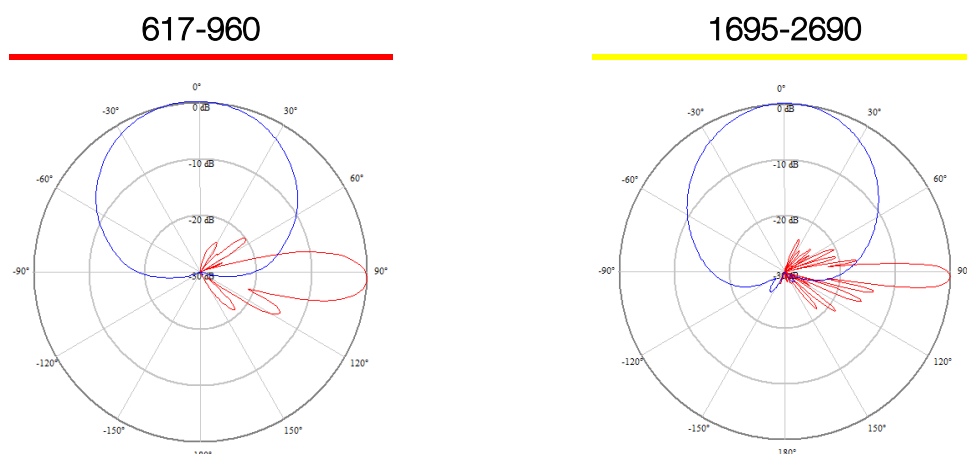
Connector Type	14 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	32.96 kg	72.7 lb
Shipping Weight	45.45 kg	100.2 lb
Antenna Dimensions (H x W x D)	1500 x 498 x 220 mm	59.1 x 19.6 x 8.7 in
Packing Size (H x W x D)	1615 x 575 x 370 mm	63.6 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	428 / 196 / 637 N	96 / 44 / 143 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



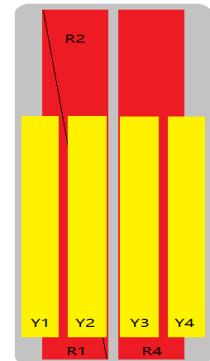
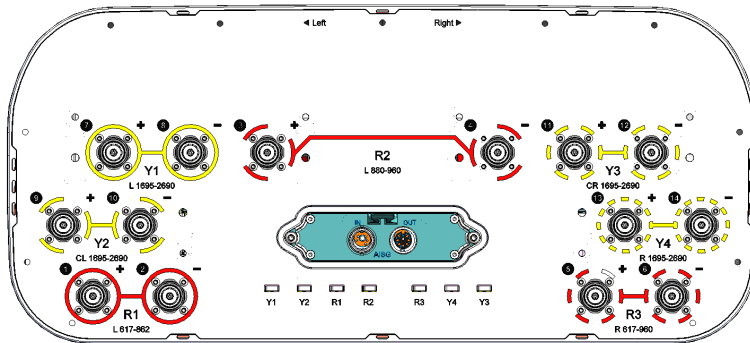
RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-862	/	SRET	RB.....XYYxxxx-R1
●R2	3 - 4	880-960	/	SRET	RB.....XYYxxxx-R2
●R3	5 - 6	617-960	/	SRET	RB.....XYYxxxx-R3
●Y1	7 - 8	1695-2690	/	SRET	RB.....XYYxxxx-Y1
●Y2	9 - 10	1695-2690	/	SRET	RB.....XYYxxxx-Y2
●Y3	11 - 12	1695-2690	/	SRET	RB.....XYYxxxx-Y3
●Y4	13 - 14	1695-2690	/	SRET	RB.....XYYxxxx-Y4

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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E45D-21

2 Port Antenna / 2L 45degree / 1.8m

PROSE

- 617-960 MHz, azimuth beamwidth 45 degree
- Embedded RET
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		2 x (617-960)				
		617-698	698-806	806-880	880-960	
Gain	Mid Tilt	dBi	16.0	16.4	16.9	17.0
	Over All Tilts		15.9±0.6	16.3±0.6	16.8±0.6	17.0±0.5
Polarization		°	±45°			
Horizontal Pattern						
3dB Azimuth Beamwidth		°	49±4	46±4	43±4	40±4
Front to Back Ratio, Total Power, 180°±30°		dB	> 2	> 2	> 2	> 2
Cross-Polar Discrimination At Mechanical Boresight 0°			> 2	> 2	> 2	> 2
Over Sector -10dB			> 1	> 1	> 1	> 1
Vertical Pattern						
3dB Elevation Beamwidth		°	15.0±2.0	13.0±2.0	11.3±1.8	9.8±0.6
Electrical Downtilt			2-12			
1st Upper Sidelobe Suppression		dB	> 1			
RF Parameters						
VSWR			< 1.5			
Intra - Cluster Isolation		dB	25			
3rd PIM(2 x 43 dBm)		dBc	< -153			
Impedance		Ω	50			
Maximum Effective Power Per Port		W	600			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

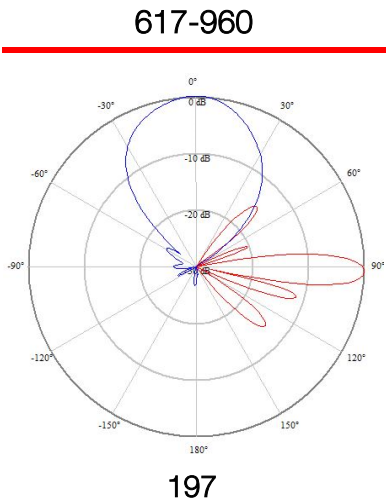
Connector Type	2 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	20.5 kg	45.2 lb
Shipping Weight	30.1 kg	66.4 lb
Antenna Dimensions (H x W x D)	1829 x 448 x 188 mm	72.0 x 17.6 x 7.4 in
Packing Size(H x W x D)	1965 x 551 x 361 mm	77.4 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	835 / 234 / 870 N	188 / 53 / 196 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

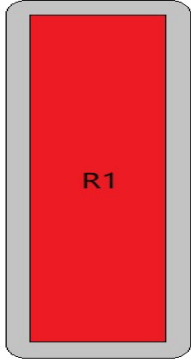
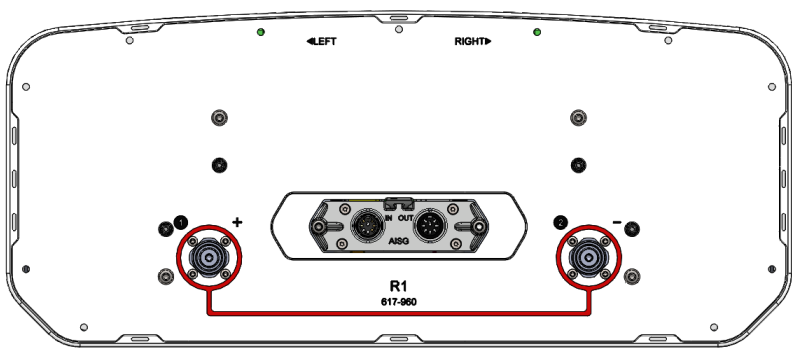


E45D-21

2 Port Antenna / 2L 45degree / 1.8m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-960	1	SRET	RB.....XYXxxxx-R1

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2D2W45E-21

8 Port Antenna / 4L4H / 8ft

PROSE

- 4 x (617-894) + 4 x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors
- Azimuth beam width 45 degree

Electrical Data (BASTA11.1)

Frequency(MHz)			4 x (617-894)			4 x (1695-2690)			
			617-698	698-806	806-894	1695-1900	1900-2180	2300-2500	2500-2690
Gain	R1/R2/Y1 Mid Tilt	dBi	15.7	16.7	16.8	18.6	18.7	20.1	20.6
	/Y2 Over All Tilts		15.6±0.7	16.7±0.6	16.8±0.5	18.5±0.5	18.7±0.5	20.0±0.6	20.6±0.6
Polarization		°	±45°						

Horizontal Pattern

3dB Azimuth Beamwidth	°	47±4	43±4	38±6	52±4	50±4	37±4	32±2
Front to Back Ratio, Total Power, 180°±30°	dB	> 26	> 28	> 28	> 32	> 32	> 33	> 35
Cross-Polar Discrimination At Mechanical Boresight 0°		> 25	> 22	> 20	> 24	> 25	> 25	> 25
Over Sector ±60°		> 9	> 10	> 12	> 8	> 12	> 12	> 12

Vertical Pattern

3dB Elevation Beamwidth	°	9.7±0.6	8.6±0.5	7.5±0.6	6.6±0.5	5.9±0.5	4.9±0.4	4.6±0.3
Electrical Downtilt		0-10			1-10			
1st Upper Sidelobe Suppression	dB	> 15	> 15	> 15	> 20	> 20	> 19	> 20

RF Parameters

VSWR		< 1.5	
Intra - Cluster Isolation	dB	25	25
Inter - Cluster Isolation		R1,R2//Y1,Y2 >30; R1//R2 >20; Y1//Y2 >30	
3rd PIM(2 x 43 dBm)	dBc	< -153	
Impedance	Ω	50	
Maximum Effective Power Per Port	W	300	200

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA11.1)

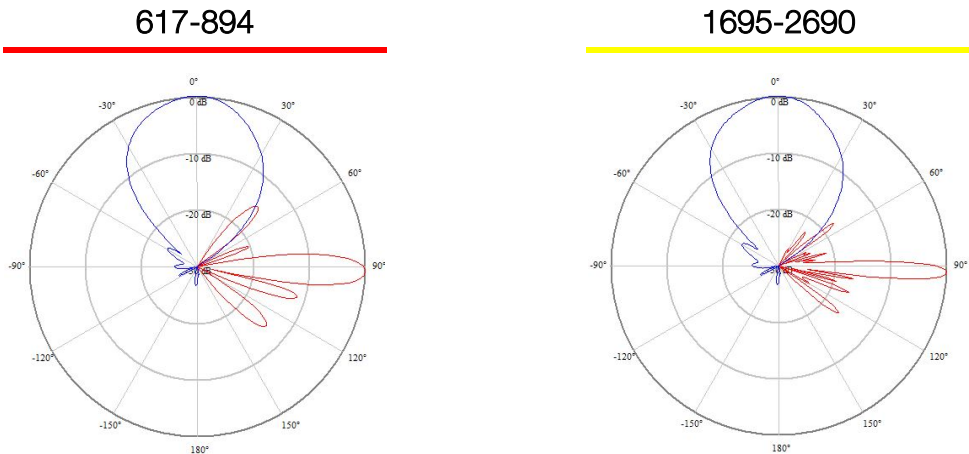
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	45 kg	99.2 lb
Shipping Weight	59.6 kg	131.4 lb
Antenna Dimensions (H x W x D)	2437 x 630 x 220 mm	95.9 x 24.8 x 8.7 in
Packing Size (H x W x D)	2590 x 760 x 365 mm	102.0 x 29.9 x 14.4 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	987 / 361 / 1446 N	222 / 81 / 325 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

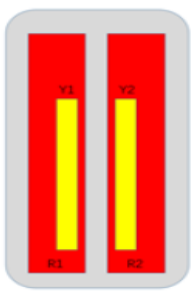
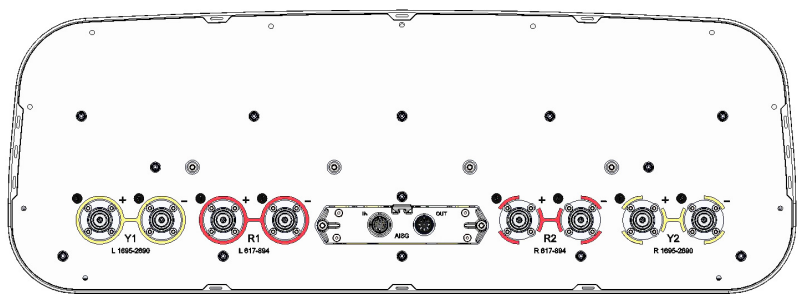


2D2W45E-21

8 Port Antenna / 4L4H / 8ft

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	2	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	617-894	2	MRET	RB.....XYyxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	7 - 8	1695-2690	3	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4W45F-21

12 Port Antenna / 2L4H 45degree / 2.6m

PROSE

- 2 x (698-960) + 4x (1695-2690) MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors
- Azimuth Beamwidth 45degree

Electrical Data (BASTA 11.1)

Frequency(MHz)			2 x (698-960)			4 x (1695-2690)				
			698-806	790-894	880-960	1695-1880	1920-2170	2300-2500	2500-2690	
Gain	R1/R2/Y1	Mid Tilt	dBi	16.2	16.5	16.9	18.5	18.8	19.2	19.4
	/Y2	Over All Tilts		16.1±0.5	16.5±0.5	16.8±0.5	18.4±0.7	18.8±0.7	19.1±0.7	19.3±0.7
	Y3/Y4	Mid Tilt			18.0	18.5	18.8	19.0		
		Over All Tilts			18.0±0.7	18.4±0.7	18.7±0.7	18.9±0.7		
Polarization			°	±45						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	46±4	43±4	40±4	47±4	44±4	41±4	39±4
Front to Back Ratio, Total Power, 180°±30°				> 25			> 28			
Cross-Polar Discrimination At Mechanical Boresight 0°			dB	> 20			> 18			
Over Sector ±60°				> 10			> 9			
Vertical Pattern										
3dB Elevation Beamwidth			°	7.7±0.8	7.2±0.8	6.4±0.8	7.1±0.5	6.1±0.5	5.2±0.5	4.8±0.5
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 16	> 16	> 16	> 17	> 17	> 17	> 17
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 25						
Inter - Cluster Isolation				> 26						
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	300			200			

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA 11.1)

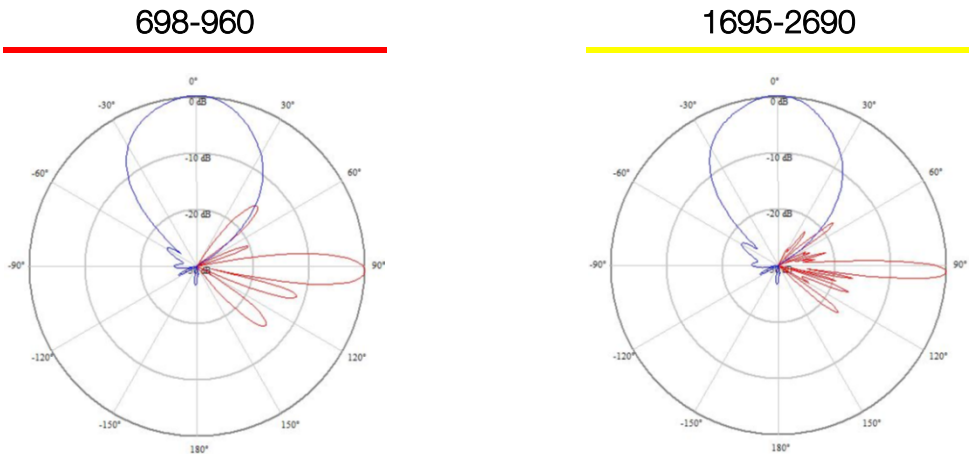
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	44.1 kg	97.2 lb
Shipping Weight	59.2 kg	139.2 lb
Antenna Dimensions (H x W x D)	2690 x 580 x 210 mm	105.9 x 22.8 x 8.3 in
Packing Size (H x W x D)	2845 x 725 x 345 mm	112 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	827 / 396 / 1304 N	186 / 89 / 293 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

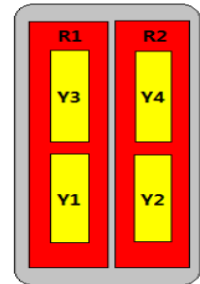
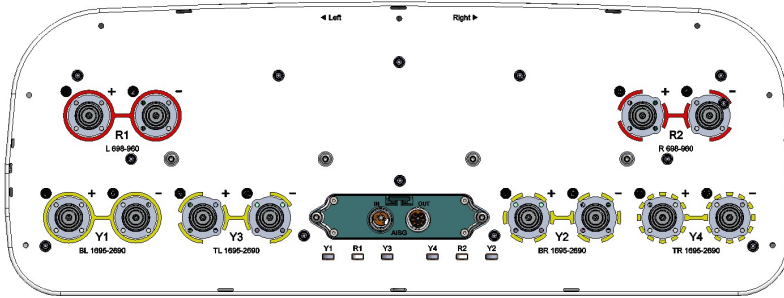


2G4W45F-21

12 Port Antenna / 2L4H 45degree / 2.6m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	5	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	6	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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Multi Beam Hybrid Antennas

Model	Port	Antenna Type	Frequency(MHz)	Gain(dBi)	3dB HBW	L x W x D(mm)	Page
2GMD-21-TK	4	Twin Beam	2 x (690-960)	17.3	33	1598 x 579 x 189	207
2WMC-21	4	Twin Beam	2 x (1710-2690)	20.5	33	1470 x 320 x 140	210
2WMC-21L	4	Twin Beam	2 x (1695-2690)	19.6	33	1060 x 396 x 190	213
3WMC-21	6	Triple Beam	3 x (1695-2690)	21.8	22	1470 x 579 x 189	216
G2GHE-21	6	1L+Twin Beam	1 x (698-960) 2 x (698-960)	13.6	65-33	2480 x 579 x 189	219
4WME-01L	8	Dual Twin Beam	4 x (1695-2690)	19.8	33	2076 x 396 x 190	222
4WMF-01VN	8	Dual Twin Beam	4 x (1695-2690)	19.6	33	2700 x 396 x 190	225
5WMB-51	10	Penta Beam	5 x (1695-2690)	22.6	11	896 x 1096 x 116	228
5UMB-40	10	Penta Beam	5 x (1710-2170)	21.1	11	806 x 836 x 116	231
G4WHE-01V	10	1L+Dual Twin Beam	1 x (698-960) 4 x (1695-2690)	15.5 / 18.5	65-33	2090 x 448 x 188	234
G4WHF-01N	10	1L+Dual Twin Beam	1 x (698-960) 4 x (1695-2690)	15.6 / 19.5	65-33	2690 x 448x 188	237
G2W2WHD-21	10	1L2H+Twim Beam	1 x (698-960) 2 x (1695-2690) 2 x (1695-2690)	13.8 /15.2/ 16.7	65-65-33	1599 x 350 x 200	240
6W22ME-01	12	Dual Triple Beam	6 x (1695-2690)	19.8	22	2000 x 579 x 189	243
6WMB-51	12	Hexa Beam	6 x (1695-2690)	22.9	9	896 x 1096 x 116	246
2G4WHE-01N	12	2L+Dual Twin Beam	2 x (698-960) 4 x (1695-2690)	15.3 / 19.1	65-33	2070 x 498 x 197	249
2G4WHF-01N	12	2L+Dual Twin Beam	2 x (698-960) 4 x (1695-2690)	16.1 / 19.5	65-33	2690 x 498 x 197	252

Model	Port	Antenna Type	Frequency(MHz)	Gain(dBi)	3dB HBW	L x W x D(mm)	Page
G2W4O33HF-01	14	1L2H+Dual Twin Beam	1 x (698-960) 2 x (1710-2690) 4 x (1710-2400)	16.6/18.1/19.5	65-65-33	2690 x 448 x 188	255
G2W4WHE-00V	14	1L2H+Dual Twin Beam	1 x (698-960) 2 x (1695-2690) 4 x (1695-2690)	14.6/17.3/18.4	65-65-33	2090 x 498 x 197	259
G2W4WHF-01V	14	1L2H+Dual Twin Beam	1 x (698-960) 2 x (1695-2690) 4 x (1695-2690)	15.6/18.2/19.3	65-65-33	2690 x 498 x 197	263
2G4W2WHF-21	16	2L4H+Twin Beam	2 x (698-960) 4 x (1695-2690) 2 x (1695-2690)	16.2	65-65-33	2690 x 498 x 197	267
9WMB-51	18	Nona Beam	9 x (1695-2690)	23.9	6	900 x 1644 x 116	271
2G4W4WHF-01	20	2L4H+Dual Twin Beam	2 x (698-960) 4 x (1695-2690) 4 x (1710-2690)	16.1	65-65-33	2699 x 580 x 210	274
4TMD-21	8	Dual Twin Beam	4 x (3300-3700)	19.5	33	2000 x 295 x 145	278
4GME-11	8	Dual Twin Beam	4x (698-960)	16.1	33	2490 x 580 x 190	281
MB-3F7X22V-00	6	Triple Beam	3x (790-960)	16.6	22	1270 x 855 x 178	284
2G6W22HF-21S	8	2L+Dual Triple Beam	2x (698-960) 6x (1710-2690)	16.0/20.5	65-22	2550 x 580 x 190	287
5RMC-21	10	Penta Beam	5 x (2300-2690)	21	12	840 x 745 x 216	290
4G4W33ME-21	16	LB Dual Twin Beam +MB Dual Twin Beam	4x (698-960) 4x (1710-2690)	16.0/18.0	33-33	2436 x 630 x 220	293
4G4W33MB-51S	16	LB Dual Twin Beam +MB Dual Twin Beam	4x (698-960) 4x (1710-2690)	12.7/13.7	33-33	850 x 498 x 197	296
G6W22HE-21	14	1L+Dual Triple Beam	1x (698-960) 6x (1710-2690)	16.0/20.5	65-22	2400 x 580 x 190	299

2GMD-21-TK

4 Port Antenna / LB Twin beam / 1.6m

PROSE

- 2 x (690-960) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2 x (690-960)			
		690-806	790-896	880-960	
Gain	Mid Tilt	dBi	16.3	16.9	17.4
	Over All Tilts		16.2±0.5	16.8±0.4	17.3±0.4
Polarization		°	±45		
Horizontal Pattern					
3dB Azimuth Beamwidth		°	40±2.3	36±2	34±1.8
Horizontal Beam Direction			±29	±26	±24
Front to Back Ratio, Total Power, 180°±30°		dB	> 26	> 28	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 20	> 20
Horizontal Sidelobe Suppression			16	16	16
Vertical Pattern					
3dB Elevation Beamwidth		°	13.8±1.0	12.1±0.9	11.1±0.8
Electrical Downtilt			0-10		
1st Upper Sidelobe Suppression		dB	> 17		
RF Parameters					
VSWR			< 1.5		
Intra - Cluster Isolation		dB	> 30		
Beam Isolation			> 16		
3rd PIM(2 x 43 dBm)		dBc	< -153		
Impedance		Ω	50		
Maximum Effective Power Per Port		W	300		

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA11.1)

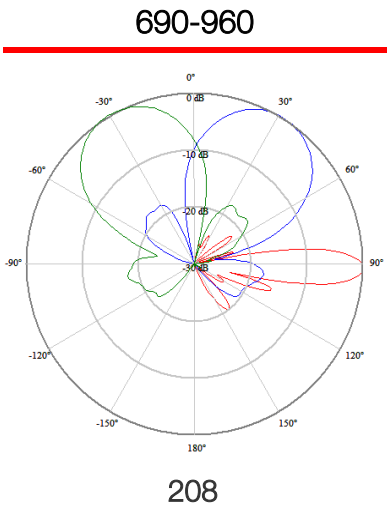
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	32.5 kg	71.6 lb
Antenna Dimensions (H x W x D)	1598 x 579 x 189 mm	62.9 x 22.8 x 7.4 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1026 / 175 / 1101 N	231 / 39 / 248 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



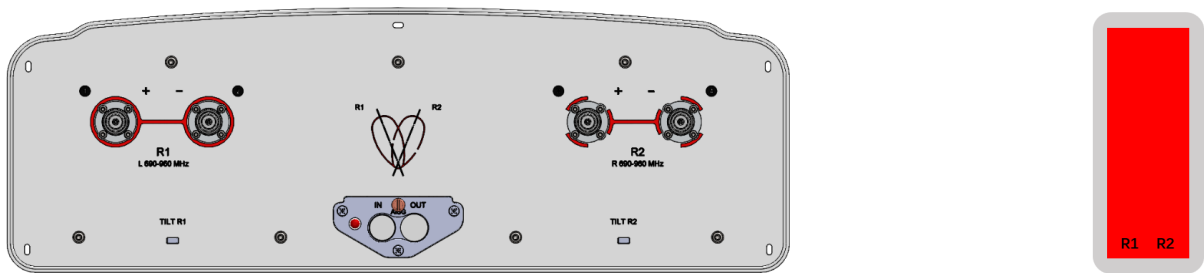
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	690-960	1	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	690-960	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-1	4.5	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2WMC-21

4 Port Antenna / HB Twin Beam / 1.47m

PROSE

- 2 x (1695-2690) Mhz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2 x (1710-2690)				
		1710-1900	1900-2180	2300-2500	2500-2690	
Gain	Mid Tilt Y1/Y2	dBi	18.8	19.8	20.6	20.0
	Over All Tilts		18.7±0.4	19.8±0.5	20.5±0.5	20.0±0.5
Polarization		°	±45			
Horizontal Pattern						
3dB Azimuth Beamwidth		°	37±3	34±3	29±3	26±2
F/B Ratio Copolar(180°±30°)		dB	> 28	> 28	> 28	> 28
Cross-Polar Discrimination						
At Mechanical Boresight 0°			> 18	> 18	> 18	> 16
Vertical Pattern						
3dB Elevation Beamwidth		°	6.8±0.6	6.1±0.5	5.7±0.5	4.8±0.3
Electrical Downtilt			1-10			
1st Upper Sidelobe Suppression		dB	> 18	> 18	> 18	> 17
RF Parameters						
VSWR			< 1.5			
Intra - Cluster Isolation		dB	> 28			
Beam Isolation			> 16			
3rd PIM(2 x 43 dBm)		dBc	< -153			
Impedance		Ω	50			
Maximum Effective Power per Port		W	250			

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA11.1)

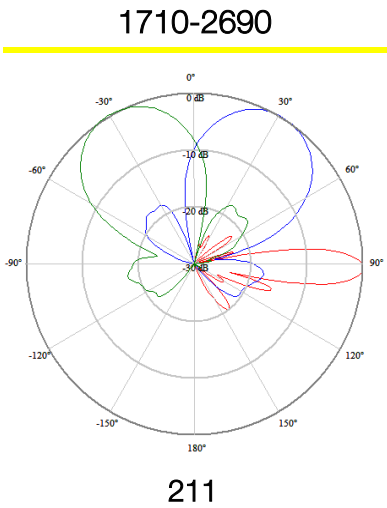
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	15 kg	33.1 lb
Shipping Weight	26.0 kg	57.3 lb
Antenna Dimensions (H x W x D)	1470 x 320 x 140 mm	57.9 x 12.6 x 5.5 in
Packing Size (H x W x D)	1620 x 444 x 308 mm	63.8 x 17.5 x 12.1 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	382 / 126 / 449 N	86 / 28 / 101 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

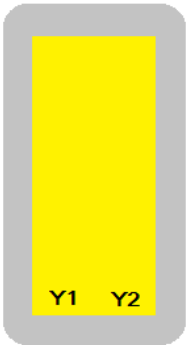
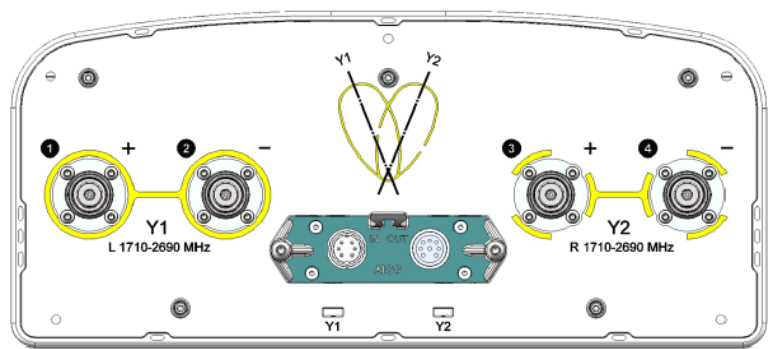


2WMC-21

4 Port Antenna / HB Twin Beam / 1.47m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1710-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	3 - 4	1710-2690	2	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

2WMC-21L

4 Port Antenna / HB Twin Beam / 1.06m

PROSE

- 2 x (1695-2690) Mhz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		2 x (1695-2690)				
		1695-1900	1900-2180	2300-2500	2500-2690	
Gain	Mid Tilt	dBi	18.0	19.2	19.7	19.8
	Over All Tilts		17.8 ± 0.4	19.0 ± 0.5	19.5 ± 0.5	19.6 ± 0.5
Polarization		°	±45°			
Horizontal Pattern						
3dB Azimuth Beamwidth		°	39±3	36±3	31±2	29±2
Beam Peak Position			± 30	± 30	± 30	± 30
Front to Back Ratio, Total Power, 180°±30°		dB	> 26	> 28	> 30	> 28
Cross-Polar Discrimination			> 16	> 19	> 24	> 20
At Mechanical Boresight 0°				> 18	> 17	> 17
Sidelobe						
Vertical Pattern						
3dB Elevation Beamwidth		°	9.0±0.7	8.1±0.6	7.0±0.5	6.5±0.5
Electrical Downtilt			2-12			
1st Upper Sidelobe Suppression		dB	> 17	> 18	> 19	> 19
RF Parameters						
VSWR			< 1.5:1			
Intra - Cluster Isolation		dB	> 28			
Inter - Cluster Isolation			> 30			
3rd PIM(2 x 43 dBm)		dBc	< -153			
Impedance		Ω	50			
Maximum Effective Power per Port		W	250			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 11.1)

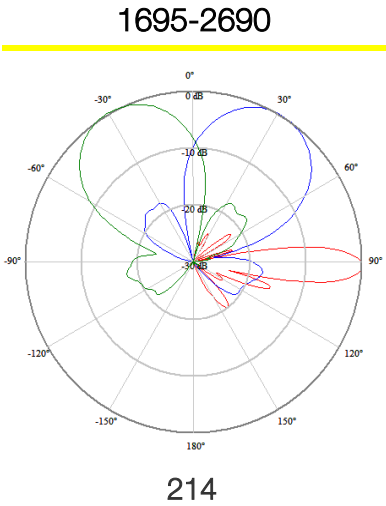
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	14 kg	30.9 lb
Shipping Weight	21.2 kg	46.7 lb
Antenna Dimensions (H x W x D)	1060 x 396 x 190 mm	41.7 x 15.6 x 7.5 in
Packing Size (H x W x D)	1210 x 508 x 343 mm	47.6 x 20.0 x 13.5 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	334 / 117 / 392 N	75 / 26 / 88 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



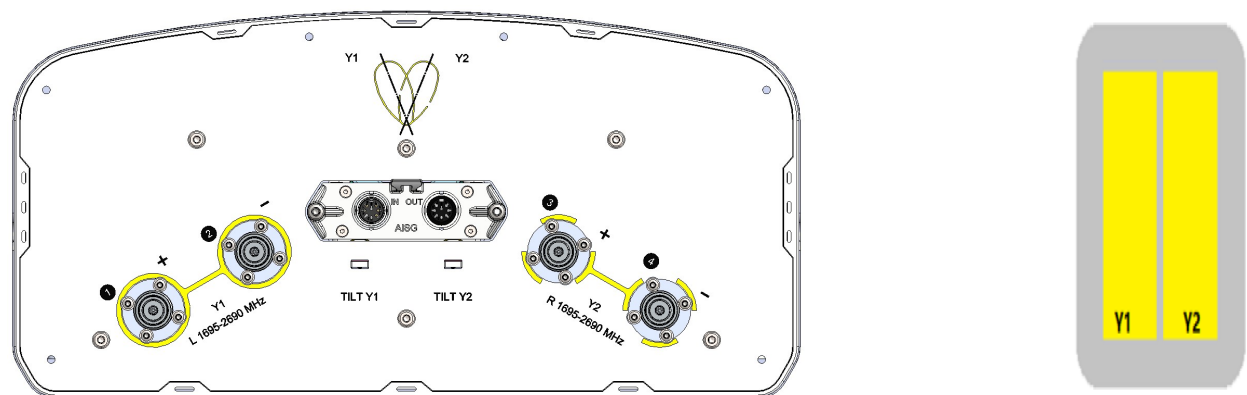
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	3 - 4	1695-2690	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-1	4.5 kg / 9.9 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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- 3 x (1695-2690) MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		3 x (1695-2690)					
		1695-1880	1850-1990	1920-2200	2300-2500	2500-2690	
Gain Y1/Y2/Y3	Mid Tilt	dBi	20.8	21.2	21.6	21.8	21.8
	Over All Tilts		20.8±0.5	21.2±0.5	21.6±0.5	21.8±0.6	21.8±0.6
Polarization		°	±45°				
Horizontal Pattern							
3dB Azimuth Beamwidth		°	21.5±3	19.7±2.5	18.2±2.4	15.2±1.2	14.5±1.1
Beam Peak Position			±34,0	±31,0	±28,0	±25,0	±23,0
Front to Back Ratio, Total Power, 180°±30°		dB	> 32	> 32	> 32	> 30	> 28
Cross-Polar Discrimination At Mechanical Boresight			> 16	> 16	> 16	> 16	> 16
Vertical Pattern							
3dB Elevation Beamwidth		°	6.8±0.6	6.3±0.6	5.9±0.6	5.2±0.5	4.9±0.4
Electrical Downtilt			2-10				
1st Upper Sidelobe Suppression		dB	> 16	> 17	> 17	> 17	> 16
RF Parameters							
VSWR			< 1.5				
Intra - Cluster Isolation		dB	25				
Inter - Cluster Isolation			15				
3rd PIM(2 x 43 dBm)		dBc	< -153				
Impedance		Ω	50				
Maximum Effective Power Per Port		W	200				

— Maximum Effective Power Whole Antenna: 800 W.

3WMC-21

6 Port Antenna / HB Triple beam / 1.47m

PROSE

Mechanical Data (BASTA 11.1)

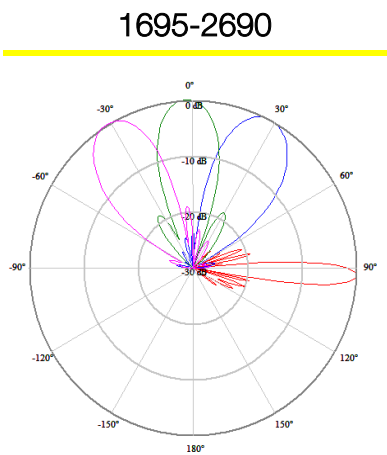
Connector Type	6 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	29.87 Kg	65.85 lb
Shipping Weight	41 Kg	90.4 lb
Antenna Dimensions (H x W x D)	1470 x 579 x 189 mm	57.9 x 22.8 x 7.4 in
Packing Size (H x W x D)	1595 x 673 x 335 mm	62.8 x 26.5 13.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	939 / 158 / 1007 N	211.1 / 35.5 / 226.4 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

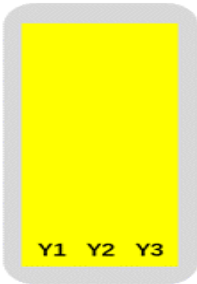
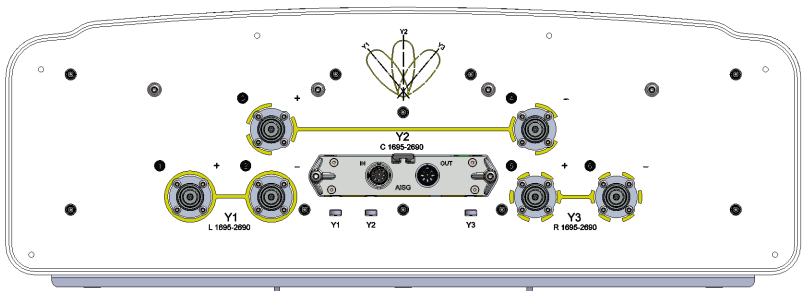


3WMC-21

6 Port Antenna / HB Triple beam / 1.47m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	3 - 4	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y3	5-6	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-2	6.5 kg / 14.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G2GHE-21

6 Port Antenna / Low Band Twin Beam / 2.48m

PROSE

- 1x (698-960)(65deg) + 2x (698-960)(33deg) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960(65deg)			698-960(33deg)		
		698-806	790-896	880-960	698-806	790-896	880-960
Gain R1/R2	Mid Tilt	13.4	13.5	13.6	15.5	16.0	16.5
	Over All Tilts	13.3±0.5	13.5±0.5	13.6±0.5	15.4±0.5	15.9±0.4	16.5±0.4
Polarization		° ±45					

Horizontal Pattern

3dB Azimuth Beamwidth	°	68±5	66±5	64±5	40±3	36±3	33±3
Horizontal Beam Direction	dB	/	/	/	±29	±26	±24
Front to Back Ratio, Total Power, 180°±30°		> 27	> 27	> 27	> 27	> 28	> 28
Cross-Polar Discrimination dB At Mechanical Boresight 0°		> 17	> 18	> 18	> 18	> 18	> 18
Horizontal Sidelobe Suppression		/	/	/	15	15	15

Vertical Pattern

3dB Elevation Beamwidth	°	17.4±0.8	15.5±0.7	14.5±0.6	17.4±0.8	15.5±0.7	14.5±0.6
Electrical Downtilt		1-10					
1st Upper Sidelobe Suppression	dB	> 16			> 16		

RF Parameters

VSWR		< 1.5					
Intra - Cluster Isolation	dB	28					
3rd PIM(2 x 43 dBm)	dBc	< -153					
Impedance	Ω	50					
Maximum Effective Power Per Port	W	500			300		

G2GHE-21

6 Port Antenna / Low Band Twin Beam / 2.48m

PROSE

Mechanical Data (BASTA11.1)

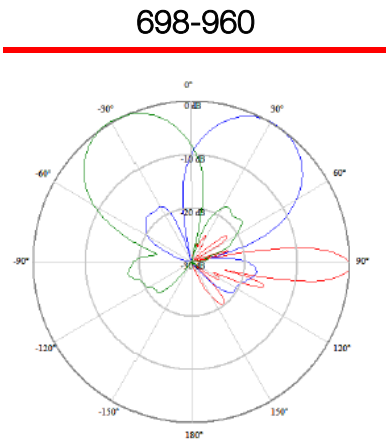
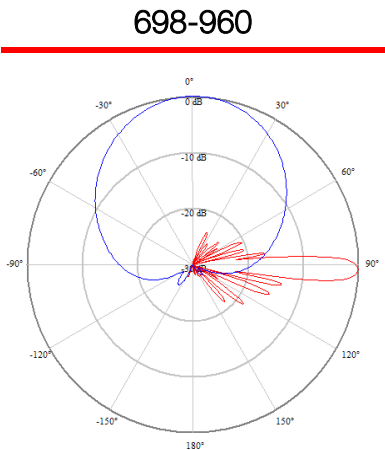
Connector Type	6 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	44 kg	97.0 lb
Shipping Weight	65.4 kg	144.2 lb
Antenna Dimensions (H x W x D)	2480 x 579 x 189 mm	97.6 x 22.8 x 7.4 in
Packing Size (H x W x D)	2630 x 725 x 330 mm	103.5 x 28.5 x 13.0 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	4226 / 774 / 4536 N	950 / 174 / 1020 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

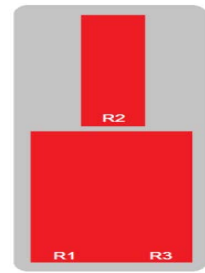
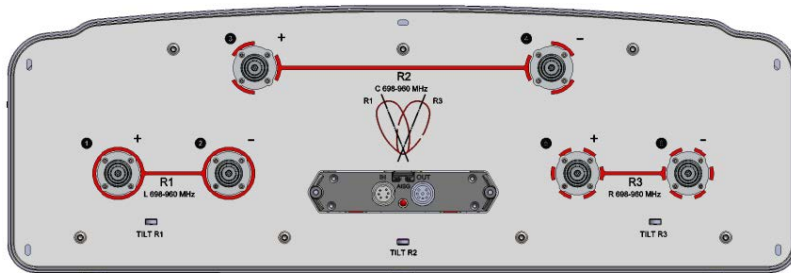


G2GHE-21

6 Port Antenna / Low Band Twin Beam / 2.48m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XXYYxxxxx-MM
●R2	3 - 4	698-960	2	MRET	RB.....XXYYxxxxx-MM
●R3	5 - 6	698-960	3	MRET	RB.....XXYYxxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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4WME-01L

8 Port Antenna / HB Dual Twin Beam / 2.08m

PROSE

- 4 x (1695-2690)MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)		4 x (1695-2690)				
		1695-1900	1900-2180	2300-2500	2500-2690	
Gain	Bottom — Mid Tilt	dBi	18.0	19.0	19.8	19.8
	Over All Tilts		17.9±0.4	19.0±0.5	19.7±0.5	19.8±0.5
	Top — Mid Tilt		17.7	18.7	19.3	19.5
	Over All Tilts		17.6±0.4	18.6±0.5	19.3±0.5	19.4±0.5
Polarization		°	±45			
Horizontal Pattern						
3dB Azimuth Beamwidth		°	38±3	36±3	32±2	29±2
Beam Peak Position		dB	± 30	± 30	± 30	± 30
Front to Back Ratio, Total Power, 180°±30°			> 27	> 28	> 30	> 28
Cross-Polar Discrimination			> 16	> 19	> 22	> 20
At Mechanical Boresight 0°						
Sidelobe			> 18	> 17	> 18	> 18
Vertical Pattern						
3dB Elevation Beamwidth		°	9.0±0.7	8.1±0.6	7.1±0.5	6.5±0.5
Electrical Downtilt			2-12			
1st Upper Sidelobe Suppression		dB	> 18	> 19	> 20	> 19
RF Parameters						
VSWR			< 1.5			
Intra - Cluster Isolation		dB	> 28			
Inter - Cluster Isolation			> 30			
3rd PIM(2 x 43 dBm)		dBc	< -150			
Impedance		Ω	50			
Maximum Effective Power per Port		W	250			

— Maximum Effective Power Whole Antenna: 800 W.

4WME-01L

8 Port Antenna / HB Dual Twin Beam / 2.08m

PROSE

Mechanical Data (BASTA)

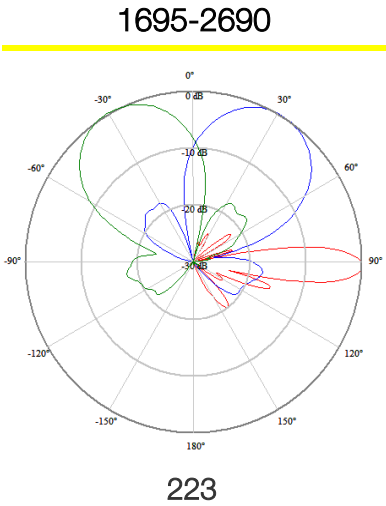
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	26.5 kg	58.4 lb
Shipping Weight	37.4 kg	82.5 lb
Antenna Dimensions (H x W x D)	2076 x 396 x 190 mm	81.7 x 15.6 x 7.5 in
Packing Size (H x W x D)	2226 x 508 x 343 mm	87.6 x 20.0 x 13.5 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	650 / 273 / 763 N	146 / 61 / 172 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

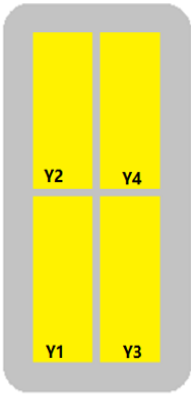
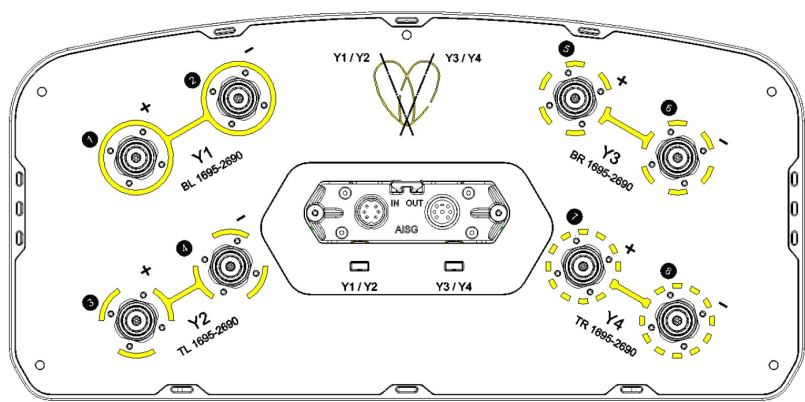


4WME-01L

8 Port Antenna / HB Dual Twin Beam / 2.08m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	3 - 4	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y3	5 - 6	1695-2690	2	MRET	RB.....XYyxxxx-MM
●Y4	7 - 8	1695-2690	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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4WMF-01VN

8 Port Antenna / HB Twin Beam / 2.70m

PROSE

- 4 x (1695-2690)MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)			4 x (1695-2690)				
			1695-1880	1920-2170	2300-2500	2490-2690	
Gain	Y1/Y2/Y3 /Y4	Mid Tilt Over All Tilts	dBi	18.7	19.3	19.2	19.6
	18.6±0.6			19.2±0.6	19.1±0.6	19.5±0.5	
Polarization			°	±45°			
Horizontal Pattern							
3dB Azimuth Beamwidth			°	40 ± 3	37 ± 3	32 ± 2	30 ± 2
Beam A Peak Position			dB	30 ± 3	30 ± 3	30 ± 3	30 ± 3
Beam B Peak Position				-30 ± 3	-30 ± 3	-30 ± 3	-30 ± 3
Front to Back Ratio, Total Power, 180°±30°				> 23	> 23	> 28	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°				> 18	> 18	> 18	> 18
Vertical Pattern							
3dB Elevation Beamwidth			°	7.2±0.5	6.3±0.5	5.6±0.5	5.1±0.5
Electrical Downtilt				2-10			
1st Upper Sidelobe Suppression			dB	> 16	> 16	> 16	> 16
RF Parameters							
VSWR				< 1.5			
Intra - Cluster Isolation			dB	> 25			
Inter - Cluster Isolation				> 25			
Beam Isolation				28			
3rd PIM(2 x 43 dBm)			dBc	< -150			
Impedance			Ω	50			
Maximum Effective Power per Port			W	250			

— Maximum Effective Power Whole Antenna: 800 W.

4WMF-01VN

8 Port Antenna / HB Twin Beam / 2.70m

PROSE

Mechanical Data (BASTA 11.1)

Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Reflector Material	Aluminium Alloy	
Radiator Material	Low Loss Circuit Board	
Radome Color	Light Grey	
Antenna Net Weight	33.0 kg	72.8 lb
Shipping Weight	37.2 kg	82.0 lb
Antenna Dimensions (H x W x D)	2700 x 396 x 190 mm	106.3 x 15.6 x 7.5 in
Packing Size (H x W x D)	2850 x 508 x 343 mm	112.2 x 20.0 x 13.5 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	904/ 371 / 1060 N	203 / 83 / 238 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

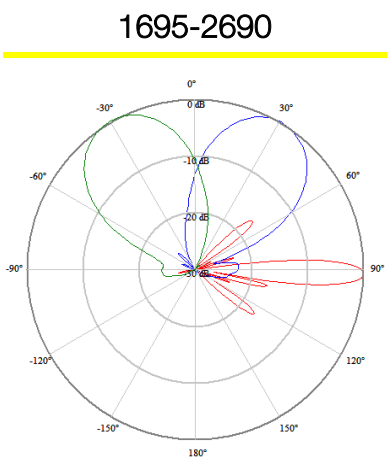
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

4WMF-01VN

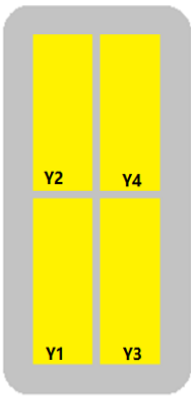
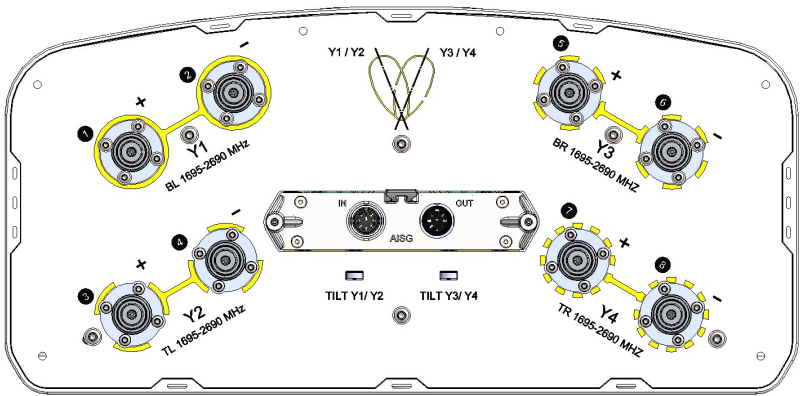
8 Port Antenna / HB Twin Beam / 2.70m

PROSE

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	3 - 4	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y3	5 - 6	1695-2690	4	MRET	RB.....XYYxxxx-MM
●Y4	7 - 8	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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5WMB-51

10 Port Antenna / High Band Penta Beam Antenna / 0.9m

PROSE

- 5 x 1695-2690
- Fixed Electrical Tilt
- 4.3-10 Connectors

Electrical Data

Frequency(MHz)			5× (1695-2690)			
			1695-1920	1900-2180	2300-2500	2500-2690
Gain	Y1/Y2/Y3/Y4/Y5	dBi	20.5±1.4	21.8±1.2	22.6±1.0	21.8±1.8
Polarization		°	±45°			
Horizontal Pattern						
3dB Azimuth Beamwidth		°	11.3±2	9.6±2	8.2±1.0	7.5±1.0
Beam Peak Position			± 36,18,0	± 32,16,0	± 27,13,0	± 25,12.5,0
Front to Back Ratio, Total Power, 180°±30°		dB	> 36	> 36	> 36	> 36
Cross-Polar Discrimination At Mechanical Boresight 0°			> 16	> 19	> 19	> 15
Vertical Pattern						
3dB Elevation Beamwidth		°	10.6±0.8	9.2±0.8	8.1±0.8	7.6±0.8
Electrical Downtilt			6° Fixed			
1st Upper Sidelobe Suppression		dB	> 18	> 18	> 18	> 18
RF Parameters						
VSWR			< 1.5			
Intra - Cluster Isolation		dB	25			
Beam Isolation			15			
3rd PIM(2 x 43 dBm)		dBc	< -153			
Impedance		Ω	50			
Maximum Effective Power per Port		W	200			

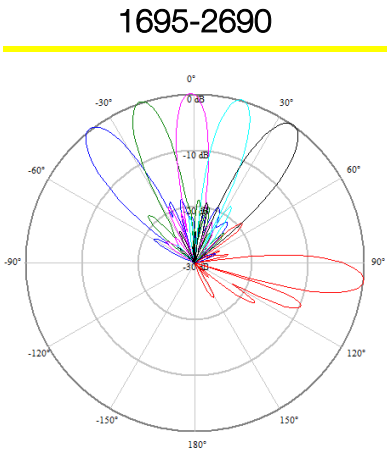
— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data

Connector Type	10 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	29 kg	63.9 lb
Packing Weight	45 Kg	99.2 lb
Antenna Dimensions (H x W x D)	896 x 1096 x 116 mm	35.3 x 43.1 x 4.6 in
Packing Size (H x W x D)	1265 x 1105 x 285 mm	49.8 x 43.5 x 11.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1078 / 60 / 1186 N	242 / 13 / 267 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



Pattern (Sample for reference)

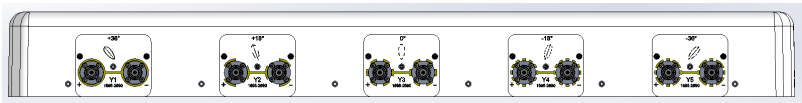


5WMB-51

10 Port Antenna / High Band Penta Beam Antenna / 0.9m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● Y1/Y2/Y3/Y4/Y5	1-10	1695-2690	N/A		

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-1	4.5 kg / 9.9 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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5UMB-40

10 Port Antenna / High Band Penta Beam Antenna / 0.8m

PROSE

- 5 x 1710-2170
- Fixed Electrical Tilt
- 7/16 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		5x (1710-2170)	
		1710-1920	1920-2170
Gain	dBi	20.6±0.7	21.1±0.7
Polarization	°	±45°	
Horizontal Pattern			
3dB Azimuth Beamwidth	°	13.6±3.5	11.2±2.5
Beam Peak Position		±43, ±20,0	±36, ±17,0
Front to Back Ratio, Total Power, 180°±30°	dB	> 30	> 30
Cross-Polar Discrimination At Mechanical Boresight 0°		> 14	> 14
Vertical Pattern			
3dB Elevation Beamwidth	°	11±1.0	10.0±0.9
Electrical Downtilt		6° Fixed	
1st Upper Sidelobe Suppression	dB	> 17	> 17
RF Parameters			
VSWR		< 1.5	
Intra - Cluster Isolation	dB	> 28	
Beam Isolation		> 13	
3rd PIM(2 x 43 dBm)	dBc	< -150	
Impedance	Ω	50	
Maximum Effective Power per Port	W	200	

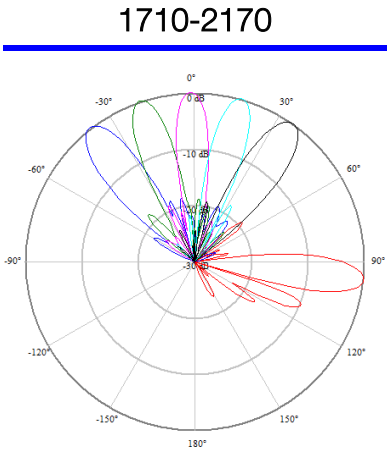
— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

Connector Type	10 x 7/16 DIN Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	20 kg	44.1 lb
Packing Weight	45 Kg	99.2 lb
Antenna Dimensions (H x W x D)	806 x 836 x 116 mm	31.7 x 32.9 x 4.6 in
Packing Size (H x W x D)	1265 x 1105 x 285 mm	49.8 x 43.5 x 11.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	731 / 54 / 804 N	164 / 12 / 181 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



Pattern (Sample for reference)

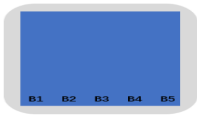


5UMB-40

10 Port Antenna / High Band Penta Beam Antenna / 0.8m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
•B1/B2/B3/B4/B5	1-10	1710-2170	/	/	/

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-1_B	4.7 kg / 10.4 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G4WHE-01V

10 Port Antenna / Hybrid 1L2TB / 2.09m

PROSE

- 698-960 + 4x(1695-2690)(twin beam) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data

Frequency(MHz)			698-960			4 x (1695-2690)			
			698-803	791-862	880-960	1695-1900	1900-2180	2300-2500	2500-2690
Gain	R1/Y1/Y2 Mid Tilt	dBi	15.1	15.3	15.6	17.2	18.1	18.5	18.6
	/Y3/Y4 Over All Tilts		15.0±0.3	15.2±0.5	15.5±0.5	17.1±0.4	18.0±0.5	18.4±0.5	18.5±0.4
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	63±5	62±5	60±5	35±2	30±3	28±2	26±2
Front to Back Ratio, Total Power, 180°±30°			> 23	> 23	> 23	> 25	> 25	> 24	> 24
Cross-Polar Discrimination		dB							
At Mechanical Boresight 0°			> 20	> 22	> 21	> 18	> 20	> 16	> 18
Beam Peak Position						±29	±29	±29	±29
Vertical Pattern									
3dB Elevation Beamwidth			10.8±1.4	9.8±1.0	9.2±0.9	9.2±0.9	8.2±0.9	7.3±0.7	6.7±0.6
Electrical Downtilt		°	2-12			2-10			
1st Upper Sidelobe Suppression			15	15	16	16	16	16	16
RF Parameters									
VSWR		dB	< 1.5						
Intra - Cluster Isolation			> 25			> 26			
Inter - Cluster Isolation		dB	> 28						
3rd PIM(2 x 43 dBm)			< -150						
Impedance		dBc	50			50			
Maximum Effective Power Per Port		Ω	500			200			

— Maximum Effective Power Whole Antenna: 1000 W.

G4WHE-01V

10 Port Antenna / Hybrid 1L2TB / 2.09m

PROSE

Mechanical Data

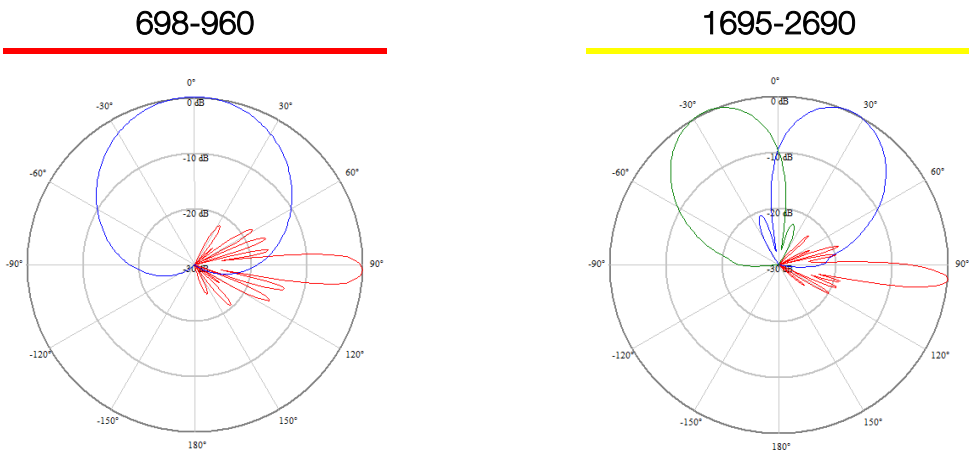
Connector Type	10 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	31 kg	68.3 lb
Antenna Dimensions (H x W x D)	2090 x 448 x 188 mm	82.3 x 17.6 x 7.4 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	806 / 926 / 192 N	180 / 208 / 43 lbf
Mast Diameter Supported	50 - 110 mm	2.0 – 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



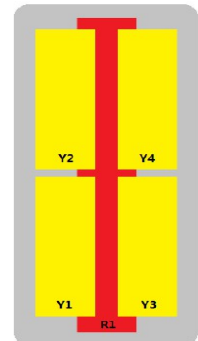
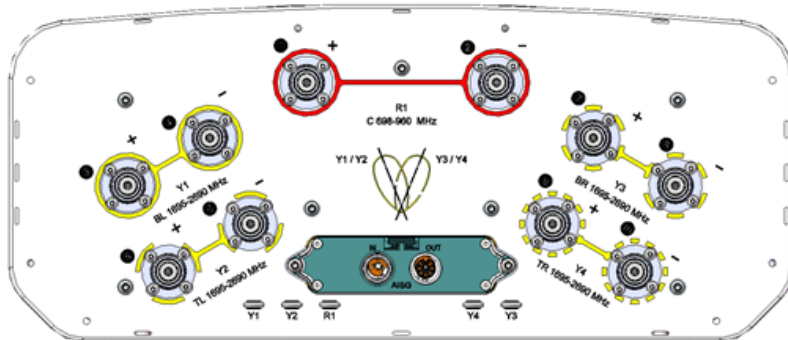
RET Specification

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	3	MRET	RB.....XYYxxxx-MM
● Y1	3 - 4	1695-2690	1	MRET	RB.....XYYxxxx-MM
● Y2	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
● Y3	7 - 8	1695-2690	5	MRET	RB.....XYYxxxx-MM
● Y4	9 - 10	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-3	7.3 kg / 16.1 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G4WHF-01N

10 Port Antenna / 1L2TB / 2.69m

PROSE

- (698-960) (65deg) + 4 x (1710-2690)(33deg)MHz
- Embedded RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)			(698-960)			4 x (1710-2690)				
			698-806	790-896	880-960	1710-1900	1900-2180	2300-2400	2500-2690	
Gain	R1/Y1/Y2	Mid Tilt	dBi	15.6	15.5	15.7	18.2	18.6	19.4	19.6
	/Y3/Y4	Over All Tilts		15.5±0.5	15.5±0.5	15.6±0.5	18.1±0.6	18.6±0.6	19.3±0.8	19.5±1.0
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	66±5	66±5	65±6	42±4	38±4	34±4	31±3
Front to Back Ratio, Total Power, 180°±30°			dB	> 22	> 23	> 24	> 22	> 22	> 23	> 23
Cross-Polar Discrimination At Mechanical Boresight 0°				> 18	> 18	> 18	> 20	> 20	> 15	> 15
Vertical Pattern										
3dB Elevation Beamwidth			°	8.5±0.8	7.6±0.7	7.0±0.5	6.9±0.5	6.1±0.7	5.1±0.7	4.9±0.6
Electrical Downtilt				2-10						
1st Upper Sidelobe Suppression			dB	> 17	> 17	> 16	> 16	> 17	> 18	> 18
RF Parameters										
VSWR				< 1.5:1						
Intra - Cluster Isolation			dB	> 25			> 25			
Beam Isolation				/			26			
Inter - Cluster Isolation				> 28						
3rd PIM(2 x 43 dBm)			dBc	< 150						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	200						

— Maximum Effective Power Whole Antenna: 1000 W.

G4WHF-01N

10 Port Antenna / 1L2TB / 2.69m

PROSE

Mechanical Data (BASTA 11.1)

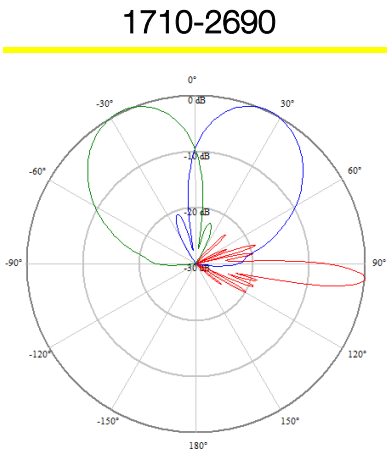
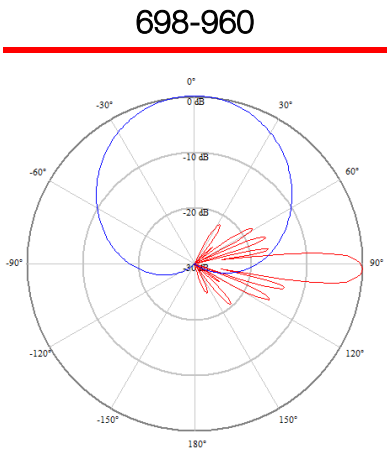
Connector Type	10 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	<43 kg	<94.8 lb
Shipping Weight	<47.3 kg	<104.3 lb
Antenna Dimensions (H x W x D)	2690 x 448x 188 mm	105.9 x 17.6 x 7.4 in
Packing Size (H x W x D)	2825 x 551 x 361 mm	112 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1230 / 374 / 1282 N	277 / 84 / 288 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



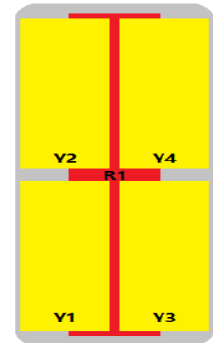
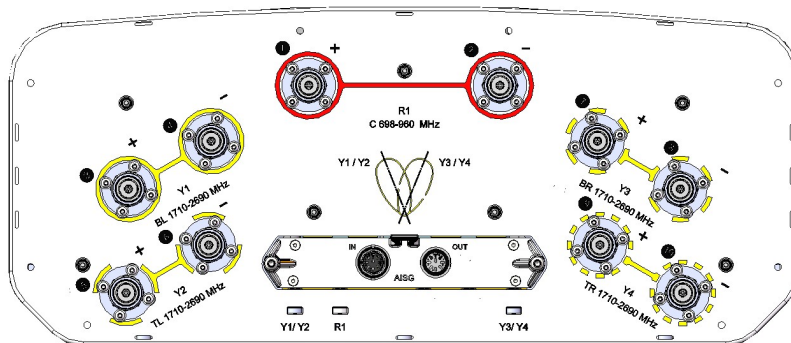
RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●Y1	3 - 4	1710-2690	3	MRET	RB.....XYYxxxx-MM
●Y2	5 - 6	1710-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	7 - 8	1710-2690	4	MRET	RB.....XYYxxxx-MM
●Y4	9 - 10	1710-2690	5	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G2W2WHD-21

10 Port Antenna / 1L2H1TB / 1.599m

PROSE

- 694-960/2x(1695-2690)/2x(1695-2690)MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		694-960		2 x 1695-2690			2 x1695-2690			
		694-806	824-960	1695-1920	1920-2180	2300-2690	1695-1920	1920-2180	2300-2690	
Gain	Mid Tilt	dBi	13.8	14.1	14.4	15.1	15.5	16	16.6	16.9
	Over All Tilts		13.5±0.4	13.8±0.5	14.1±0.5	14.8±0.5	15.2±0.5	15.7±0.5	16.4±0.5	16.7±0.5
Polarization		°	±45°							

Horizontal Pattern

3dB Azimuth Beamwidth	°	68±3	67±3	57±3	63±6	66±6	37±2	34±2	29±2
Front to Back Ratio, Co-polar 180°±30°	dB	> 28	> 27	> 28	> 28	> 26	> 27	> 28	> 29
Cross-Polar Discrimination At Mechanical Boresight 0°		> 21	> 20	> 15	> 18	> 18	> 20	> 20	> 16

Vertical Pattern

3dB Elevation Beamwidth	°	17.5±1.3	14.6±1.3	14.2±0.9	12.5±1	10.4±0.8	10.5±1	9.6±1.0	8.3±0.8
Electrical Downtilt		1-10							
1st Upper Sidelobe Suppression	dB	> 16	> 16	> 16	> 16	> 16	> 16	> 16	> 16

RF Parameters

VSWR		< 1.5		
Intra - Cluster Isolation	dB	26	25	25
Inter - Cluster Isolation		28		
3rd PIM(2 x 43 dBm)	dBc	< -153		
Impedance	Ω	50		
Maximum Effective Power Per Port	W	500	300	

— Maximum Effective Power Whole Antenna: 1000 W.

G2W2WHD-21

10 Port Antenna / 1L2H1TB / 1.599m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	10 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	23 kg	50.7 lb
Shipping Weight	34.6 kg	76.3 lb
Antenna Dimensions (H x W x D)	1599 x 350 x 200 mm	63.0 x 13.8 x 7.9 in
Packing Size (H x W x D)	1749 x 435 x 350 mm	68.9 x 17.1 x 13.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	404 / 199 / 517 N	91 / 45 / 116 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F

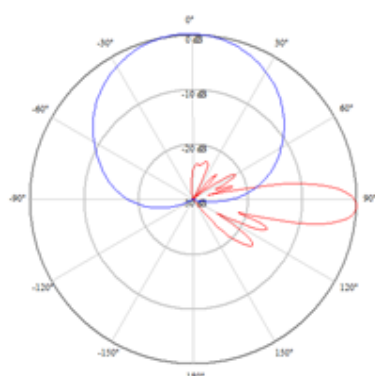


RET Specification (BASTA11.1)

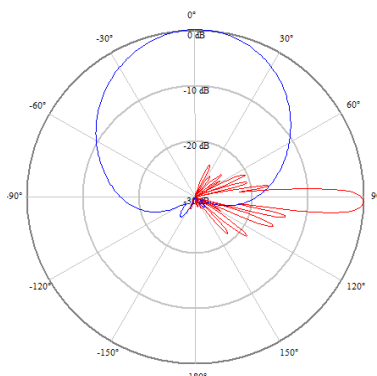
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

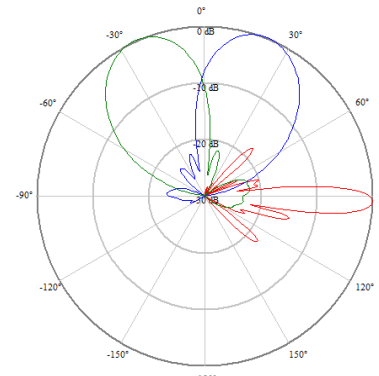
694-960



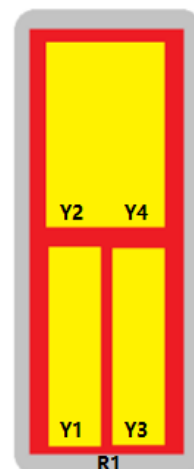
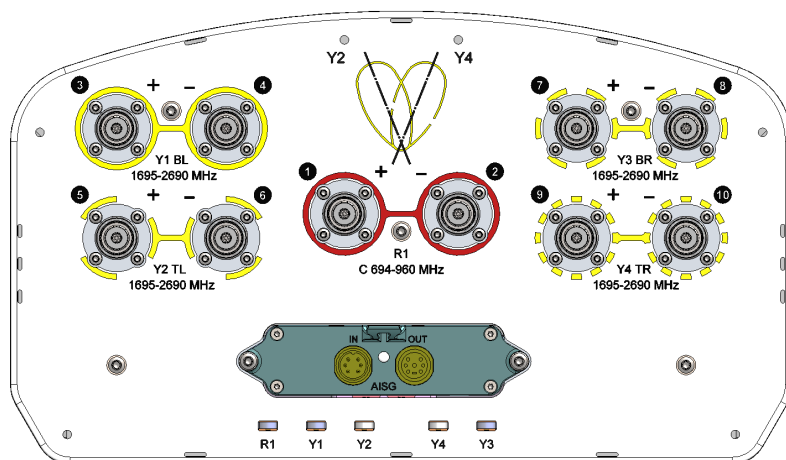
1695-2690



1695-2690(Twinbeam)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	694-960	1	MRET	RB.....XYYxxxx-MM
● Y1	3 - 4	1695-2690	2	MRET	RB.....XYYxxxx-MM
● Y2	5 - 6	1695-2690	3	MRET	RB.....XYYxxxx-MM
● Y3	7 - 8	1695-2690	5	MRET	RB.....XYYxxxx-MM
● Y4	9 - 10	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

— Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001

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6W22ME-01

12 Port Antenna / HB Dual Triple Beam / 2.0m

PROSE

- 6 x (1710-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)		1710-2690					
		1710-1880	1850-1990	1920-2200	2300-2500	2500-2690	
Gain	Mid Tilt	dBi	19.3	19.5	19.7	19.8	19.8
	Over All Tilts		19.3±0.5	19.5±0.5	19.7±0.5	19.8±0.5	19.8±0.5
Polarization		°	±45				
Horizontal Pattern							
3dB Azimuth Beamwidth		°	23±1.8	21.0±1.6	19.0±1.5	16.0±1.4	14.0±1.2
Horizontal Beam Direction			±34	±31	±28	±25	±23
Front to Back Ratio, Total Power, 180°±30°		dB	> 28	> 28	> 28	> 28	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°			> 16	> 16	> 16	> 16	> 16
Vertical Pattern							
3dB Elevation Beamwidth		°	8.8±0.8	7.8±0.8	7.4±0.8	6.7±0.6	6.4±0.6
Electrical Downtilt			2-10				
1st Upper Sidelobe Suppression		dB	> 16	> 16	> 16	> 16	> 16
RF Parameters							
VSWR			< 1.5				
Intra - Cluster Isolation		dB	25				
3rd PIM(2 x 43 dBm)		dBc	< -150				
Impedance		Ω	50				
Maximum Effective Power Per Port		W	200				

— Maximum Effective Power Whole Antenna: 1000 W.

6W22ME-01

12 Port Antenna / HB Dual Triple Beam / 2.0m

PROSE

Mechanical Data (BASTA)

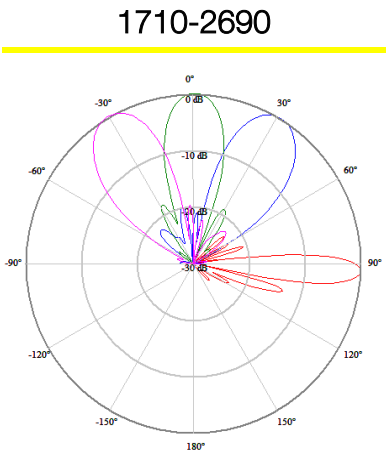
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	43.48 kg	95.9 lb
Shipping Weight	58.88 kg	129.8 lb
Antenna Dimensions (H x W x D)	2000 x 579 x 189 mm	78.7 x 22.8 x 7.4 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Front/Lateral/Max)	1302 / 231/ 1398 N	293 / 52 / 314 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



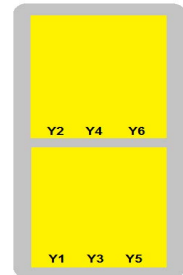
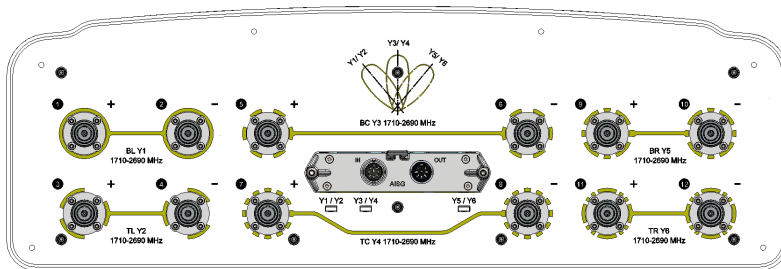
RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1710-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	3 - 4	1710-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	5 - 6	1710-2690	2	MRET	RB.....XYYxxxx-MM
●Y4	7 - 8	1710-2690	2	MRET	RB.....XYYxxxx-MM
●Y5	9 - 10	1710-2690	3	MRET	RB.....XYYxxxx-MM
●Y6	11 - 12	1710-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-2	6.5 kg / 14.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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6WMB-51

12 Port Antenna / HB Hexa Beam / 0.9m

PROSE

- 6 x (1695-2690) MHz
- Fixed Electrical Tilt
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)		6 x (1695-2690)				
		1695-1920	1920-2180	2300-2500	2500-2690	
Gain	Y1/Y6	dBi	19.4±0.6	20.9±0.6	21.5±0.4	21.5±0.5
	Y2/Y5		20.5±0.4	21.8±0.5	22.6±0.2	22.5±0.4
	Y3/Y4		20.8±0.4	22.1±0.5	22.9±0.2	22.8±0.2
Polarization		°	±45°			
Horizontal Pattern						
3dB Azimuth Beamwidth Y1/Y6		°	12.6±0.8	10.4±0.7	8.5±0.5	7.7±0.3
3dB Azimuth Beamwidth Y2/Y5			10.6±0.5	9.1±0.5	7.7±0.2	7.1±0.2
3dB Azimuth Beamwidth Y3/Y4			9.8±0.4	8.6±0.4	7.4±0.2	6.9±0.2
Beam Direction			±40, ±22.5, ±7.5	±34, ±20, ±6.5	±29, ±17, ±5.5	±26, ±15.5, ±5
Front to Back Ratio, Copolar , 180°±30°		dB	> 35	> 35	> 35	> 35
Cross-Polar Ratio @Boresight			> 13	> 14	> 16	> 18
Vertical Pattern						
3dB Elevation Beamwidth		°	10.6±0.5	9.3±0.5	7.9±0.2	7.2±0.2
Electrical Downtilt			Fixed 6			
1st Upper Sidelobe Suppression		dB	> 16	> 16	> 17	> 16
RF Parameters						
VSWR			< 1.5			
Intra - Cluster Isolation		dB	> 28			
Inter - Cluster Isolation			> 15			
3rd PIM(2 x 43 dBm)		dBc	< -153			
Impedance		Ω	50			
Maximum Effective Power Per Port		W	200			

— Maximum Effective Power Whole Antenna: 1200 W.

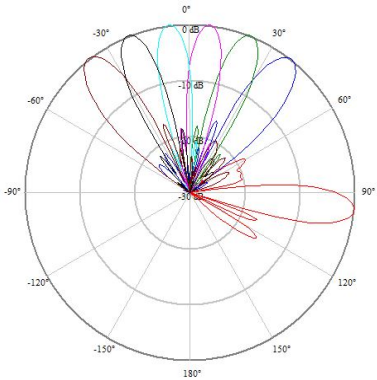
Mechanical Data (BASTA)

Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	31 kg	68.3 lb
Antenna Dimensions (H x W x D)	896 x 1096 x 116 mm	35.3 x 43.1 x 4.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Side)	1240 / 1296 / 72 N	279 / 291 / 16 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



Pattern (Sample for reference)

1695-2690

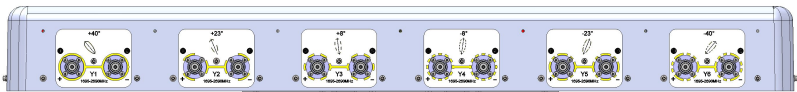


6WMB-51

12 Port Antenna / HB Hexa Beam / 0.9m



Layout



Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-1	4.5 kg / 9.9 lb	0-15

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4WHE-01N

12 Port Antenna / Hybrid 2L2TB / 2.0m

PROSE

- 2 x (698-960) + 4x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2 x (698-960)			4 x (1695-2690)					
		698-806	790-896	880-960	1695-1900	1900-2180	2300-2400	2500-2690		
Gain	R1/R2	Mid Tilt	dBi	14.9	15.2	15.3				
		Over All Tilts		14.6±0.6	15.0±0.6	15.1±0.6				
	Y2/Y3	Mid Tilt					17.5	18.6	19.2	19.3
		Over All Tilts					17.3±0.4	18.4±0.5	19.0±0.5	19.1±0.5
	Y1/Y4	Mid Tilt					17.2	18.3	18.8	18.8
		Over All Tilts					17.0±0.4	18.1±0.5	18.6±0.5	18.6±0.5
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	66±6	60±5	58±6	39±4	35±3	30±2	27±2	
Front to Back Ratio, Total Power, 180°±30°		dB	> 23	> 23	> 23	> 25	> 26	> 26	> 25	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 19	> 20	> 20	> 20	> 20	> 16	> 16	
Over Sector ±60°			> 10	> 9	> 9	> 10	> 10	> 8	> 8	
Vertical Pattern										
3dB Elevation Beamwidth		°	10.3±1.2	9.2±1.0	8.6±1.0	9.3±0.8	8.3±0.6	7.1±0.6	6.7±0.6	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 15	> 16	> 16	> 16	> 16	> 16	> 16	
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	> 25							
Inter - Cluster Isolation			> 28							
3rd PIM(2 x 43 dBm)		dBc	< -150							
Impedance		Ω	50							
Maximum Effective Power Per Port		W	500			200				

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	37 kg	81.6 lb
Shipping Weight	49.5 kg	109.1 lb
Antenna Dimensions (H x W x D)	2070 x 498 x 197 mm	81.5 x 19.6 x 7.8 in
Packing Size (H x W x D)	2220 x 575 x 370 mm	87.4 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	823 / 306 / 998 N	185 / 69 / 224 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

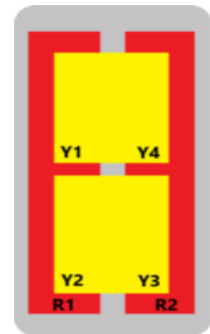
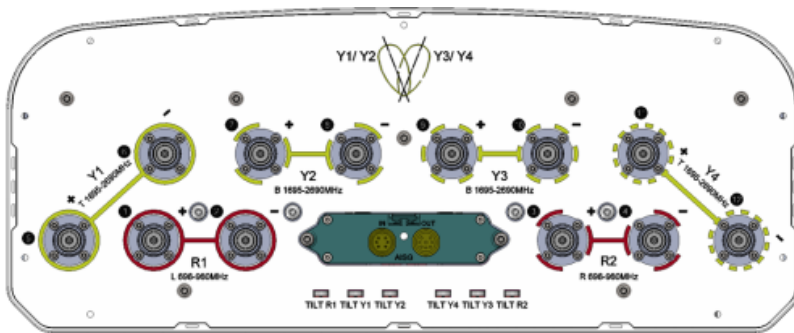


2G4WHE-01N

12 Port Antenna / Hybrid 2L2TB / 2.0m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	1	MRET	RB.....XYYxxxx-MM
● R2	3 - 4	698-960	6	MRET	RB.....XYYxxxx-MM
● Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
● Y2	7 - 8	1695-2690	3	MRET	RB.....XYYxxxx-MM
● Y3	9 - 10	1695-2690	5	MRET	RB.....XYYxxxx-MM
● Y4	11 - 12	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2G4WHF-01N

12 Port Antenna / Hybrid 2L2TB / 2.7m

PROSE

- 2 x (698-960) + 4x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2 x (698-960)			4 x (1695-2690)					
		698-806	790-896	880-960	1695-1900	1900-2180	2300-2400	2500-2690		
Gain	R1/R2	Mid Tilt	dBi	15.6	16.1	16.1				
		Over All Tilts		15.6±0.6	16.0±0.6	16.1±0.6				
	Y2/Y3	Mid Tilt					17.7	18.9	19.6	19.0
		Over All Tilts					17.6±0.7	18.8±0.5	19.5±0.5	19.0±0.5
	Y1/Y4	Mid Tilt					17.4	18.4	19.3	18.6
		Over All Tilts					17.3±0.7	18.4±0.5	19.2±0.5	18.6±0.5
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	70±6	65±5	60±6	39±4	36±3	30±2	27±2	
Front to Back Ratio, Total Power, 180°±30°		dB	> 22	> 23	> 23	> 25	> 26	> 26	> 25	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 17	> 20	> 19	> 18	> 20	> 20	> 15	
Over Sector ±60°			> 10	> 9	> 9	> 10	> 10	> 8	> 8	
Vertical Pattern										
3dB Elevation Beamwidth		°	8.6±0.9	7.6±0.7	7.0±0.6	7.4±0.6	6.6±0.6	5.6±0.6	5.2±0.6	
Electrical Downtilt			2-10			2-10				
1st Upper Sidelobe Suppression		dB	> 16	> 16	> 16	> 16	> 16	> 16	> 16	
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	> 25			> 25				
Inter - Cluster Isolation			> 26							
3rd PIM(2 x 43 dBm)		dBc	< -150							
Impedance		Ω	50							
Maximum Effective Power Per Port		W	300			200				

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

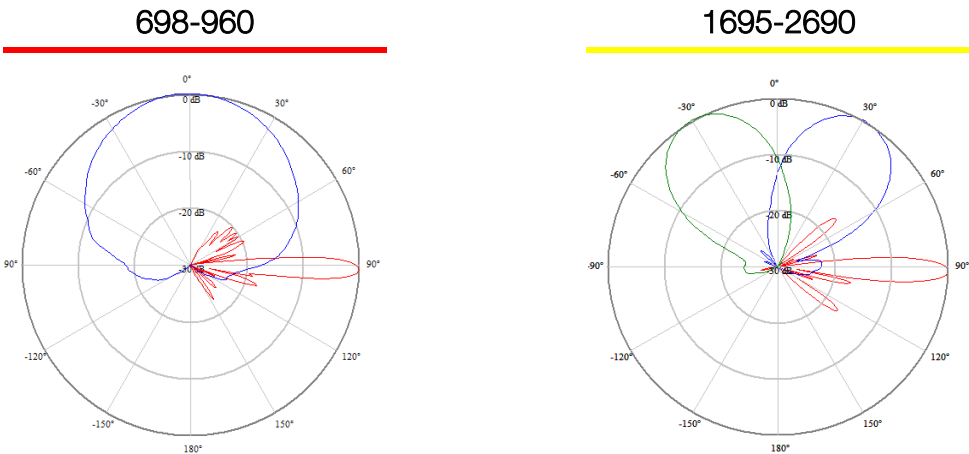
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	48.7 kg	107.4 lb
Shipping Weight	61.9 kg	136.5 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

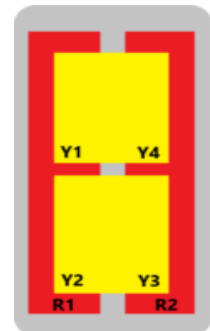
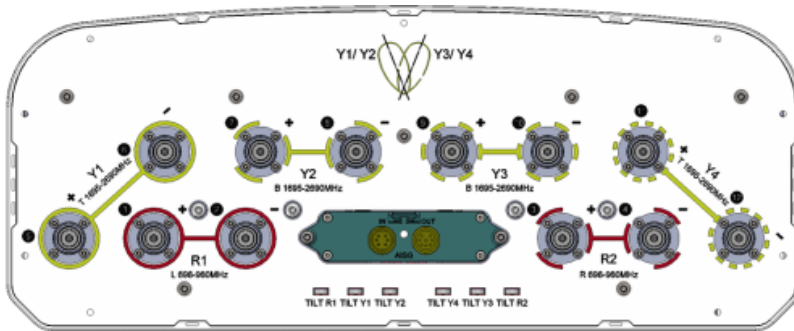


2G4WHF-01N

12 Port Antenna / Hybrid 2L2TB / 2.7m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	1	MRET	RB.....XYYxxxx-MM
● R2	3 - 4	698-960	6	MRET	RB.....XYYxxxx-MM
● Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
● Y2	7 - 8	1695-2690	3	MRET	RB.....XYYxxxx-MM
● Y3	9 - 10	1695-2690	5	MRET	RB.....XYYxxxx-MM
● Y4	11 - 12	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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G2W4O33HF-01

14 Port Antenna / Hybrid 1L2H2Tb / 2.69m

PROSE

- 698-960 + 2 x (1710-2690) + 4x (1710-2400)(twinbeam) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960			2 x (1710-2690)				
		698-806	790-896	880-960	1710-1920	1920-2180	2300-2500	2500-2690	
Gain	Mid Tilt	dBi	15.7	16.1	16.6	17.0	17.7	17.9	18.1
	Over All Tilts		15.7±0.6	16.0±0.5	16.6±0.5	17.0±0.5	17.6±0.5	17.9±0.5	18.1±0.5
Polarization		°	±45						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	68±3	66±3	67±3	68±5	65±5	62±5	57±5
Beam Peak Position		dB	/			/			
Front to Back Ratio, Total Power, 180°±30°			> 28	> 28	> 28	> 28	> 28	> 28	> 28
Cross-Polar Ratio @Boresight			> 18	> 18	> 18	> 18	> 18	> 18	> 18
Vertical Pattern									
3dB Elevation Beamwidth		dB	8.6±0.6	7.7±0.5	7.3±0.4	6.3±0.5	5.8±0.5	5.1±0.5	4.7±0.5
Electrical Downtilt		°	0-10			1-10			
1st Upper Sidelobe Suppression		dB	> 17	> 17	> 17	> 18	> 18	> 18	> 18
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	> 28			> 28			
Beam Isolation			/			/			
3rd PIM(2 x 43 dBm)		dBc	< -150						
Impedance		Ω	50						
Maximum Effective Power Per Port		W	300			200			

Electrical Data (BASTA11.1)

4 x (1710-2400)(twinbeam)

Frequency(MHz)				
		1710-1920	1920-2180	2300-2400
Gain	Mid Tilt	18.6	19.4	19.5
	Over All Tilts	18.5±0.5	19.3±0.5	19.5±0.5
Polarization		°		
		±45		

Horizontal Pattern

3dB Azimuth Beamwidth	°	33±3	30±3	27±3
Beam Peak Position	dB	±28	±26	±22
Front to Back Ratio, Total Power, 180°±30°		> 28	> 28	> 28
Cross-Polar Ratio @Boresight		> 18	> 18	> 18

Vertical Pattern

3dB Elevation Beamwidth	dB	6.3±0.6	5.8±0.6	5.1±0.6
Electrical Downtilt	°	2-10		
1st Upper Sidelobe Suppression	dB	> 18	> 18	> 18

RF Parameters

VSWR		< 1.5
Intra - Cluster Isolation	dB	> 28
Beam Isolation		20
3rd PIM(2 x 43 dBm)	dBc	< -150
Impedance	Ω	50
Maximum Effective Power Per Port	W	200

— Maximum Effective Power Whole Antenna: 1200 W.

G2W4O33HF-01

14 Port Antenna / Hybrid 1L2H2Tb / 2.69m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	14 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	39 kg	86.0 lb
Shipping Weight	51.5 kg	113.5 lb
Antenna Dimensions (H x W x D)	2690 x 448 x 188 mm	105.9 x 17.6 x 7.4 in
Packing Size (H x W x D)	2840 x 551 x 361 mm	111.8 x 21.7 x 14.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1230 / 374 / 1282 N	277 / 84 / 288 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F

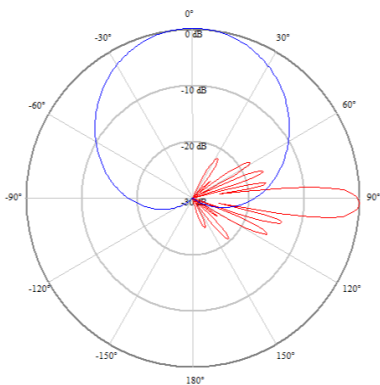


RET Specification (BASTA11.1)

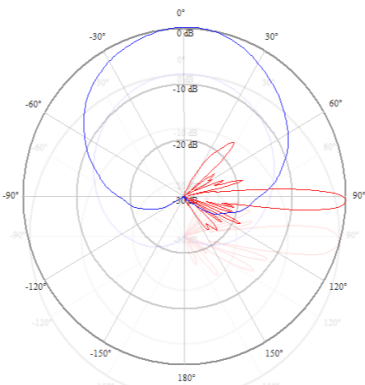
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

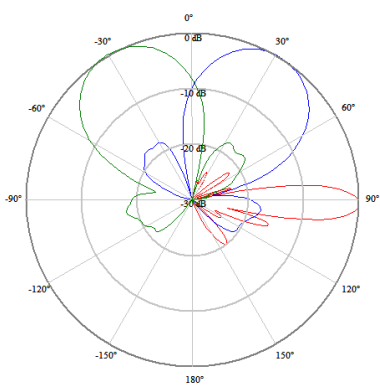
698-960



1710-2690



1710-2400(twinbeam)

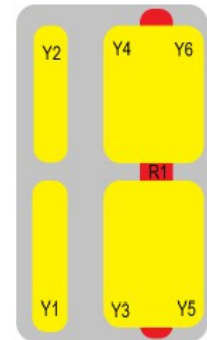
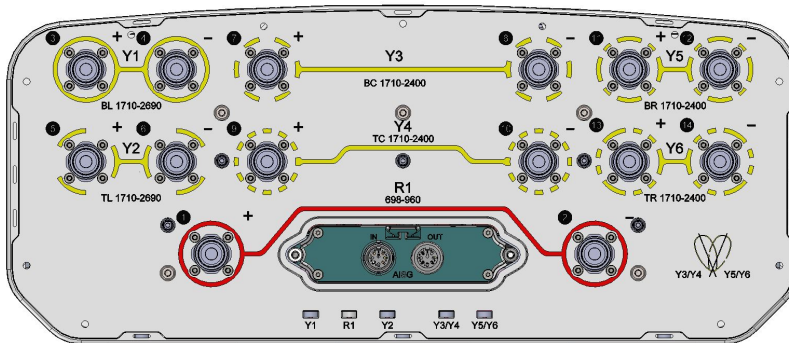


G2W4O33HF-01

14 Port Antenna / Hybrid 1L2H2Tb / 2.69m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●Y1	3 - 4	1710-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	5 - 6	1710-2690	3	MRET	RB.....XYYxxxx-MM
●Y3	7 - 8	1710-2400	4	MRET	RB.....XYYxxxx-MM
●Y4	9 - 10	1710-2400	4	MRET	RB.....XYYxxxx-MM
●Y5	11 - 12	1710-2400	5	MRET	RB.....XYYxxxx-MM
●Y6	13 - 14	1710-2400	5	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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G2W4WHE-00V

14 Port Antenna / Hybrid 1L2H2Tb / 2.09m

PROSE

- 698-960 + 2 x (1695-2690) + 4x (1695-2690)(twinbeam) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 7/16 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			698-960			2 x (1695-2690)				
			698-806	790-896	880-960	1695-1900	1900-2180	2300-2400	2500-2690	
Gain	R1/Y1/Y3	Mid Tilt	dBi	14.7	14.8	14.7	15.2	16.1	16.8	17.4
	Y5	Over All Tilts		14.6±0.3	14.7±0.3	14.6±0.5	15.1±0.4	16±0.5	16.7±0.7	17.3±0.4
	Y2/Y4/Y6	Mid Tilt					15	15.8	16.6	17.1
		Over All Tilts					14.9±0.4	15.7±0.5	16.5±0.7	17±0.4
Polarization			°	±45						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	65±5	64±5	63±5	69±5	67±5	63±5	60±5
Beam Peak Position			dB	/			/			
Cross-Polar Discrimination										
At Mechanical Boresight 0°				> 18	> 18	> 18	> 18	> 18	> 18	> 18
Vertical Pattern										
3dB Elevation Beamwidth			dB	11.4±1.4	10.0±1.0	9.5±0.9	9.0±0.7	8.1±0.6	7.1±0.5	6.5±0.5
Electrical Downtilt			°	2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 16	> 16	> 16	> 16	> 16	> 16	> 16
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 26			> 26			
Inter - Cluster Isolation				R1//Y1,Y2,Y3,Y4,Y5,Y6 >28						
Beam Isolation				/			/			
3rd PIM(2 x 43 dBm)			dBc	< -150						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	500			250			

Electrical Data (BASTA11.1)

Frequency(MHz)		4 x (1695-2690)(twinbeam)					
		1695-1900	1900-2180	2300-2400	2500-2690		
Gain	R1/Y1/Y3	Mid Tilt	dBi	16.5	17.6	18.5	18.4
	Y5	Over All Tilts		16.4±0.4	17.5±0.5	18.4±0.7	18.3±0.4
	Y2/Y4/Y6	Mid Tilt		16.2	17.3	18.2	18.1
		Over All Tilts		16.1±0.4	17.2±0.5	18.1±0.7	18±0.4
Polarization		°	±45				
Horizontal Pattern							
3dB Azimuth Beamwidth		°	40±2	38±3	35±2	31±2	
Beam Peak Position		dB	±29	±29	±29	±29	
Cross-Polar Discrimination							
At Mechanical Boresight 0°			> 20	> 20	> 15	> 15	
Vertical Pattern							
3dB Elevation Beamwidth		dB	9.0±0.7	8.1±0.6	7.1±0.5	6.5±0.5	
Electrical Downtilt		°	2-12				
1st Upper Sidelobe Suppression		dB	> 16	> 16	> 16	> 16	
RF Parameters							
VSWR			< 1.5				
Intra - Cluster Isolation		dB	> 26				
Inter - Cluster Isolation			R1//Y1,Y2,Y3,Y4,Y5,Y6 >28				
Beam Isolation			25				
3rd PIM(2 x 43 dBm)		dBc	< -150				
Impedance		Ω	50				
Maximum Effective Power Per Port		W	200				

— Maximum Effective Power Whole Antenna: 1200 W.

G2W4WHE-00V

14 Port Antenna / Hybrid 1L2H2Tb / 2.09m

PROSE

Mechanical Data (BASTA11.1)

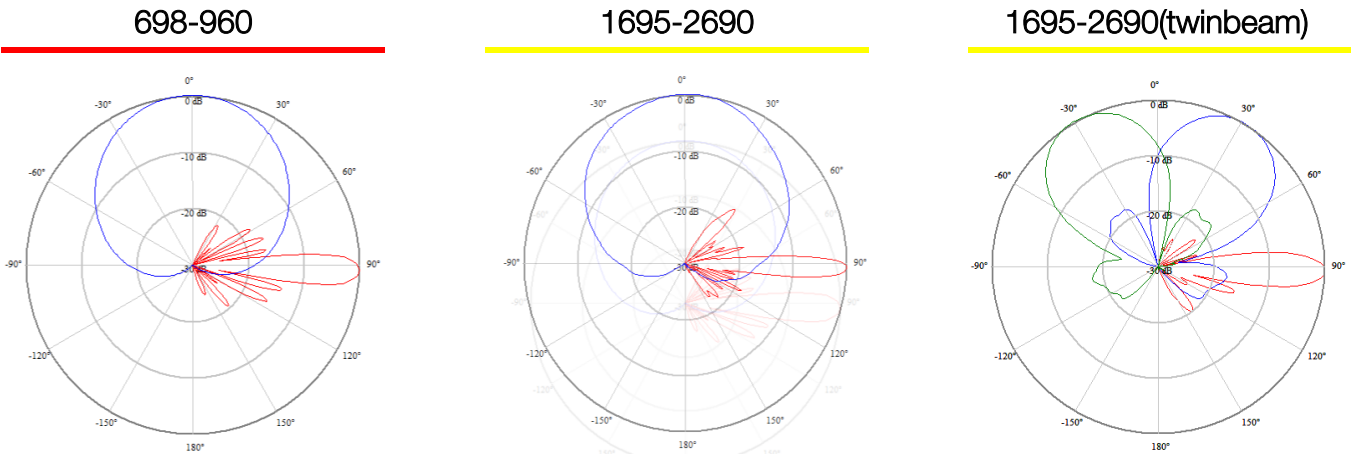
Connector Type	14 x 7/16 DIN Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	36.6 kg	80.7 lb
Shipping Weight	44.5 kg	98.1 lb
Antenna Dimensions (H x W x D)	2090 x 498 x 197 mm	82.3 x 19.6 x 7.8 in
Packing Size (H x W x D)	2240 x 575 x 370 mm	88.2 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	832 / 310 / 1008 N	187 / 70 / 227 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



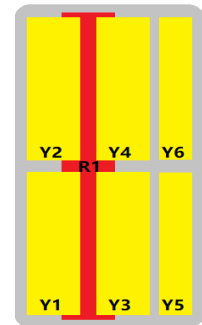
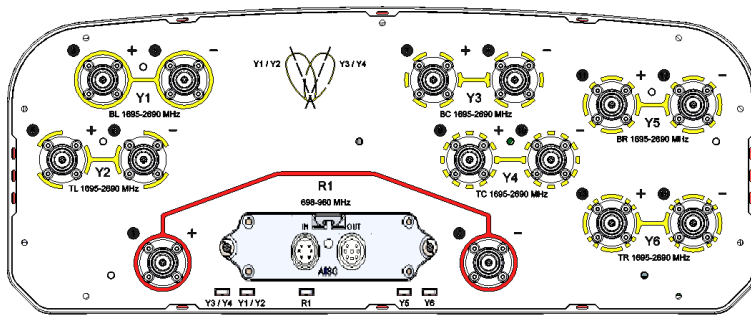
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
● Y1	3 - 4	1695-2690	4	MRET	RB.....XYYxxxx-MM
● Y2	5 - 6	1695-2690	4	MRET	RB.....XYYxxxx-MM
● Y3	7 - 8	1695-2690	3	MRET	RB.....XYYxxxx-MM
● Y4	9 - 10	1695-2690	3	MRET	RB.....XYYxxxx-MM
● Y5	11 - 12	1695-2690	5	MRET	RB.....XYYxxxx-MM
● Y6	13 - 14	1695-2690	1	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G2W4WHF-01V

14 Port Antenna / Hybrid 1L2H2Tb / 2.69m

PROSE

- 698-960 + 2 x (1695-2690) + 4x (1695-2690)(twinbeam) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			698-960			2 x (1695-2690)				
			698-806	790-896	880-960	1695-1900	1900-2180	2300-2400	2500-2690	
Gain	R1/Y1/Y3	Mid Tilt	dBi	15.6	15.5	15.2	16.5	16.9	18.0	18.3
	Y5	Over All Tilts		15.6±0.3	15.4±0.3	15.2±0.5	16.5±0.4	16.9±0.5	17.9±0.7	18.2±0.4
	Y2/Y4/Y6	Mid Tilt			16.2	16.5	17.6	17.6		
		Over All Tilts			16.1±0.4	16.5±0.5	17.5±0.7	17.6±0.4		
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	68±5	67±5	63±5	70±5	68±5	62±5	58±5
Beam Peak Position			dB	/			/			
Cross-Polar Discrimination At Mechanical Boresight 0°				> 14	> 15	> 16	> 18	> 18	> 18	> 18
Vertical Pattern										
3dB Elevation Beamwidth				8.6±1.4	7.7±1.0	7.1±0.9	7.0±0.9	6.3±0.9	5.4±0.7	5.1±0.6
Electrical Downtilt			°	2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 16	> 16	> 16	> 16	> 16	> 16	> 16
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 26			> 27			
Inter - Cluster Isolation				R1//Y1,Y2,Y3,Y4,Y5,Y6 >28						
Beam Isolation				/			/			
3rd PIM(2 x 43 dBm)			dBc	< -150						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	500			250			

Electrical Data (BASTA11.1)

Frequency(MHz)		4 x (1695-2690)(twinbeam)				
		1695-1900	1900-2180	2300-2400	2500-2690	
Gain	R1/Y1/Y3 Mid Tilt	dBi	17.5	18.5	19.4	19.3
	Y5 Over All Tilts		17.4±0.4	18.4±0.5	19.3±0.7	19.3±0.4
	Y2/Y4/Y6 Mid Tilt		17.1	18.2	18.9	19.0
	Over All Tilts		17±0.4	18.1±0.5	18.9±0.7	18.9±0.4
Polarization		°	±45°			
Horizontal Pattern						
3dB Azimuth Beamwidth		°	42±4	35±4	31±3	29±4
Beam Peak Position		dB	±29	±29	±29	±29
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 20	> 15	> 15
Vertical Pattern						
3dB Elevation Beamwidth			7.0±0.9	6.3±0.9	5.4±0.7	5.1±0.6
Electrical Downtilt		°	2-12			
1st Upper Sidelobe Suppression		dB	> 16	> 16	> 16	> 16
RF Parameters						
VSWR			< 1.5			
Intra - Cluster Isolation		dB	> 25			
Inter - Cluster Isolation			R1//Y1,Y2,Y3,Y4,Y5,Y6 >28			
Beam Isolation			25			
3rd PIM(2 x 43 dBm)		dBc	< -150			
Impedance		Ω	50			
Maximum Effective Power Per Port		W	200			

— Maximum Effective Power Whole Antenna: 1200 W.

G2W4WHF-01V

14 Port Antenna / Hybrid 1L2H2Tb / 2.69m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	14 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	45.5 kg	100.3 lb
Shipping Weight	58.7 kg	129.4 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F

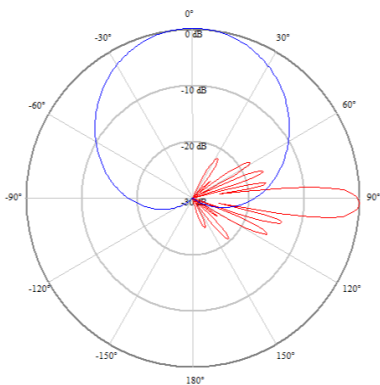


RET Specification (BASTA11.1)

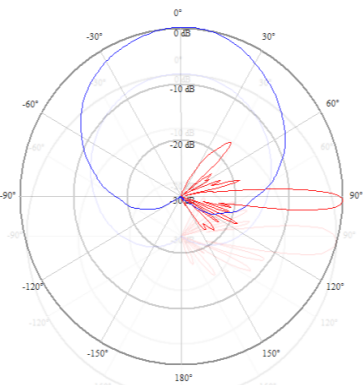
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

698-960

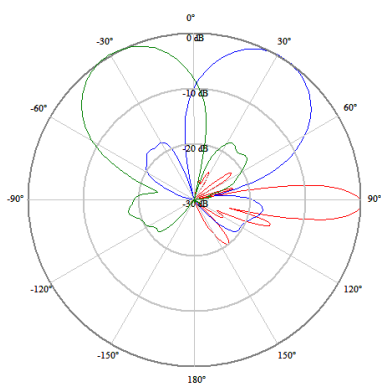


1695-2690



265

1695-2690(twinbeam)

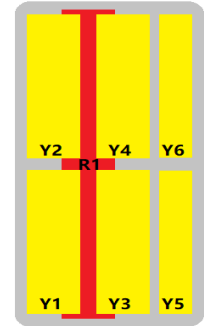
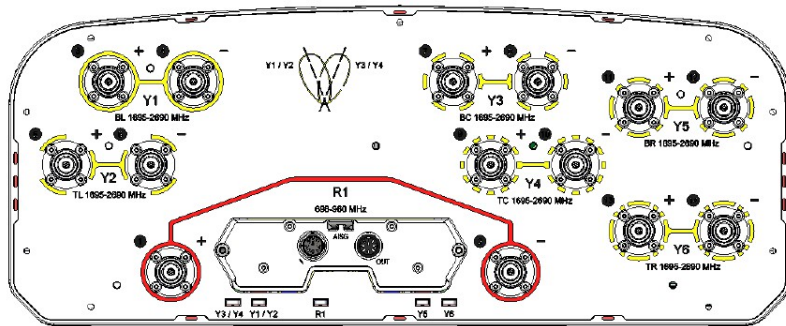


G2W4WHF-01V

14 Port Antenna / Hybrid 1L2H2Tb / 2.69m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	2	MRET	RB.....XYYxxxx-MM
●Y1	3 - 4	1695-2690	4	MRET	RB.....XYYxxxx-MM
●Y2	5 - 6	1695-2690	4	MRET	RB.....XYYxxxx-MM
●Y3	7 - 8	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y4	9 - 10	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y5	11 - 12	1695-2690	5	MRET	RB.....XYYxxxx-MM
●Y6	13 - 14	1695-2690	1	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2G4W2WHF-21

16 Port Antenna / Hybrid 2L4H1TB / 2.69m

PROSE

- 2 x (698-960) (65deg) + 4 x (1695-2690) (65deg) + 2 x (1695-2690) (twinbeam)MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2x (698-960)		4x (1695-2690)			
		698-806	806-960	1695-1920	1920-2180	2300-2500	2500-2690
Gain	Mid Tilt	15.7	16.2	16.2	16.9	17.1	17.5
	Over All Tilts	15.6±0.5	16.2±0.5	16.2±0.5	16.8±0.5	17.0±0.5	17.5±0.5
Polarization		±45					

Horizontal Pattern

3dB Azimuth Beamwidth	°	72±6	68±6	62±5	64±6	65±6	60±5
Front to Back Ratio, Total Power, 180°±30°	dB	> 27	> 27	> 26	> 26	> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°		> 18	> 18	> 16	> 16	> 16	> 16

Vertical Pattern

3dB Elevation Beamwidth	°	8.2±0.8	7.1±0.8	6.8±0.7	6.4±0.7	5.5±0.6	5.0±0.5
Electrical Downtilt		2-12		2-12			
1st Upper Sidelobe Suppression	dB	> 16	> 16	> 16	> 16	> 16	> 16

RF Parameters

VSWR		< 1.5	
Intra - Cluster Isolation	dB	> 26	> 26
Beam Isolation		/	/
3rd PIM(2 x 43 dBm)		< -153	
Impedance	Ω	50	
Maximum Effective Power Per Port	W	400	300

2G4W2WHF-21

16 Port Antenna / Hybrid 2L4H1TB / 2.69m

PROSE

Electrical Data (BASTA11.1)

Frequency(MHz)		2x (1695-2690)(twinbeam)				
		1695-1920	1920-2180	2300-2500	2500-2690	
Gain	Mid Tilt	dBi	17.3	18.5	18.6	18.3
	Over All Tilts		17.3±0.6	18.4±0.6	18.5±0.6	18.2±0.5
Polarization		°	±45			
Horizontal Pattern						
3dB Azimuth Beamwidth		°	33±3	30±2	28±2	25±2
Front to Back Ratio, Total Power, 180°±30°		dB	> 27	> 28	> 28	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 18	> 18	> 18
Vertical Pattern						
3dB Elevation Beamwidth		°	9.5±0.6	8.3±0.6	7.3±0.3	6.7±0.3
Electrical Downtilt			2-10			
1st Upper Sidelobe Suppression		dB	> 16	> 16	> 16	> 16
RF Parameters						
VSWR			< 1.5			
Intra - Cluster Isolation		dB	> 26			
Beam Isolation			16	18	16	16
3rd PIM(2 x 43 dBm)			< -153			
Impedance		Ω	50			
Maximum Effective Power Per Port		W	200			

2G4W2WHF-21

16 Port Antenna / Hybrid 2L4H1TB / 2.69m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	16 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	48 kg	105.8 lb
Shipping Weight	68.5 kg	151.0 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F

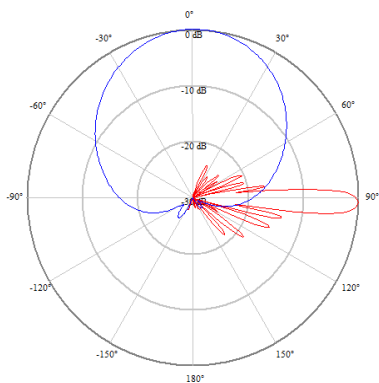


RET Specification (BASTA11.1)

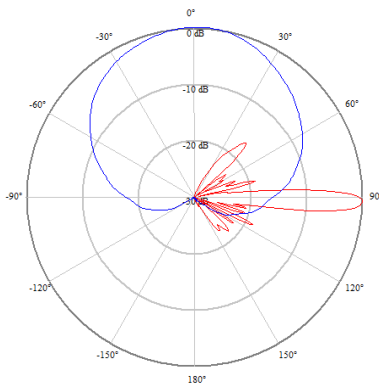
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

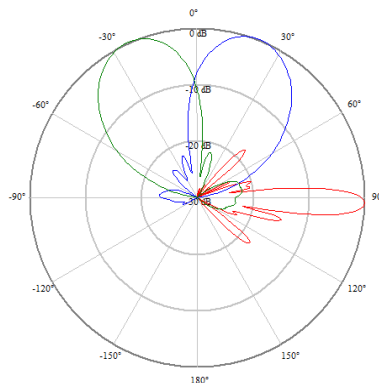
698-960



1695-2690



1695-2690(twinbeam)

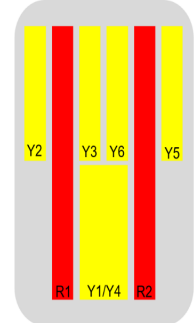
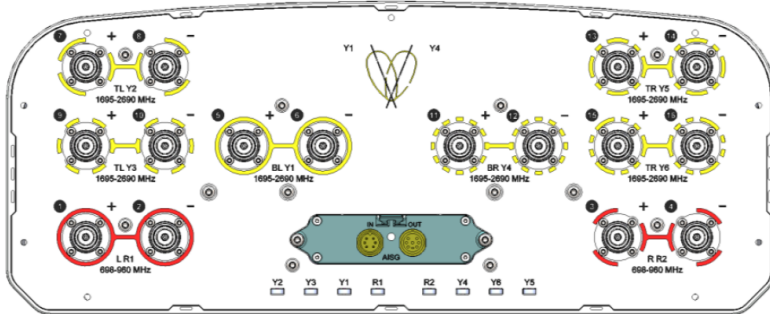


2G4W2WHF-21

16 Port Antenna / Hybrid 2L4H1TB / 2.69m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	4	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	5	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	6	MRET	RB.....XYYxxxx-MM
●Y5	13 - 14	1695-2690	8	MRET	RB.....XYYxxxx-MM
●Y6	15 - 16	1695-2690	7	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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9WMB-51

18 Port Antenna / HB Nona Beam / 0.9m

PROSE

- 9 x (1695-2690) MHz
- Fixed Electrical Tilt
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)			9 x (1695-2690)			
			1695-1920	1920-2180	2300-2500	2500-2690
Gain	Y1/Y9	dBi	20.4±0.7	22.3±0.5	22.7±0.4	22.7±0.3
	Y2/Y8		21.4±0.6	22.8±0.5	23.4±0.3	23.4±0.3
	Y3/Y7		21.7±0.6	22.9±0.4	23.5±0.3	23.5±0.3
	Y4/Y6		22.1±0.6	23.3±0.4	23.9±0.3	23.9±0.3
	Y5		22.0±0.6	23.2±0.4	23.9±0.3	23.7±0.3
Polarization		°	±45°			
Horizontal Pattern						
3dB Azimuth Beamwidth Y1/Y9		°	8.3±0.5	6.8±0.5	5.7±0.3	5.0±0.2
3dB Azimuth Beamwidth Y2/Y8			7.4±0.4	6.2±0.4	5.2±0.2	4.7±0.2
3dB Azimuth Beamwidth Y3/Y7			6.7±0.3	5.7±0.3	5.0±0.2	4.5±0.2
3dB Azimuth Beamwidth Y4/Y6			6.4±0.3	5.6±0.3	4.9±0.2	4.4±0.2
3dB Azimuth Beamwidth Y5			6.5±0.3	5.6±0.3	4.8±0.2	4.4±0.2
Beam Direction			±41,±29,±19, ±9,0	±35,±26,±17, ±8,0	±30,±22,±14, ±7,0	±27,±20,±13, ±6,0
Front to Back Ratio, Copolar, 180°±30°		dB	> 36	> 36	> 38	> 38
Cross-Polar Ratio @Boresight			> 14	> 17	> 19	> 19
Vertical Pattern						
3dB Elevation Beamwidth		°	10.5±0.4	9.2±0.5	7.9±0.3	7.4±0.2
Electrical Downtilt			Fixed 6			
1st Upper Sidelobe Suppression		dB	> 15	> 16	> 16	> 18
RF Parameters						
VSWR			< 1.5			
Intra - Cluster Isolation		dB	> 28			
Inter - Cluster Isolation			> 15			
3rd PIM(2 x 43 dBm)		dBc	< -153			
Impedance		Ω	50			
Maximum Effective Power Per Port		W	200			

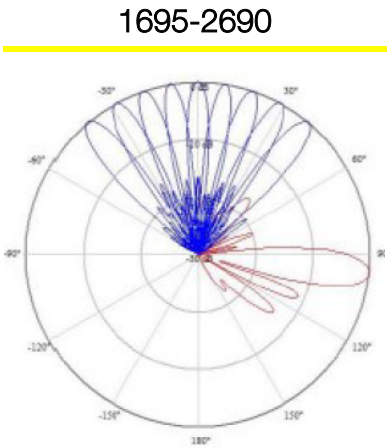
— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA)

Connector Type	18 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	52 kg	114.6 lb
Antenna Dimensions (H x W x D)	900 x 1644 x 116 mm	35.4 x 64.7 x 4.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Side)	1845 / 1900 / 71 N	414 / 427 / 16 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



Pattern (Sample for reference)

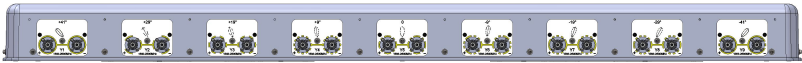


9WMB-51

18 Port Antenna / HB Nona Beam / 0.9m

PROSE

Layout



Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8 Y9

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	2 x 85-1	2 x 9.9 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4W4WHF-01

20 Port Antenna / Hybrid 2L4H+2TB / 2.7m

PROSE

- 2 x (698-960) + 4 x (1710-2690) + 4 x (1710-2690) (twinbeam) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		2 x (698-960)				4 x (1695-2690)				
		698-806	790-862	880-960	1710-1900	1900-2180	2300-2400	2500-2690		
Gain	R1/R2/Y1	Mid Tilt	dBi	15.7	16.2	16.1				
	Y7/Y3/Y5	Over All Tilts		15.7±0.7	16.1±0.6	16.0±0.6				
	Y2/Y8/Y4	Mid Tilt					16.3	16.8	17.5	18.0
	Y6	Over All Tilts					16.2±0.6	16.7±0.6	17.4±0.6	17.9±0.6
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	71±6	67±5	67±6	66±5	66±6	60±6	54±5
Beam Peak Position			dB	/	/	/	/	/	/	/
Front to Back Ratio, Total Power, 180°±30°				> 24	> 26	> 26	> 27	> 28	> 25	> 25
Cross-Polar Discrimination										
At Mechanical Boresight 0°				> 15	> 19	> 20	> 21	> 21	> 20	> 20
Over Sector ±60°			> 9	> 8	> 7	> 5	> 5	> 5	> 8	
Vertical Pattern										
3dB Elevation Beamwidth			°	9.0±0.8	8.2±0.6	7.3±0.8	7.0±0.5	6.3±0.5	5.6±0.5	5.1±0.6
Electrical Downtilt				2-12			2-12			
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 25			> 25			
Beam Isolation				/			/			
Inter - Cluster Isolation				> 26						
3rd PIM(2 x 43 dBm)			dBc	< -150						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	300			250			

Electrical Data (BASTA11.1)

Frequency(MHz)		4 x (1710-2690)(twinbeam)					
		1710-1880	1920-2170	2300-2400	2500-2690		
Gain	R1/R2/Y1	Mid Tilt	dBi	17.1	18.5	19.4	19.2
	Y7/Y3/Y5	Over All Tilts		17.0±0.7	18.5±0.7	19.3±0.7	19.2±0.7
	Y2/Y8/Y4	Mid Tilt					
	Y6	Over All Tilts					
Polarization			°	±45°			
Horizontal Pattern							
3dB Azimuth Beamwidth			°	39±3	35±2	29±2	25±2
Beam Peak Position			dB	±29	±26	±22	±19
Front to Back Ratio, Total Power, 180°±30°				> 27	> 27	> 28	> 28
Cross-Polar Discrimination							
At Mechanical Boresight 0°				> 18	> 19	> 18	> 16
Over Sector ±60°				> 8	> 10	> 9	> 6
Vertical Pattern							
3dB Elevation Beamwidth			°	7.0±0.5	6.2±0.5	5.5±0.5	5.0±0.6
Electrical Downtilt				2-10			
RF Parameters							
VSWR				< 1.5			
Intra - Cluster Isolation			dB	> 25			
Beam Isolation				16			
Inter - Cluster Isolation				> 26			
3rd PIM(2 x 43 dBm)			dBc	< -150			
Impedance			Ω	50			
Maximum Effective Power Per Port			W	200			

— Maximum Effective Power Whole Antenna: 1200 W.

2G4W4WHF-01

20 Port Antenna / Hybrid 2L4H+2TB / 2.7m

PROSE

Mechanical Data (BASTA11.1)

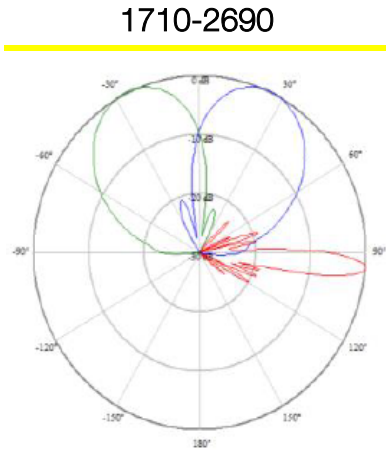
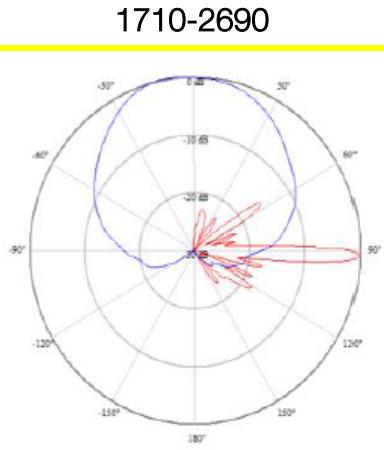
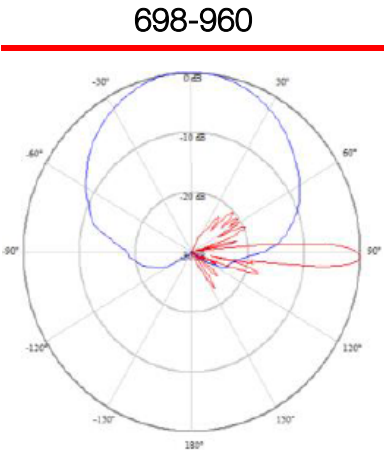
Connector Type	20 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	58 kg	127.9 lb
Shipping Weight	79.9 kg	176.1 lb
Antenna Dimensions (H x W x D)	2699 x 580 x 210 mm	106.3 x 22.8 x 8.3 in
Packing Size (H x W x D)	2849 x 725 x 345 mm	112.2 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1004 / 413 / 1322 N	226 / 93 / 297 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

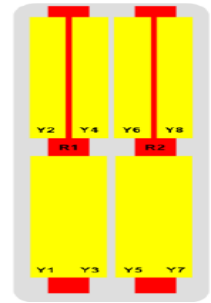
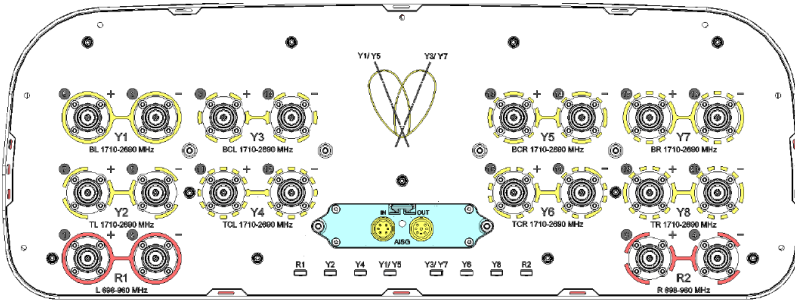


2G4W4WHF-01

20 Port Antenna / Hybrid 2L4H+2TB / 2.7m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	/	SRET	RB.....XYYxxxxx-R1
●R2	3 - 4	698-960	/	SRET	RB.....XYYxxxxx-R2
●Y1	5 - 6	1710-2690	/	SRET	RB.....XYYxxxxx-Y1
●Y2	7 - 8	1710-2690	/	SRET	RB.....XYYxxxxx-Y5
●Y3	9 - 10	1710-2690	/	SRET	RB.....XYYxxxxx-Y2
●Y4	11 - 12	1710-2690	/	SRET	RB.....XYYxxxxx-Y3
●Y5	13 - 14	1710-2690	/	SRET	RB.....XYYxxxxx-Y7
●Y6	15 - 16	1710-2690	/	SRET	RB.....XYYxxxxx-Y4
●Y7	17 - 18	1710-2690	/	SRET	RB.....XYYxxxxx-Y6
●Y8	19 - 20	1710-2690	/	SRET	RB.....XYYxxxxx-Y8

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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4TMD-21

8 Port Antenna / 2x3.5G Twinbeam / 2.0m

PROSE

- 4 x (3300-3700) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		3300-3700	
		3300-3700	
Gain	P1/P3 Mid Tilt	dBi	19.5
	Over All Tilts		19.4±0.5
	P2/P4 Mid Tilt		19.1
	Over All Tilts		19.0±0.5
Polarization		°	±45°
Horizontal Pattern			
3dB Azimuth Beamwidth		°	33±2
Beam Peak Position		degree	±32
Front to Back Ratio, Total Power, 180°±30°		dB	> 23
Cross-Polar Discrimination At Mechanical Boresight 0°			> 22
Over Sector -10dB			> 13
Side Lobe			18
Vertical Pattern			
3dB Elevation Beamwidth		°	5.5±0.5
Electrical Downtilt			2-10
1st Upper Sidelobe Suppression		dB	> 17
RF Parameters			
VSWR			< 1.5
Intra - Cluster Isolation		dB	26
Beam Isolation			30
3rd PIM(2 x 43 dBm)		dBc	< -153
Impedance		Ω	50
Maximum Effective Power Per Port		W	100

— Maximum Effective Power Whole Antenna: 600 W.

Mechanical Data (BASTA11.1)

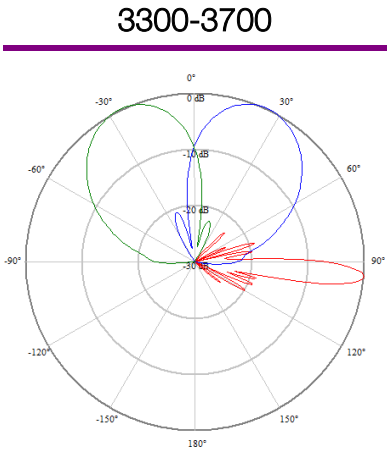
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	21 kg	46.3 lb
Shipping Weight	28.2 kg	62.2 lb
Antenna Dimensions (H x W x D)	2000 x 295 x 145 mm	78.7 x 11.6 x 5.7 in
Packing Size (H x W x D)	2330 x 380 x 300 mm	91.7 x 15.0 x 11.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	439 / 138 / 552 N	99 / 31 / 124 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



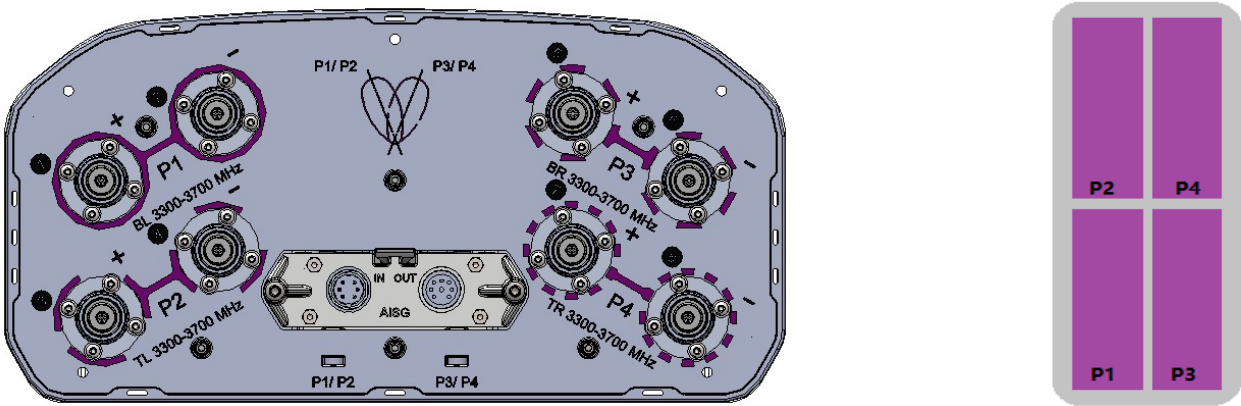
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●P1	1 - 2	3300-3700	1	MRET	RB.....XYYxxxx-MM
●P2	3 - 4	3300-3700	1	MRET	RB.....XYYxxxx-MM
●P3	5 - 6	3300-3700	2	MRET	RB.....XYYxxxx-MM
●P4	7 - 8	3300-3700	2	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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4GME-11

8 Port Antenna / LB Dual Twin Beam / 2.5m

PROSE

- 4x (698-960) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		698-960			
		698-790	790-880	880-960	
Gain	Mid Tilt	dBi	15.0	15.6	16.1
	Over All Tilts		15±0.4	15.5±0.5	16±0.5
Polarization		°	±45		
Horizontal Pattern					
3dB Azimuth Beamwidth		°	40±3	36±3	34±3
Front to Back Ratio, Total Power, 180°±30°		dB	> 28	> 28	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 18	> 18
Vertical Pattern					
3dB Elevation Beamwidth		°	17.4±1.6	15.5±1.2	14.1±0.8
Electrical Downtilt			0-10		
1st Upper Sidelobe Suppression		dB	> 18	> 18	> 18
RF Parameters					
VSWR			< 1.5		
Intra - Cluster Isolation		dB	> 28		
3rd PIM(2 x 43 dBm)		dBc	< -153		
Impedance		Ω	50		
Maximum Effective Power Per Port		W	300		

— Maximum Effective Power Whole Antenna: 800 W.

Mechanical Data (BASTA11.1)

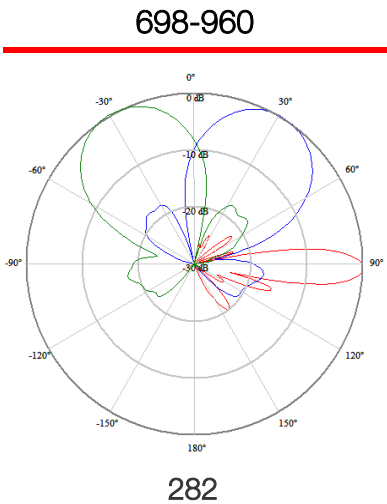
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	49.7 kg	109.6 lb
Shipping Weight	71.1 kg	156.7 lb
Antenna Dimensions (H x W x D)	2490 x 580 x 190 mm	98.0 x 22.8 x 7.5 in
Packing Size (H x W x D)	2640 x 725 x 330 mm	103.9 x 28.5 x 13.0 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1644 / 302 / 1765 N	370 / 68 / 397 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

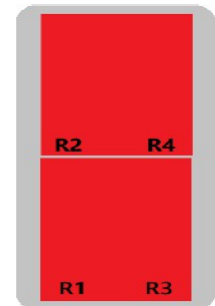
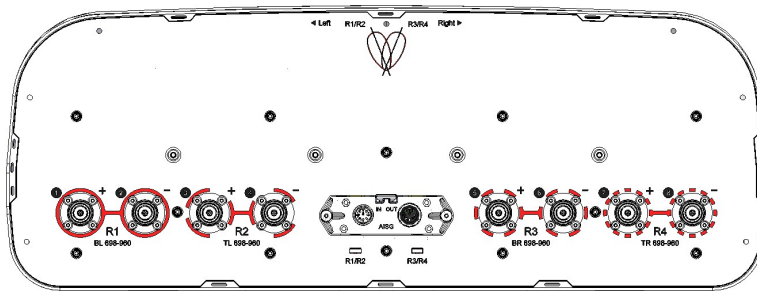


4GME-11

8 Port Antenna / LB Dual Twin Beam / 2.5m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	1	MRET	RB.....XYYxxxx-MM
●R3	5 - 6	698-960	2	MRET	RB.....XYYxxxx-MM
●R4	7 - 8	698-960	2	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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MB-3F7X22V-00

6 Port Antenna / LB Triple Beam / 1.28m

PROSE

- 3x (790-960) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		790-960		
		790-896	880-960	
Gain	Mid Tilt	dBi	16.0	16.7
	Over All Tilts		16.0±0.8	16.6±0.7
Polarization		°	±45°	
Horizontal Pattern				
3dB Azimuth Beamwidth		°	29±4	27±4
Beam Direction		dB	±42,0	±39,0
Front to Back Ratio, Total			> 30	> 30
Power, 180°±30°				
Cross-Polar Discrimination				
At Mechanical Boresight 0°			> 17	> 18
Vertical Pattern				
3dB Elevation Beamwidth		°	15.4±1	14.3±0.7
Electrical Downtilt			2-12	
1st Upper Sidelobe		dB	> 17	> 17
Suppression				
RF Parameters				
VSWR			< 1.43	
Intra - Cluster Isolation		dB	> 26	
Beam Isolation			> 17	
3rd PIM(2 x 43 dBm)		dBc	< -150	
Impedance		Ω	50	
Maximum Effective Power		W	300	
Per Port				

— Maximum Effective Power Whole Antenna: 800 W.

MB-3F7X22V-00

6 Port Antenna / LB Triple Beam / 1.28m

PROSE

Mechanical Data (BASTA11.1)

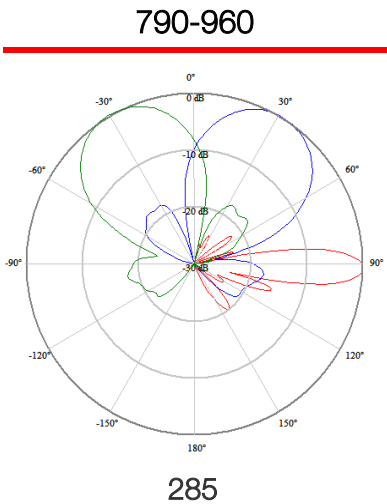
Connector Type	6 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	42.6 kg	93.9 lb
Shipping Weight	56KG	123.5lb
Antenna Dimensions (H x W x D)	1270 x 855 x 178 mm	50.0 x 33.7 x 7.0 in
Packing Size (H x W x D)	1445 x 1055 x 333 mm	56.9 x 39.6 x 13.1 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1325 / 130 / 1458 N	298 / 29 / 328 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

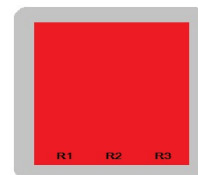
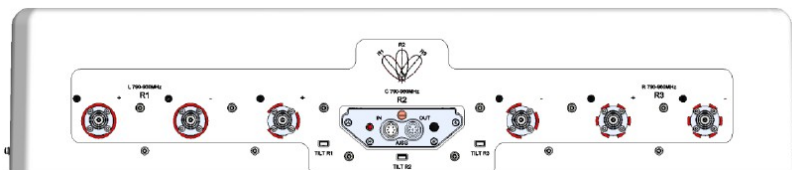


MB-3F7X22V-00

6 Port Antenna / LB Triple Beam / 1.28m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	790-960	1	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	790-960	2	MRET	RB.....XYyxxxx-MM
●R3	5 - 6	790-960	3	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-2	6.5 kg / 14.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G6W22HF-21S

16 Port Antenna / 2L+Dual Triple Beam / 2.55m

PROSE

- 2x(698-960) + 6 x (1710-2690) MHz, high band triple beam
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)		2 x (698-960)			6 x (1710-2690)				
		698-824	791-894	880-960	1710-1920	1920-2180	2300-2400	2500-2690	
Gain	Mid Tilt	dBi	16.0	15.9	16.1	19.1	20.1	20.5	20.5
	Over All Tilts		15.7±0.6	15.8±0.3	15.6±0.4	19.0±1.3	20.0±1.0	20.4±1.0	20.4±1.3
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	67±3	67±3	67±4	22.0±2.5	19.0±2.4	16.0±1.4	14.0±1.2
Horizontal Beam Direction			/			±33, 0	±28, 0	±25, 0	±23, 0
Front to Back Ratio, Total Power, 180°±30°		dB	> 24			> 28			
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20			> 16			
Over Sector -10dB			> 10			> 10			
Vertical Pattern									
3dB Elevation Beamwidth		°	8.8±0.8	8.2±0.9	7.6±0.5	8.3±0.8	7.4±0.8	6.7±0.6	6.4±0.6
Electrical Downtilt			2-12			2-10			
1st Upper Sidelobe Suppression		dB	> 16			> 16			
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	25						
Inter-Cluster Isolation			26						
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power Per Port		W	300			200			

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA)

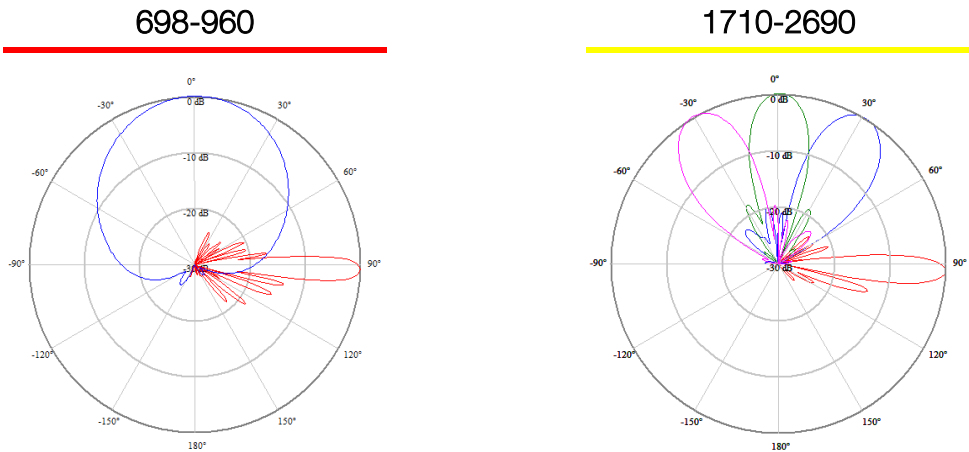
Connector Type	16 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	50 kg	103.2 lb
Shipping Weight	60.7 kg	133.8 lb
Antenna Dimensions (H x W x D)	2550 x 580 x 190 mm	100.4 x 22.8 x 7.5 in
Packing Size (H x W x D)	2700 x 725 x 330 mm	106.3 x 28.5 x 13.0 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Front/Lateral/Max)	1581 / 289 / 1697 N	355 / 65 / 382 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

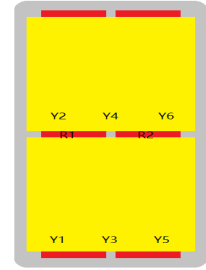
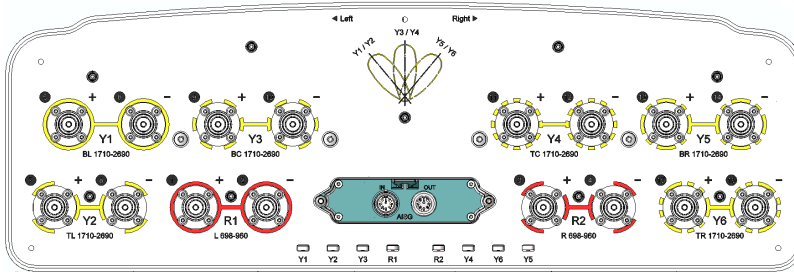


2G6W22HF-21S

16 Port Antenna / 2L+Dual Triple Beam / 2.55m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	/	SRET	RB.....XYYxxxxx-R1
●R2	3 - 4	698-960	/	SRET	RB.....XYYxxxxx-R2
●Y1	5 - 6	1710-2690	/	SRET	RB.....XYYxxxxx-Y1
●Y2	7 - 8	1710-2690	/	SRET	RB.....XYYxxxxx-Y2
●Y3	9 - 10	1710-2690	/	SRET	RB.....XYYxxxxx-Y3
●Y4	11 - 12	1710-2690	/	SRET	RB.....XYYxxxxx-Y4
●Y5	13 - 14	1710-2690	/	SRET	RB.....XYYxxxxx-Y5
●Y6	15 - 16	1710-2690	/	SRET	RB.....XYYxxxxx-Y6

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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5RMC-21SR

10 Port Antenna / High Band Penta Beam Antenna / 1.0m

PROSE

- 5 x 2300-2690
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)		5 x (2300-2690)	
		2300-2500	2500-2690
Gain	Mid Tilt	21.0	21.4
	Over All Tilts	20.9±1.5	21.3±1.8
Polarization	°	±45°	
Horizontal Pattern			
3dB Azimuth Beamwidth	°	12.5±2.5	11.0±2
Beam Peak Position		±49,±22,0	±43,±20,0
Front to Back Ratio, Total Power, 180°±30°	dB	> 30	> 30
Cross-Polar Discrimination At Mechanical Boresight 0°		> 15	> 15
Vertical Pattern			
3dB Elevation Beamwidth	°	8.8±0.8	8.0±0.8
Electrical Downtilt		2-10	
1st Upper Sidelobe Suppression	dB	> 16	
RF Parameters			
VSWR		< 1.5	
Intra - Cluster Isolation	dB	> 25	
Beam Isolation		> 17	
3rd PIM(2 x 43 dBm)	dBc	< -153	
Impedance	Ω	50	
Maximum Effective Power per Port	W	200	
— Maximum Effective Power Whole Antenna: 1200 W.			

Mechanical Data (BASTA)

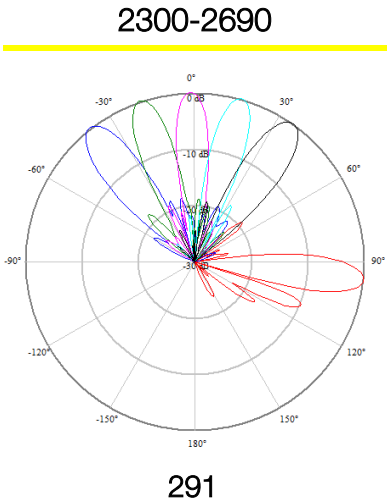
Connector Type	10 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	30 kg	92.6 lb
Antenna Dimensions (H x W x D)	840 x 745 x 216 mm	33.1 x 29.3 x 8.5 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	905 / 92 / 984 N	203 / 21 / 221 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2W(stand by); ≤13W(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

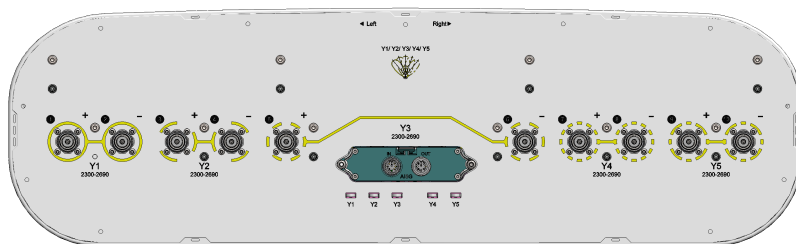


5RMC-21

10 Port Antenna / High Band Penta Beam Antenna / 1.0m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1-2	2300-2690	/	SRET	RB.....XYXxxxx-Y1
●Y2	3-4	2300-2690	/	SRET	RB.....XYXxxxx-Y2
●Y3	5-6	2300-2690	/	SRET	RB.....XYXxxxx-Y3
●Y4	7-8	2300-2690	/	SRET	RB.....XYXxxxx-Y4
●Y5	9-10	2300-2690	/	SRET	RB.....XYXxxxx-Y5

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-1	4.5 kg / 9.9 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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4G4W33ME-21

16 Port Antenna / (2x LB + 2x HB) Twinbeam / 2.4m

PROSE

- 4x(698-960) + 4x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors
- Dual band dual beam, 4x4 MIMO

Electrical Data (BASTA 11.1)

Frequency(MHz)			4x(698-960)			4x(1695-2690)				
			698-806	806-880	880-960	1695-1880	1880-2170	2300-2400	2500-2690	
Gain	R1/R2/R3	Mid Tilt	dBi	14.5	15.6	16.1				
	/R4	Over All Tilts		14.5±0.6	15.6±0.5	16.0±0.6				
	Y1/Y2/Y3	Mid Tilt					16.5	18.0	18.3	18.3
	/Y4	Over All Tilts					16.4±0.9	17.9±0.5	18.3±0.5	18.2±0.5
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	42±2.0	38±2	35±2.0	35±3	31±2	28±2	26±2
Beam Peak Position			dB	±35	±32	±30	±29	±25	±22	±20
Front to Back Ratio, Total Power, 180°±30°				> 26	> 28	> 26	> 26	> 26	> 28	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°				> 15	> 17	> 20	> 17	> 20	> 15	> 16
Vertical Pattern										
3dB Elevation Beamwidth			°	18.6±1.9	16.8±1.9	15.7±1.5	9±0.6	8±0.6	7.0±0.6	6.6±0.6
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 18	> 18	> 18	> 16	> 16	> 16	> 16
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 25			> 25			
Inter-Cluster Isolation				25						
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power per Port			W	300			200			

— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA 11.1)

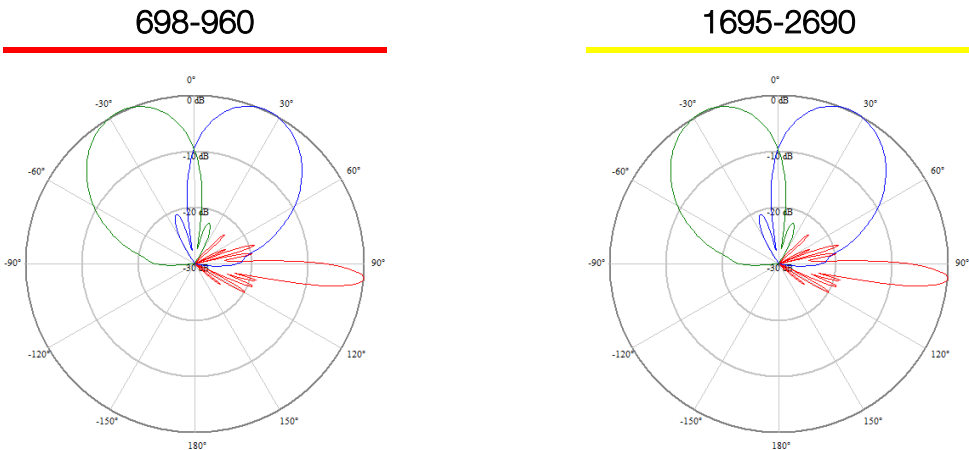
Connector Type	16 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	51.8 kg	114.2 lb
Shipping Weight	66.4 kg	146.4 lb
Antenna Dimensions (H x W x D)	2436 x 630 x 220 mm	95.9x 24.8 x 8.7 in
Packing Size (H x W x D)	2590 x 760 x 365 mm	102 x 29.9 x 14.4 in
Survival Wind Speed	200 km/h	124 mph
Wind Load @150 km/h (Frontal / Lateral / Rearside)	986 / 366 / 1445 N	222 / 82 / 325 lbf
Mast Diameter Supported	70 - 114 mm	2.8 - 4.5 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

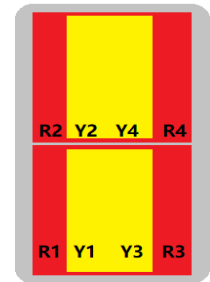
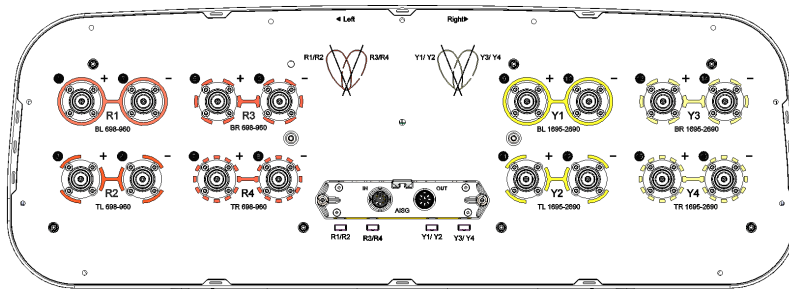


4G4W33ME-21

16 Port Antenna / (2x LB + 2x HB) Twinbeam / 2.4m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	1	MRET	RB.....XYYxxxx-MM
●R3	5 - 6	698-960	2	MRET	RB.....XYYxxxx-MM
●R4	7 - 8	698-960	2	MRET	RB.....XYYxxxx-MM
●Y1	9 - 10	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y2	11 - 12	1695-2690	3	MRET	RB.....XYYxxxx-MM
●Y3	13 - 14	1695-2690	4	MRET	RB.....XYYxxxx-MM
●Y4	15 - 16	1695-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg/8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

4G4W33MB-51S

16 Port Antenna / (2x LB + 2x HB) Twinbeam / 0.8m

PROSE

- 4x(698-960) + 4x(1695-2690) MHz
- Fixed Electrical Tilt
- 4.3-10 Connectors
- Dual band dual beam, 4x4 MIMO

Electrical Data (BASTA 11.1)

Frequency(MHz)		4x(698-960)			4x(1695-2690)				
		698-806	806-880	880-960	1695-1880	1880-2170	2300-2400	2500-2690	
Gain	dBi	11.8±0.6	12.3±0.5	12.7±0.6	12.8±0.6	13.3±0.5	13.7±0.6	14.0±0.6	
Polarization	°	±45°							
Horizontal Pattern									
3dB Azimuth Beamwidth	°	43±4	41±4	39±4	35±3	31±2	28±2	26±2	
Beam Peak Position	dB	±33	±30	±27	±29	±25	±22	±20	
Front to Back Ratio, Total Power, 180°±30°		> 25	> 26	> 26	> 27	> 27	> 28	> 26	
Cross-Polar Discrimination									
At Mechanical Boresight 0°		> 16	> 17	> 16	> 17	> 20	> 15	> 16	
Vertical Pattern									
3dB Elevation Beamwidth	°	36±4	34±4	32±4	22±2.6	20±2	18±2	16±2	
Electrical Downtilt		fixed 3			fixed 3				
1st Upper Sidelobe Suppression	dB	> 16	> 16	> 16	> 16	> 16	> 16	> 16	
RF Parameters									
VSWR		< 1.5							
Intra - Cluster Isolation	dB	> 25			> 25				
Beam Isolation		> 16			> 16				
Inter-Cluster Isolation		> 25							
3rd PIM(2 x 43 dBm)	dBc	< -153							
Impedance	Ω	50							
Maximum Effective Power per Port	W	300			200				

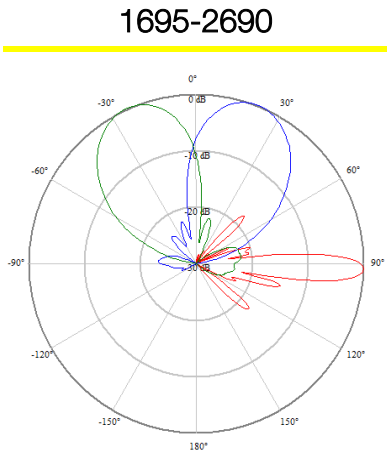
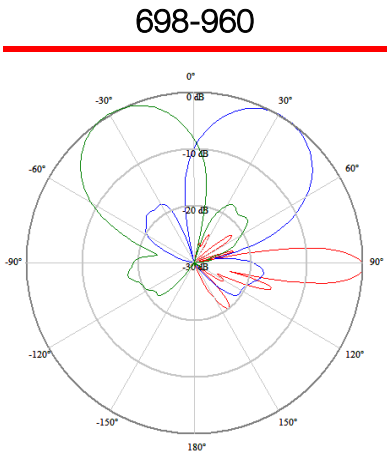
— Maximum Effective Power Whole Antenna: 1200 W.

Mechanical Data (BASTA 11.1)

Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	16	35.3 lb
Antenna Dimensions (H x W x D)	850 x 498 x 197 mm	33.5 x 19.6 x 7.8 in
Survival Wind Speed	200 km/h	124 mph
Wind Load @150 km/h (Frontal / Lateral / Rearside)	319 / 112 / 387 N	
Mast Diameter Supported	50 - 110 mm	2.8 - 4.5 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



Pattern (Sample for reference)

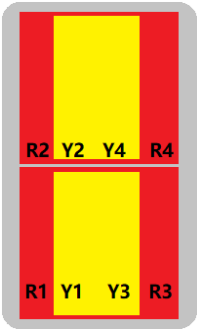
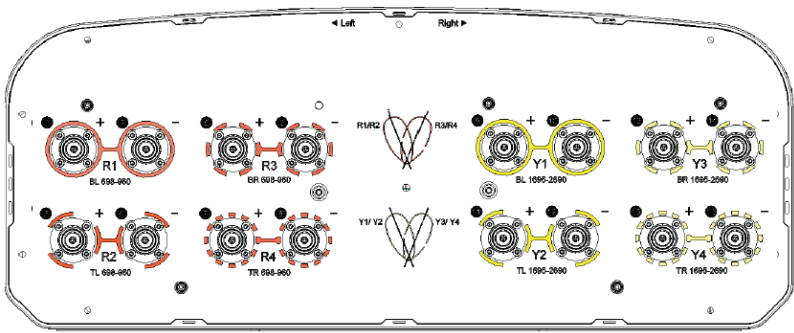


4G4W33MB-51S

16 Port Antenna / (2x LB + 2x HB) Twinbeam / 0.8m

PROSE

Layout



Array	Connector	Frequency (MHz)
●R1	1 - 2	698-960
●R2	3 - 4	698-960
●R3	5 - 6	698-960
●R4	7 - 8	698-960
●Y1	9 - 10	1695-2690
●Y2	11 - 12	1695-2690
●Y3	13 - 14	1695-2690
●Y4	15 - 16	1695-2690

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85L-1	4.1 kg / 9.0 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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G6W22HE-21

14 Port Antenna / 1L2TrB / 2.4m

PROSE

- 698-960 + 6 x (1710-2690) MHz, high band triple beam
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)		698-960			6 x (1710-2690)				
		698-824	791-894	880-960	1710-1920	1920-2180	2300-2400	2500-2690	
Gain	Mid Tilt	dBi	16.0	15.9	16.1	19.1	20.1	20.5	20.5
	Over All Tilts		16.0±0.5	15.8±0.5	16.0±0.5	19.0±1.3	20.0±1.0	20.4±1.0	20.4±1.3
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	65±6	63±6	61±6	22.0±2.5	19.0±2.4	16.0±1.4	14.0±1.2
Horizontal Beam Direction			/			±33, 0	±28, 0	±25, 0	±23, 0
Front to Back Ratio, Total Power, 180°±30°		dB	> 25			> 28			
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18			> 16			
Over Sector -10dB			> 10			> 10			
Vertical Pattern									
3dB Elevation Beamwidth		°	9.5±0.8	8.4±0.8	7.5±0.8	8.3±0.8	7.4±0.8	6.7±0.6	6.4±0.6
Electrical Downtilt			2-12			2-10			
1st Upper Sidelobe Suppression		dB	> 16			> 16			
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	25						
Inter-Cluster Isolation			26						
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power Per Port		W	500			200			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA)

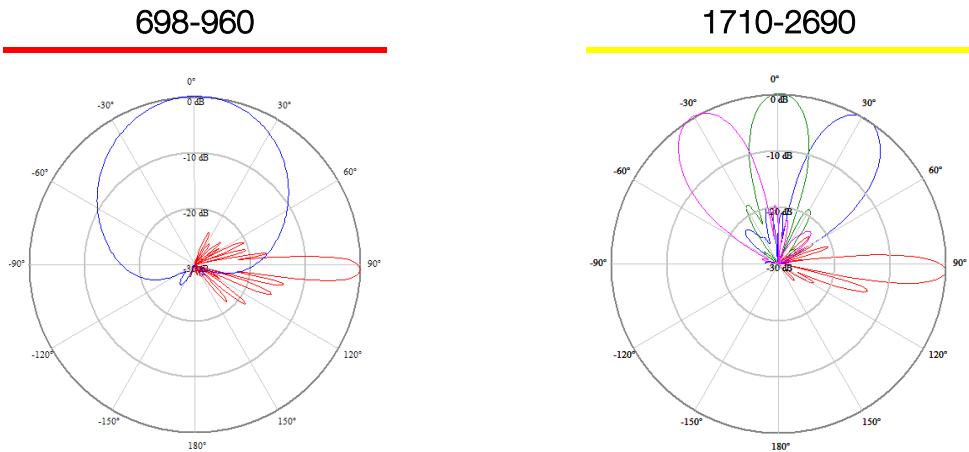
Connector Type	14 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	46.8 kg	103.2 lb
Shipping Weight	60.7 kg	133.8 lb
Antenna Dimensions (H x W x D)	2400 x 580 x 190 mm	94.5 x 22.8 x 7.5 in
Packing Size (H x W x D)	2550 x 725 x 330 mm	100.4 x 28.5 x 13.0 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Front/Lateral/Max)	1581 / 289 / 1697 N	355 / 65 / 382 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

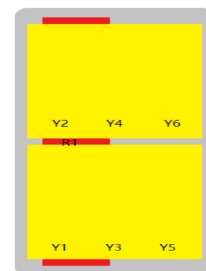
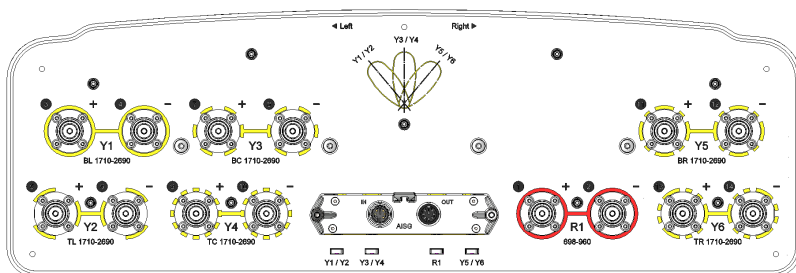


G6W22HE-21

14 Port Antenna / 1L2TrB / 2.4m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	3	MRET	RB.....XYYxxxx-MM
●Y1	3 - 4	1710-2690	1	MRET	RB.....XYYxxxx-MM
●Y2	5 - 6	1710-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	7 - 8	1710-2690	2	MRET	RB.....XYYxxxx-MM
●Y4	9 - 10	1710-2690	2	MRET	RB.....XYYxxxx-MM
●Y5	11 - 12	1710-2690	4	MRET	RB.....XYYxxxx-MM
●Y6	13 - 14	1710-2690	4	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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Beamforming Antennas

Model	Port	Antenna Type	Frequency(MHz)	Gain(dBi)	3dB HBW	L x W x D(mm)	Page
4RTC-01	8	2.6G TDD	4 x (2300-2690)	16.5	65	1600 x 305 x 115	304
4R90TC-01	8	2.6G TDD	4 x (2300-2690)	17.9	65	1570 x 305 x 115	308
4TTB-01	8	3.5G TDD	4 x (3200-3800)	17.3	65	1100 x 295 x 145	312
4T90TB-01	8	3.5G TDD	4 x (3200-4200)	17	65	1100 x 295 x 145	316
2G4RHD-01	12	2L + 2.6GTDD	2 x (698-960) 4 x (2300-2690)	15.2/16.9	65-65	1999x 498 x 197	320
2G4RHF-01	12	2L + 2.6GTDD	2 x (698-960) 4 x (2300-2690)	16/16.9	65-65	2690 x 498 x 197	325
G3W4TBD-01	16	1L3H + 3.5G TDD	(698-960) 3 x (1695-2690) 4 x (3300-3800)	15/16.2/16.5	65-65-65	2100 x 498 x 197	330
2G2W4RBF-07	16	2L2H + 2.6G TDD	2 x (698-960) 2 x (1695-2690) 4 x (2300-2690)	16.0/17.2/17.5	65-65-65	2690 x 498 x 197	335
2G2J4XBC-27	16	2L2H + 2.3-3.8G TDD	2 x (698-960) 2 x (1427-2690) 4 x (2300-3800)	13.8/17.9/15.8/16.8	65-65-65	1500 x 498 x 197	340
G4W4THC-01	18	1L4H + 3.5G TDD	(698-960) 4 x (1695-2690) 4 x (3300-3800)	14.2/15.7/16.0	65-65-65	1600 x 396 x 190	345
2G4W4RBF-01	20	2L4H + 2.6G TDD	2 x (698-960) 4 x (1695-2690) 4 x (2300-2690)	15.9/17.6/16.8	65-65	2690 x 498 x 197	350
2G4W4TBC-27S	20	2L4H + 3.5G TDD	2 x (698-960) 4 x (1695-2690) 4 x (3300-3800)	13.2/15.2/16.8	65-65-65	1400 x 498 x 197	355
2G4W4TBD-27	20	2L4H + 3.5G TDD	2 x (698-960) 4 x (1695-2690) 4 x (3300-3800)	14.9/16.3/16.5	65-65-65	2000 x 498 x 197	360
2G4W4THF-21	20	2L4H + 3.5G TDD	2 x (698-960) 4 x (1695-2690) 4 x (3300-3800)	16.1/17.5/16.7	65-65-65	2690 x 498 x 197	365
2G4W4XBD-01	20	2L4H + 2.3-3.8G TDD	2 x (698-960) 4 x (1695-2690) 4 x (2300-3800)	15.0/16.6/16.7/15.6	65-65-65	2100 x 498 x 197	370
2G5W4RHF-01	22	2L5H + 2.6G TDD	2 x (698-960) 5 x (1695-2690) 4 x (2300-2690)	16.1/17.6/16.9	65-65-65	2690 x 498 x 197	375

Model	Port	Antenna Type	Frequency(MHz)	Gain(dBi)	3dB HBW	L x W x D(mm)	Page
ACG4W4RBD-07	22	3L4H + 2.6G TDD	(698-862 / 880-960) (698-960) 4 x (1695-2690) 4 x (2300-2690)	14.9/15.1/15.4/16.3/17	65-65-65-65-65	2000 x 498 x 197	380
ACG4W4RBF-07	22	3L4H + 2.6G TDD	(698-862 / 880-960) (698-960) 4 x (1695-2690) 4 x (2300-2690)	15.6/15.9/16.2/17.4/17	65-65-65-65-65	2690 x 498 x 197	385
2G2W4W4R4TAE-07	24	2L2H + 2.3-3.8G TDD	2 x (698-960) 2 x (1427-2690) 8 x (2300-3800)	14.8/18.5/16.4/17	65-65-65	2100 x 498 x 197	390
2G4WFC-21D-N43	12	2L + 1.7-2.7G FDD BF	2 x (698-960) 4 x (1710-2690)	13.8/16/5	65-65	1530 x 429 x 199	395
2G4WFD-21D-N43	12	2L + 1.7-2.7G FDD BF	2 x (698-960) 4 x (1710-2690)	13.8/16/5	65-65	1940 x 429 x 199	399

- 4 x (2300-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		4 x (2300-2690)	
		2300-2400	2490-2690
Polarization	°	±45°	
Electrical Downtilt		0-10	
Single column beam			
Gain over All Tilts	dBi	16.5	17.0
Horizontal 3dB Beamwidth	°	84±10	72±10
Vertical 3dB Beamwidth		5.2±0.5	4.7±0.5
Cross-Polar Discrimination at Mechanical Boresight	dB	> 18	> 18
1st Upper Sidelobe Suppression		> 16	> 16
Front to Back Ratio, Total Power, 180° ±30°		25	25
Broadcast 65° beam			
Gain over All Tilts	dBi	16.2	16.5
Horizontal 3dB Beamwidth	°	65±7	65±7
Cross-Polar Discrimination at Mechanical Boresight	dB	> 20	> 20
Front to Back Ratio, Total Power, 180° ±30°		> 27	> 27
Service beam			
0° direction Gain over All Tilts	dBi	21.5	22.0
0° direction Horizontal 3dB Beamwidth	°	21	20
0° direction Cross-Polar Discrimination at Mechanical Boresight	dB	> 20	> 20
0° direction Front to Back Ratio, Total Power, 180°±30°		> 30	> 30
30° direction Gain over All Tilts	dBi	16	16.5
30° direction Horizontal 3dB Beamwidth	°	23	22
RF Parameters			
Coupling Factor (Cal Port to RF Ports)	dB	26	
Max Amp. Tolerance (Cal Port to RF Ports)		0.9	
Max Phase Tolerance (Cal Port to RF Ports)	°	7	
VSWR		< 1.5	
Intra - Cluster Isolation	dB	20	
Inter - Cluster Isolation		25	
Impedance	Ω	50	
Maximum Effective Power per Port	W	50	

— Maximum Effective Power Whole Antenna: 600 W.

4RTC-01

8 Port Antenna / 2.6G TDD / 1.6m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	18 kg	39.7 lb
Shipping Weight	25.1 kg	55.1 lb
Antenna Dimensions (H x W x D)	1600 x 305 x 115 mm	63.0 x 12.0 x 4.5 in
Packing Size (H x W x D)	1750 x 380 x 312 mm	68.9 x 15.0 x 12.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	396 / 108 / 459 N	89 / 24 / 103 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



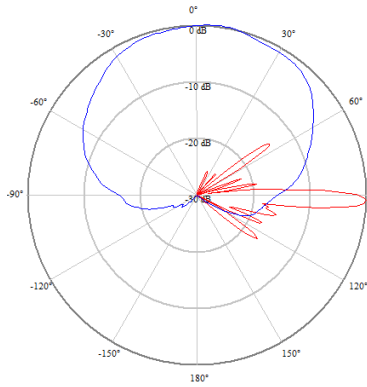
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

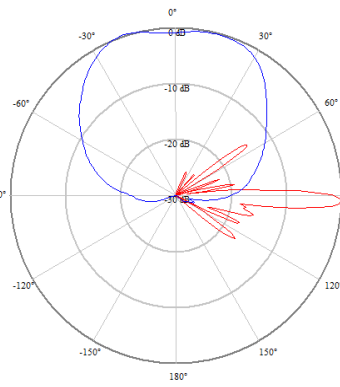
Pattern (Sample for reference)

2300-2690

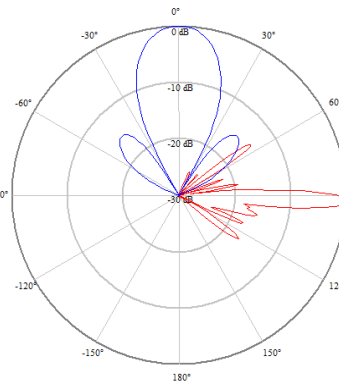
Column beam



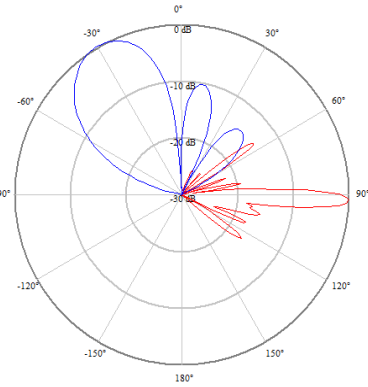
Broadcast beam



0° service beam



30° service beam



Layout

Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	2300-2690	/	SRET	RB.....XYXxxxx-Y1
●Y2	3 - 4	2300-2690	/	SRET	RB.....XYXxxxx-Y1
●Y3	5 - 6	2300-2690	/	SRET	RB.....XYXxxxx-Y1
●Y4	7 - 8	2300-2690	/	SRET	RB.....XYXxxxx-Y1

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	85-1	4.5 kg / 9.9 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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4R90TC-01

8 Port Antenna / 2.6G TDD / 1.6m

PROSE

- 4 x (2300-2690) MHz
- Embedded RET (AISG 2.0 Compliant)
- 4.3-10 Connectors

Electrical Data (BASTA 11.1)

Frequency(MHz)		4 x (2300-2690)	
		2300-2400	2490-2690
Polarization	°	±45	
Electrical Downtilt		2-12	
Single column beam			
Gain over All Tilts	dBi	16.0±0.8	16.4±0.7
Horizontal 3dB Beamwidth	°	100±15	85±15
Vertical 3dB Beamwidth		5.1±0.5	4.7±0.5
Cross-Polar Discrimination at Mechanical Boresight	dB	> 1	> 1
1st Upper Sidelobe Suppression		> 1	> 1
Front to Back Ratio, Total Power, 180°±30°		> 2	> 2
Broadcast 65° beam			
Gain over All Tilts	dBi	17.3	17.9
Horizontal 3dB Beamwidth	°	60	60
Cross-Polar Discrimination at Mechanical Boresight	dB	> 2	> 2
Front to Back Ratio, Total Power, 180°±30°		> 2	> 2
Service beam			
0° direction Gain over All Tilts	dBi	21.5	21.7
0° direction Horizontal 3dB Beamwidth	°	26	25
0° direction Cross-Polar Discrimination at Mechanical Boresight	dB	> 2	> 2
Front to Back Ratio, Co-Polar, 180°±30°		> 3	> 3
30° direction Gain over All Tilts	dBi	20.5	20.7
30° direction Horizontal 3dB Beamwidth	°	28	27
Soft split beam			
Gain over All Tilts	dBi	19.0	18.8
Horizontal 3dB Beamwidth	°	32	31
Cross-Polar Discrimination at Beampeak	dB	> 1	> 1
Horizontal Sidelobe		> 1	> 1
RF Parameters			
Coupling Factor (Cal Port to RF Ports)	dB	26	
Max Amp. Tolerance (Cal Port to RF Ports)		< 0.9	
Max Phase Tolerance (Cal Port to RF Ports)	°	< 7	
VSWR		< 1.5	
Isolation(Co-polar RF Ports)	dB	20	
Isolation(Cross-polar RF Ports)		25	
Impedance	Ω	50	
Maximum Effective Power Per Port	W	250	
3rd Order PIM@2x43dBm	dBc	< -150	

— Maximum Effective Power Whole Antenna: 600 W.

4R90TC-01

8 Port Antenna / 2.6G TDD / 1.6m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	8 x 4.3-10 Female, Cal: 1 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	15.3 kg	33.7 lb
Shipping Weight	20.0 kg	44.1 lb
Antenna Dimensions (H x W x D)	1570 x 305 x 115 mm	61.8 x 12.0 x 4.5 in
Packing Size (H x W x D)	1720 x 375 x 260 mm	67.7 x 14.7 x 10.2 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	387 / 105 / 448 N	87 / 24 / 101 lbf
Max. Wind Load @150 km/h (Rear)	283 N	64 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Storage Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

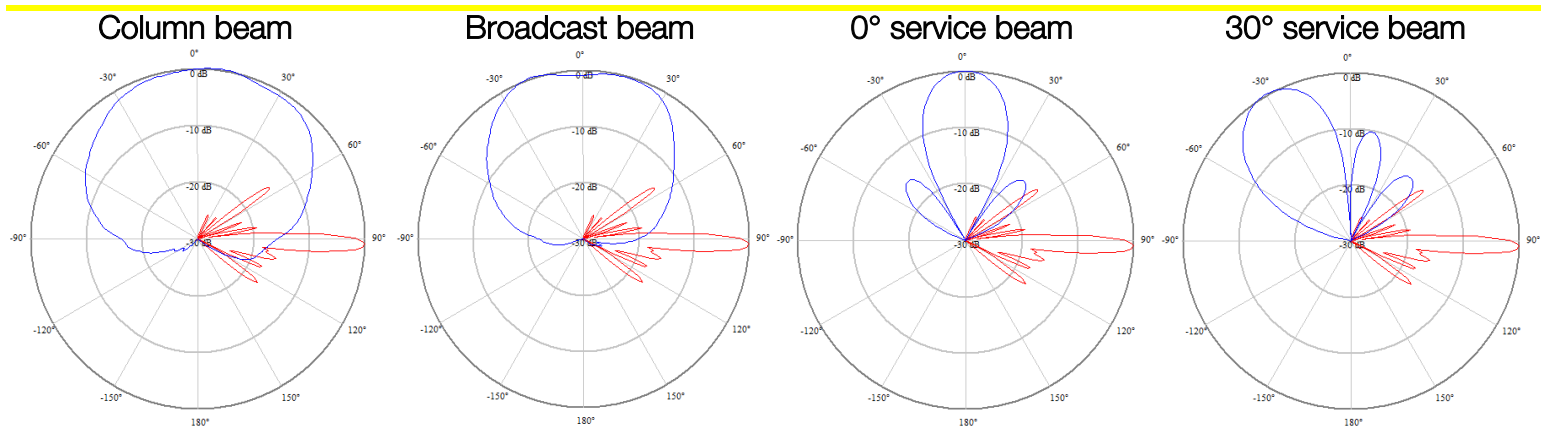
4R90TC-01

8 Port Antenna / 2.6G TDD / 1.6m

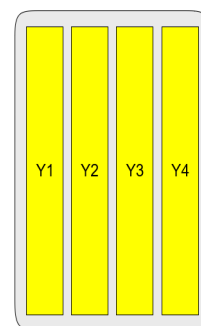
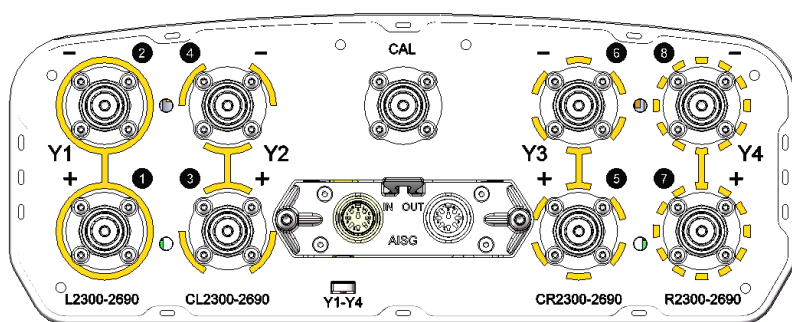
PROSE

Pattern (Sample for reference)

2300-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	2300-2690	/	SRET	RB.....XYYxxxx-Y1
●Y2	3 - 4	2300-2690	/	SRET	RB.....XYYxxxx-Y1
●Y3	5 - 6	2300-2690	/	SRET	RB.....XYYxxxx-Y1
●Y4	7 - 8	2300-2690	/	SRET	RB.....XYYxxxx-Y1

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.5 kg / 5.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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4TTB-01

8 Port Antenna / 3.5G TDD / 1.1m

PROSE

- 4 x (3200-3800) MHz
- Embedded RET (AISG 2.0 Compliant)
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		4 x (3200-3800)	
		3200-3600	3600-3800
Polarization	°	±45°	
Electrical Downtilt		2-12	
Single column beam			
Gain over All Tilts	dBi	16.8±0.5	16.8±0.5
Horizontal 3dB Beamwidth	°	80±7	73±8
Vertical 3dB Beamwidth		5.3±0.4	5.1±0.3
Cross-Polar Discrimination at Mechanical Boresight	dB	> 18	> 18
1st Upper Sidelobe Suppression		> 17	> 17
Front to Back Ratio, Total Power, 180° ±30°		> 21	> 21
Broadcast 65° beam			
Gain over All Tilts	dBi	17.2±0.8	17.3±0.8
Horizontal 3dB Beamwidth	°	65±5	64±5
Cross-Polar Discrimination at Mechanical Boresight	dB	> 18	> 18
Front to Back Ratio, Total Power, 180° ±30°		> 25	> 25
Service beam			
0° direction Gain over All Tilts	dBi	21.8±0.6	22.0±0.6
0° direction Horizontal 3dB Beamwidth	°	21	21
0° direction Cross-Polar Discrimination at Mechanical Boresight	dB	> 18	> 18
0° direction Front to Back Ratio, Total Power, 180°±30°		> 30	> 30
30° direction Gain over All Tilts	dBi	20.8±0.6	21.0±0.6
30° direction Horizontal 3dB Beamwidth	°	23	23
RF Parameters			
Coupling Factor (Cal Port to RF Ports)	dB	26±2	
Max Amp. Tolerance (Cal Port to RF Ports)		< 0.9	
Max Phase Tolerance (Cal Port to RF Ports)	°	< 7	
VSWR		< 1.5	
Intra - Cluster Isolation	dB	20	
Inter - Cluster Isolation		25	
Impedance	Ω	50	
Maximum Effective Power Per Port	W	75	
3rd Order PIM@2x43dBm	dBc	< -150	

— Maximum Effective Power Whole Antenna: 600 W.

4TTB-01

8 Port Antenna / 3.5G TDD / 1.1m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	8 x 4.3-10 Female, Cal: 1 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	12 kg	26.5 lb
Shipping Weight	20.3 kg	44.8 lb
Antenna Dimensions (H x W x D)	1100 x 295 x 145 mm	43.3 x 11.6 x 5.7 in
Packing Size (H x W x D)	1250 x 380 x 300 mm	49.2 x 15.0 x 11.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	233 / 67 / 293 N	52 / 15 / 66 lbf
Max. Wind Load @150 km/h (Rear)	283 N	64 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

4TTB-01

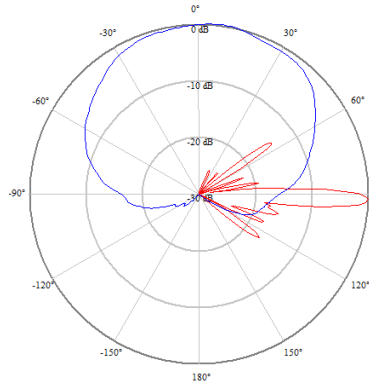
8 Port Antenna / 3.5G TDD / 1.1m

PROSE

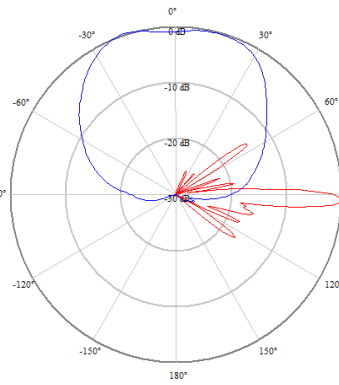
Pattern (Sample for reference)

3200-3800

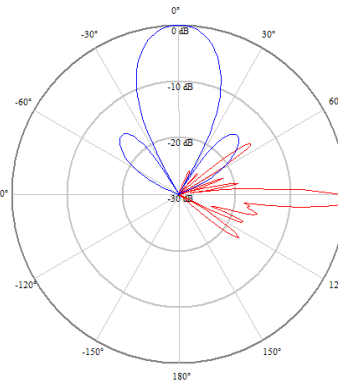
Column beam



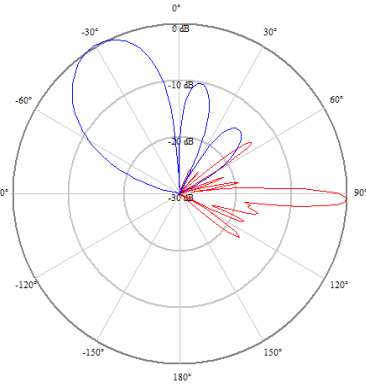
Broadcast beam



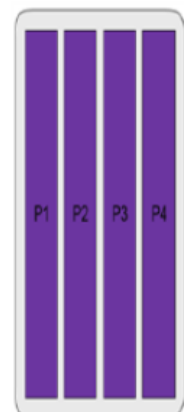
0° service beam



30° service beam



Layout



4TTB-01

8 Port Antenna / 3.5G TDD / 1.1m

PROSE

Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●P1	1 - 2	3200-3800	/	SRET	RB.....XYXxxxx-P1
●P2	3 - 4	3200-3800	/	SRET	RB.....XYXxxxx-P1
●P3	5 - 6	3200-3800	/	SRET	RB.....XYXxxxx-P1
●P4	7 - 8	3200-3800	/	SRET	RB.....XYXxxxx-P1

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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- 4 x (3200-3800)MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)		4 x (3200-3800)	
		3200-3600	3600-3800
Polarization	°	±45°	
Electrical Downtilt		2-12	
Single column beam			
Gain over All Tilts	dBi	15.8±0.8	15.8±0.8
Horizontal 3dB Beamwidth	°	90±10	85±12
Vertical 3dB Beamwidth		5.3±0.4	5.0±0.4
Cross-Polar Discrimination at Mechanical Boresight	dB	> 15	> 15
1st Upper Sidelobe Suppression		> 16	> 16
Front to Back Ratio, Total Power, 180° ±30°		> 20	> 20
Broadcast 65° beam			
Gain over All Tilts	dBi	16.8	16.8
Horizontal 3dB Beamwidth	°	65±5	65±5
Cross-Polar Discrimination at Mechanical Boresight	dB	> 18	> 18
Front to Back Ratio, Total Power, 180° ±30°		> 25	> 25
Service beam			
0° direction Gain over All Tilts	dBi	21.0	21.3
0° direction Horizontal 3dB Beamwidth	°	26	25
0° direction Cross-Polar Discrimination at Mechanical Boresight	dB	> 18	> 18
0° direction Front to Back Ratio, Total Power, 180°±30°		> 28	> 28
30° direction Gain over All Tilts	dBi	20.0	20.3
30° direction Horizontal 3dB Beamwidth	°	28	27
Soft split beam			
Gain over All Tilts	dBi	19.5	19.6
Horizontal 3dB Beamwidth	°	32	30
Cross-Polar Discrimination at Beampeak	dB	> 15	> 15
Horizontal Sidelobe		> 16	> 16
RF Parameters			
Coupling Factor (Cal Port to RF Ports)	dB	26±2	
Max Amp. Tolerance (Cal Port to RF Ports)		0.9	
Max Phase Tolerance (Cal Port to RF Ports)	°	7	
VSWR		< 1.5	
Isolation (Cross-polar RF Ports)	dB	25	
Isolation (Co-polar RF Ports)		20	
Impedance	Ω	50	
Maximum Effective Power Per Port	W	75	

— Maximum Effective Power Whole Antenna: / W.

4T90TB-01

8 Port Antenna / 3.5G TDD / 1.1m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	8 x 4.3-10 Female, Cal: 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	12 kg	26.5 lb
Shipping Weight	20.3 kg	44.8 lb
Antenna Dimensions (H x W x D)	1100 x 295 x 145 mm	43.3 x 11.6 x 5.7 in
Packing Size (H x W x D)	1250 x 380 x 300 mm	49.2 x 15.0 x 11.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	233 / 67 / 293 N	52 / 15 / 66 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

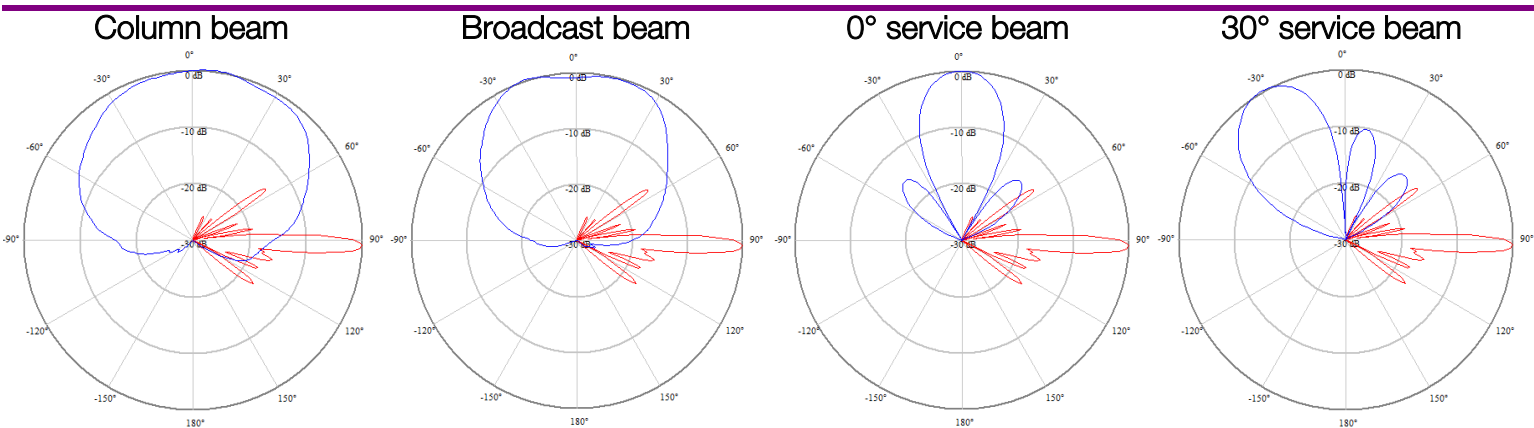
Pattern (Sample for reference)

4T90TB-01

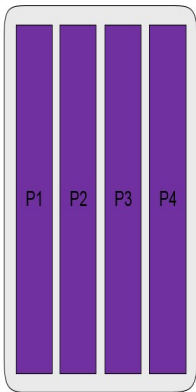
8 Port Antenna / 3.5G TDD / 1.1m

PROSE

3200-3800



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●P1	1 - 2	3200-3800	/	SRET	RB.....XYyxxxx-P1
●P2	3 - 4	3200-3800	/	SRET	RB.....XYyxxxx-P1
●P3	5 - 6	3200-3800	/	SRET	RB.....XYyxxxx-P1
●P4	7 - 8	3200-3800	/	SRET	RB.....XYyxxxx-P1

*Remark: X – Year, YY – Week , xxxxx – Serial Number

4T90TB-01

8 Port Antenna / 3.5G TDD / 1.1m

PROSE

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2G4RHD-01

12 Port Antenna / 2L + 2.3-2.7G TDD / 2.0m

PROSE

- 2 x (698-960) + 4 x (2300-2690) MHz
- Integrated RET (AISG 2.0 Compliant)
- 4.3-10 Connectors

Electrical Data (FDD) (BASTA11.1)

Frequency(MHz)		2 x (698-960)			
		698-806	790-862	880-960	
Gain	Mid Tilt	dBi	14.9	15.1	15.2
	Over All Tilts		14.8±0.5	15.0±0.5	15.2±0.5
Polarization		°	±45°		
Horizontal Pattern					
3dB Azimuth Beamwidth		°	65±6	62±5	60±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 25	> 25	> 25
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 20	> 18
Over Sector ±60°			> 10	> 10	> 8
Vertical Pattern					
3dB Elevation Beamwidth		°	10.7±1.0	9.7±0.6	8.7±0.6
Electrical Downtilt			2-12		
1st Upper Sidelobe Suppression		dB	> 16		
RF Parameters					
VSWR			< 1.5		
Intra - Cluster Isolation		dB	25		
Inter - Cluster Isolation			R1//R2 26; R1-R2//Y1-Y4 28		
3rd PIM(2 x 43 dBm)		dBc	< -150		
Impedance		Ω	50		
Maximum Effective Power Per Port		W	500		

Electrical Data (TDD) (BASTA11.1)

Frequency(MHz)		4 x (2300-2690)
		2300-2690
Polarization	°	±45°
Electrical Downtilt		2-12
Single column beam		
Gain over All Tilts	dBi	15.3±0.8
Horizontal 3dB Beamwidth	°	90±15
Vertical 3dB Beamwidth		5.3±0.4
1st Upper Sidelobe Suppression	dB	> 15
Broadcast 65° beam		
Gain over All Tilts	dBi	16.9
Horizontal 3dB Beamwidth	°	65±10
Cross-Polar Discrimination at Mechanical Boresight	dB	> 16
Front to Back Ratio, Total Power, 180° ±30°		> 25
Service beam		
0° direction Gain over All Tilts	dBi	21.0
0° direction Horizontal 3dB Beamwidth	°	25
30° direction Gain over All Tilts	dBi	20.0
30° direction Horizontal 3dB Beamwidth	°	27
Soft split beam		
Gain over All Tilts	dBi	18.5
Horizontal 3dB Beamwidth	°	32
Cross-Polar Discrimination at Beampeak	dB	> 18
F/B Co-polar(180°±30°)		> 28
RF Parameters		
Coupling Factor (Cal Port to RF Ports)	dB	-26±2
Max Amp. Tolerance (Cal Port to RF Ports)		0.9
Max Phase Tolerance (Cal Port to RF Ports)	°	7
VSWR		< 1.5
Intra - Cluster Isolation	dB	25
Inter - Cluster Isolation		20
Impedance	Ω	50
Maximum Effective Power per Port	W	75

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

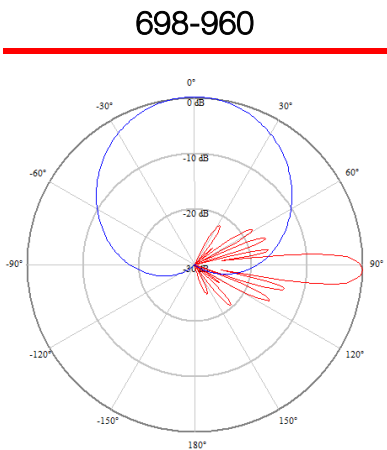
Connector Type	12 x 4.3-10 Female Cal: 1 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	36.8 kg	81.1 lb
Shipping Weight	51.9 kg	114.4 lb
Antenna Dimensions (H x W x D)	1999 x 498 x 197 mm	78.7 x 19.6 x 7.8 in
Packing Size (H x W x D)	2149 x 575 x 370 mm	84.6 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	793 / 294 / 961 N	178 / 66 / 216 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

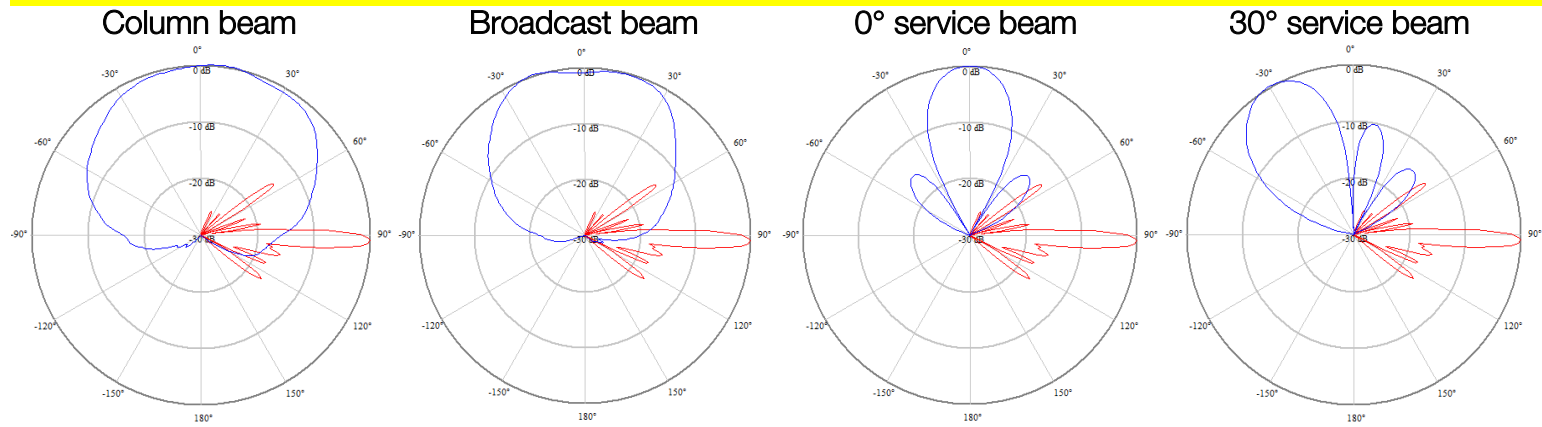


2G4RHD-01

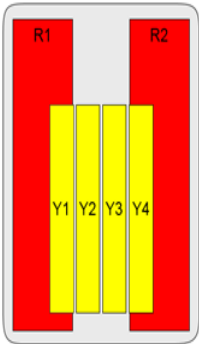
12 Port Antenna / 2L + 2.3-2.7G TDD / 2.0m

PROSE

2300-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	698-960	3	MRET	RB.....XYyxxxx-MM
●Y1-Y4	5 - 12	2300-2690	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

2G4RHD-01

12 Port Antenna / 2L + 2.3-2.7G TDD / 2.0m

PROSE

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-2	6.5 kg / 14.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4RHF-01

12 Port Antenna / 2L + 2.3-2.7G TDD / 2.6m

PROSE

- 2 x (698-960) + 4 x (2300-2690) MHz
- Integrated RET (AISG 2.0 Compliant)
- 4.3-10 Connectors

Electrical Data (FDD) (BASTA11.1)

Frequency(MHz)		2 x (698-960)			
		698-806	790-862	880-960	
Gain	Mid Tilt	dBi	15.7	15.9	16.1
	Over All Tilts		15.6±0.5	15.8±0.5	16.0±0.5
Polarization		°	±45°		
Horizontal Pattern					
3dB Azimuth Beamwidth		°	65±6	60±5	58±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 25	> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 20	> 20
Over Sector ±60°			> 10	> 10	> 10
Vertical Pattern					
3dB Elevation Beamwidth		°	8.5±0.8	7.6±0.6	6.9±0.6
Electrical Downtilt			2-12		
1st Upper Sidelobe Suppression		dB	> 16		
RF Parameters					
VSWR			< 1.5		
Intra - Cluster Isolation		dB	25		
Inter - Cluster Isolation			R1//R2 26; R1-R2//Y1-Y4 28		
3rd PIM(2 x 43 dBm)		dBc	< -150		
Impedance		Ω	50		
Maximum Effective Power Per Port		W	500		

Electrical Data (TDD) (BASTA11.1)

Frequency(MHz)		4 x (2300-2690)
		2300-2690
Polarization	°	±45°
Electrical Downtilt		2-12
Single column beam		
Gain over All Tilts	dBi	15.3±0.8
Horizontal 3dB Beamwidth	°	90±15
Vertical 3dB Beamwidth		5.3±0.4
1st Upper Sidelobe Suppression	dB	> 16
Broadcast 65° beam		
Gain over All Tilts	dBi	16.9
Horizontal 3dB Beamwidth	°	65±10
Cross-Polar Discrimination at Mechanical Boresight	dB	> 16
Front to Back Ratio, Total Power, 180° ±30°		> 25
Service beam		
0° direction Gain over All Tilts	dBi	21.0
0° direction Horizontal 3dB Beamwidth	°	25
30° direction Gain over All Tilts	dBi	20.0
30° direction Horizontal 3dB Beamwidth	°	27
Soft split beam		
Gain over All Tilts	dBi	18.5
Horizontal 3dB Beamwidth	°	32
Cross-Polar Discrimination at Beampeak	dB	> 18
F/B Co-polar(180°±30°)		> 28
RF Parameters		
Coupling Factor (Cal Port to RF Ports)	dB	-26±2
Max Amp. Tolerance (Cal Port to RF Ports)		0.9
Max Phase Tolerance (Cal Port to RF Ports)	°	7
VSWR		< 1.5
Intra - Cluster Isolation	dB	25
Inter - Cluster Isolation		20
Impedance	Ω	50
Maximum Effective Power per Port	W	75

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

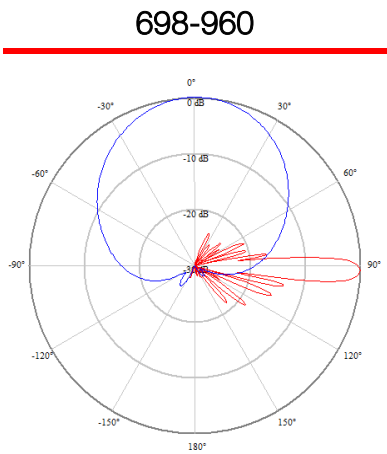
Connector Type	12 x 4.3-10 Female Cal: 1 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	46.5 kg	102.5 lb
Shipping Weight	67.0 kg	147.7 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

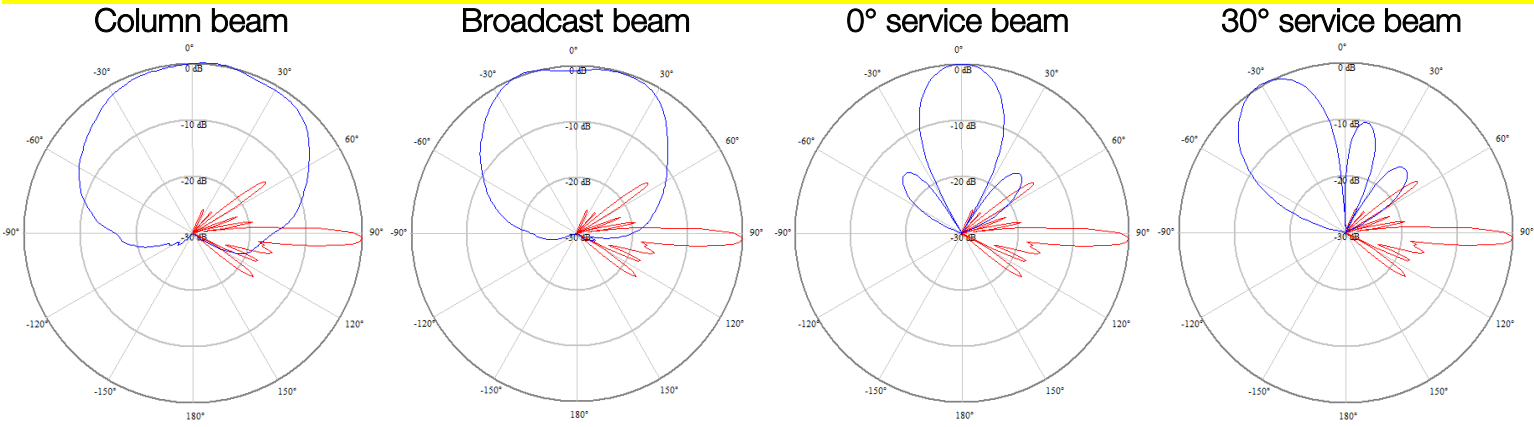


2G4RHF-01

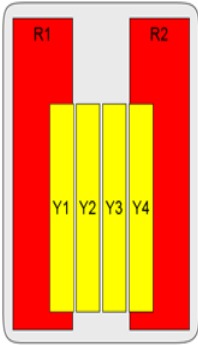
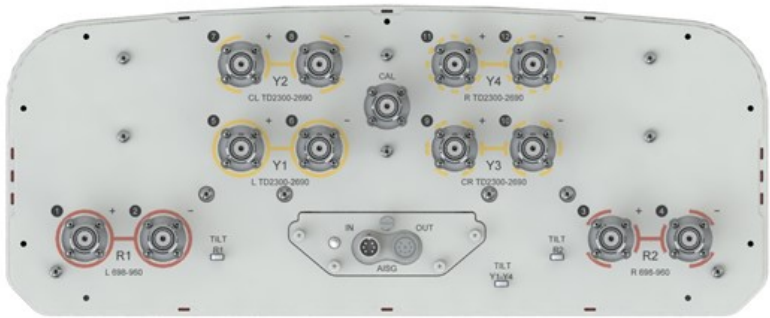
12 Port Antenna / 2L + 2.3-2.7G TDD / 2.6m

PROSE

2300-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	698-960	3	MRET	RB.....XYyxxxx-MM
●Y1-Y4	5 - 12	2300-2690	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

2G4RHF-01

12 Port Antenna / 2L + 2.3-2.7G TDD / 2.6m

PROSE

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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G3W4TBD-01

16 Port Antenna / 1L3H + 3.5G TDD / 2.0m

PROSE

- 1 x (698-960) + 3 x (1695-2690) + 4 x (3300-3800) MHz
- Integrated RET (AISG 2.0 Compliant)
- 4.3-10 Connectors

Electrical Data (FDD) (BASTA11.1)

Frequency(MHz)		1 x (698-960)				3 x (1695-2690)				
		698-806	790-862	880-960	1695-1880	1900-2180	2300-2400	2500-2690		
Gain	R1/R2/Y1	Mid Tilt	dBi	14.7	14.8	15.0	15.0	15.8	16.1	16.3
	/Y3	Over All Tilts		14.6±0.5	14.8±0.5	15.0±0.5	15.0±0.5	15.7±0.5	16.0±0.5	16.2±0.5
	Y2	Mid Tilt					14.5	15.3	15.6	15.9
		Over All Tilts					14.5±0.5	15.2±0.5	15.5±0.5	15.8±0.5
Polarization			°	±45°						

Horizontal Pattern

3dB Azimuth Beamwidth	°	60±6	60±6	61±5	62±6	62±6	63±5	62±5
Front to Back Ratio, Total Power, 180°±30°	dB	> 25	> 25	> 25	> 26	> 26	> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°		> 18	> 18	> 18	> 16	> 16	> 16	> 16
Over Sector ±60°		> 10	> 10	> 8	> 10	> 8	> 6	> 6

Vertical Pattern

3dB Elevation Beamwidth	°	10.3±1.0	9.3±0.6	8.5±0.6	11.1±0.8	9.7±0.8	8.6±0.6	7.9±0.6
Electrical Downtilt		2-12			2-12			
1st Upper Sidelobe Suppression	dB	> 16			> 16			

RF Parameters

VSWR		< 1.5	
Intra - Cluster Isolation	dB	28	25
Inter - Cluster Isolation		28	25
3rd PIM(2 x 43 dBm)	dBc	< -150	
Impedance	Ω	50	
Maximum Effective Power Per Port	W	300	250

Electrical Data (TDD) (BASTA11.1)

Frequency(MHz)		4 x (3300-3800)
		3300-3800
Polarization	◦	±45°
Electrical Downtilt		2-12
Single column beam		
Gain over All Tilts	dBi	15.4±0.8
Horizontal 3dB Beamwidth	◦	90±15
Vertical 3dB Beamwidth		5.6±0.4
1st Upper Sidelobe Suppression	dB	> 16
Broadcast 65° beam		
Gain over All Tilts	dBi	16.5
Horizontal 3dB Beamwidth	◦	65±10
Cross-Polar Discrimination at Mechanical Boresight	dB	> 15
Front to Back Ratio, Total Power, 180° ±30°		> 28
Service beam		
0° direction Gain over All Tilts	dBi	21.0
0° direction Horizontal 3dB Beamwidth	◦	26
30° direction Gain over All Tilts	dBi	20.0
30° direction Horizontal 3dB Beamwidth	◦	28
Soft split beam		
Gain over All Tilts	dBi	18.5
Horizontal 3dB Beamwidth	◦	32
Cross-Polar Discrimination at Beampeak	dB	> 18
F/B Co-polar(180°±30°)		> 28
RF Parameters		
Coupling Factor (Cal Port to RF Ports)	dB	-26±2
Max Amp. Tolerance (Cal Port to RF Ports)		0.9
Max Phase Tolerance (Cal Port to RF Ports)	◦	9
VSWR		< 1.5
Intra - Cluster Isolation	dB	25
Inter - Cluster Isolation		20
Impedance	Ω	50
Maximum Effective Power per Port	W	75

— Maximum Effective Power Whole Antenna: 1000 W.

G3W4TBD-01

16 Port Antenna / 1L3H + 3.5G TDD / 2.0m

PROSE

Mechanical Data (BASTA11.1)

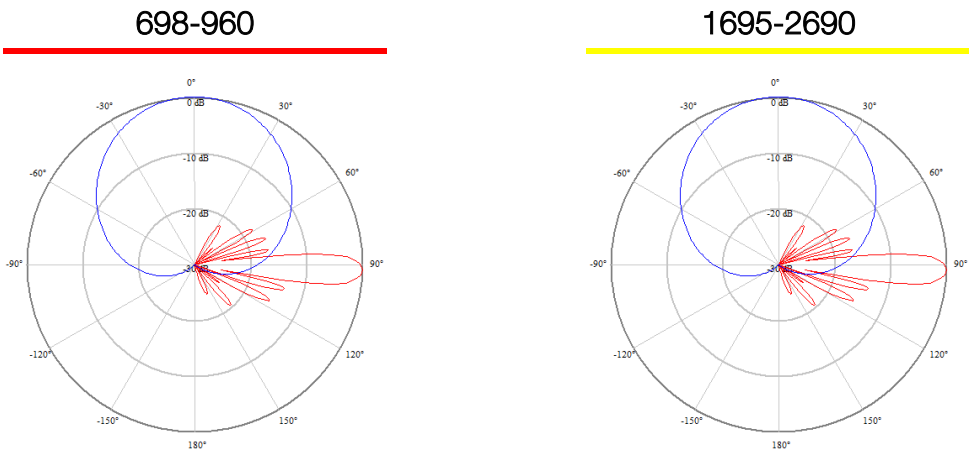
Connector Type	16 x 4.3-10 Female Cal: 1 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	37.2 kg	82.0 lb
Shipping Weight	57.1 kg	125.9 lb
Antenna Dimensions (H x W x D)	2100 x 498 x 197 mm	82.7 x 19.6 x 7.8 in
Packing Size (H x W x D)	2250 x 575 x 370 mm	88.6 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	836 / 312 / 1013 N	188 / 70 / 228 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

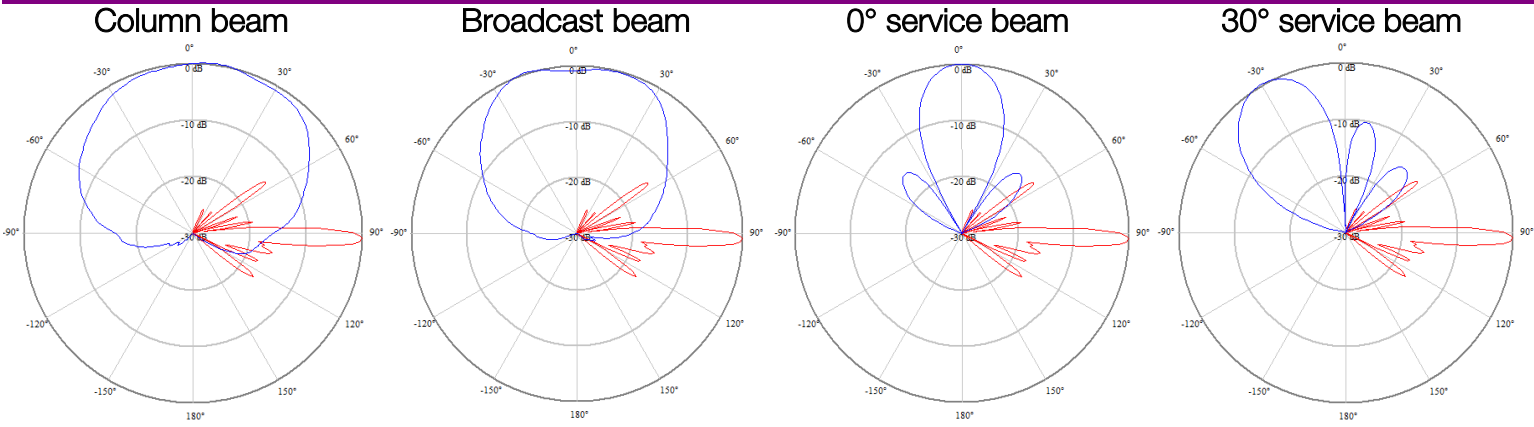


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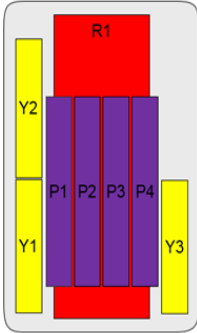
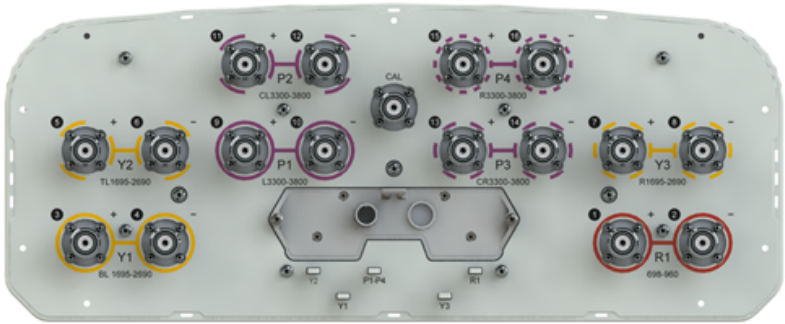
16 Port Antenna / 1L3H + 3.5G TDD / 2.0m

PROSE

3300-3800



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	5	MRET	RB.....XYyxxxx-MM
●Y1	3 - 4	1695-2690	3	MRET	RB.....XYyxxxx-MM
●Y2	5 - 6	1695-2690	4	MRET	RB.....XYyxxxx-MM
●Y3	7 - 8	1695-2690	1	MRET	RB.....XYyxxxx-MM
●P1-P4	9 - 16	3300-3800	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

G3W4TBD-01

16 Port Antenna / 1L3H + 3.5G TDD / 2.0m

PROSE

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G2W4RBF-07

16 Port Antenna / 2L2H+2.3-2.7G TDD / 2.6 m

PROSE

- 2 x (698-960) + 2 x (1695-2690) + 4 x (2300-2690) MHz
- Integrated RET (AISG 2.0 Compliant)
- 4.3-10 Connectors + Cluster

Electrical Data (FDD) (BASTA11.1)

Frequency(MHz)		2 x (698-960)			2 x (1695-2690)			
		698-824	791-894	880-960	1695-1880	1900-2200	2300-2400	2500-2690
Gain	Mid Tilt	15.7	15.8	16.1				
	Over All Tilts	15.6±0.8	15.8±0.8	16.0±0.8				
	Y1/Y2				15.6	16.1	16.8	17.3
	Over All Tilts				15.5±0.5	16.1±0.5	16.7±0.5	17.2±0.5
Polarization		±45°						

Horizontal Pattern

3dB Azimuth Beamwidth	°	65±6	61±6	59±6	67±6	66±6	61±4	58±4
Front to Back Ratio, Total Power, 180°±30°		> 22	> 23	> 23	> 24	> 24	> 24	> 24
Cross-Polar Discrimination	dB							
At Mechanical Boresight 0°		> 18	> 18	> 18	> 18	> 18	> 18	> 18
Over Sector ±60°		> 10	> 8	> 6	> 10	> 8	> 6	> 4

Vertical Pattern

3dB Elevation Beamwidth	°	8.5±0.8	7.6±0.6	6.9±0.6	7.1±0.4	6.2±0.4	5.7±0.3	5.2±0.3
Electrical Downtilt		2-12			2-12			
1st Upper Sidelobe Suppression	dB	> 16			> 16			

RF Parameters

VSWR		< 1.5						
Intra - Cluster Isolation	dB	> 26						
Inter - Cluster Isolation		> 26						
3rd PIM(2 x 43 dBm)	dBc	< -150						
Impedance	Ω	50						
Maximum Effective Power Per Port	W	300			250			

Electrical Data (TDD) (BASTA11.1)

Frequency(MHz)		4 x (2300-2690)
		2300-2690
Polarization	°	±45°
Electrical Downtilt		2-12
Single column beam		
Gain over All Tilts	dBi	15.3±0.8
Horizontal 3dB Beamwidth	°	90±15
Vertical 3dB Beamwidth		5.3±0.6
Cross-Polar Discrimination at Mechanical Boresight		> 15
1st Upper Sidelobe Suppression	dB	> 16
Front to Back Ratio, Total Power, 180° ±30°		> 25
Broadcast 65° beam		
Gain over All Tilts	dBi	17.5
Horizontal 3dB Beamwidth	°	60
Cross-Polar Discrimination at Mechanical Boresight		> 18
Front to Back Ratio, Total Power, 180° ±30°	dB	> 28
Service beam		
0° direction Gain over All Tilts	dBi	20.5
0° direction Horizontal 3dB Beamwidth	°	26
0° direction Cross-Polar Discrimination at Mechanical Boresight		> 18
0° direction Front to Back Ratio, Total Power, 180° ±30°	dB	> 28
30° direction Gain over All Tilts	dBi	19.5
30° direction Horizontal 3dB Beamwidth	°	28
RF Parameters		
Coupling Factor (Cal Port to RF Ports)		-26±2
Max Amp. Tolerance (Cal Port to RF Ports)	dB	0.9
Max Phase Tolerance (Cal Port to RF Ports)	°	9
VSWR		< 1.5
Intra - Cluster Isolation		25
Inter - Cluster Isolation	dB	20
Impedance	Ω	50
Maximum Effective Power Per Port	W	150

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

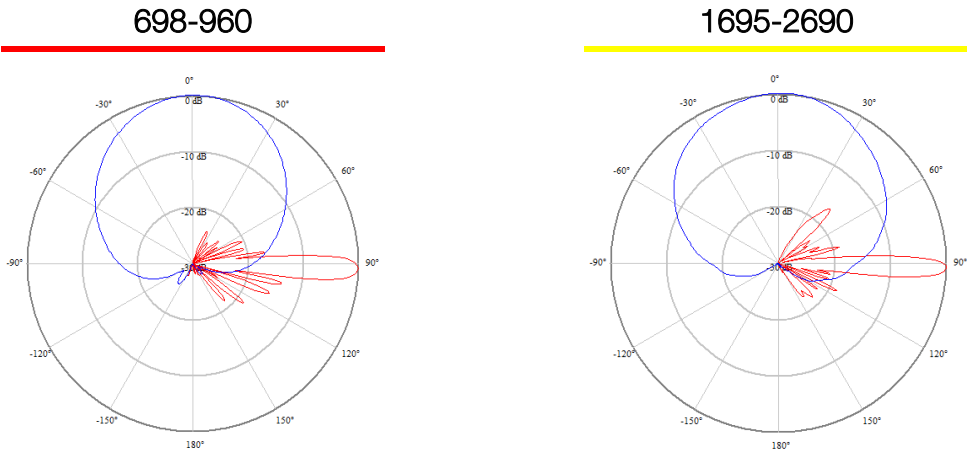
Connector Type	8 x 4.3-10 Female 1 x MQ4 1 x MQ5	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	44.5 kg	98.1 lb
Shipping Weight	57.7 kg	127.2 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



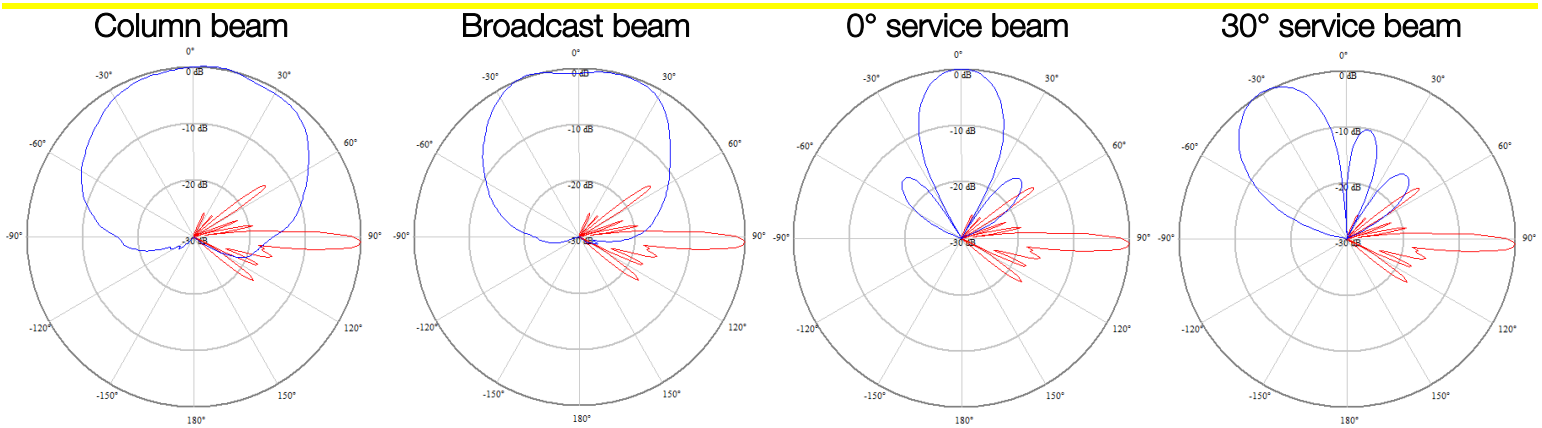
RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

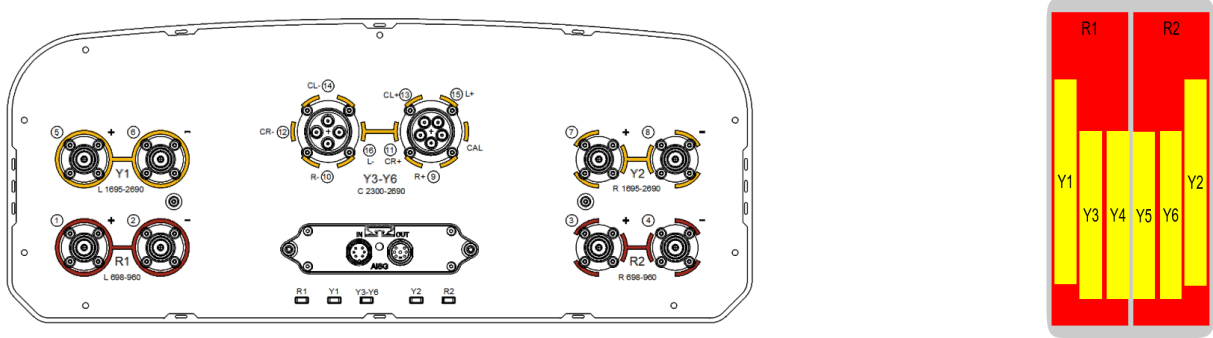
Pattern (Sample for reference)



2300-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	4	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	698-960	5	MRET	RB.....XYyxxxx-MM
●Y1	5 - 6	1695-2690	3	MRET	RB.....XYyxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y3-Y6	9 - 16	2300-2690	2	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2G2J4XBC-27

16 Port Antenna / 2L2H + 2.3-3.8 TDD / 1.5m

PROSE

- 2x(698-960) + 2x(1427-2690) + 4x(2300-3800) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors + Cluster

Electrical Data (FDD) (BASTA11.1)

Frequency(MHz)		2 x (698-960)				2 x (1427-2690)					
		698-806	790-862	880-960	1427-1518	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1/R2/Y1 Mid Tilt	dBi	13.7	13.7	13.9	15.0	15.8	16.5	17.2	18.0	
	/Y2 Over All Tilts		13.6±0.6	13.6±0.6	13.8±0.6	14.9±0.6	15.7±0.5	16.4±0.6	17.1±0.6	17.9±0.8	
Polarization		°	±45°								
Horizontal Pattern											
3dB Azimuth Beamwidth		°	63±5	62±5	65±6	73±6	73±6	69±6	64±5	56±6	
Front to Back Ratio, Total Power, 180°±30°		dB	> 20	> 22	> 21	> 20	> 23	> 24	> 25	> 25	
Cross-Polar Discrimination											
At Mechanical Boresight 0°			> 18	> 18	> 18	> 16	> 18	> 18	> 19	> 18	
Over Sector ±60°			> 10	> 8	> 8	> 10	> 8	> 6	> 3	> 2	
Vertical Pattern											
3dB Elevation Beamwidth		°	15.6±1.5	14.3±1.0	13.6±1.0	8.0±0.6	6.5±0.6	5.9±0.5	5.4±0.4	4.9±0.4	
Electrical Downtilt			2-12		2-12						
1st Upper Sidelobe Suppression		dB	> 16			> 16					
RF Parameters											
VSWR			< 1.5								
Intra - Cluster Isolation		dB	25			25					
Inter - Cluster Isolation			25			25					
3rd PIM(2 x 43 dBm)		dBc	< -153								
Impedance		Ω	50								
Maximum Effective Power Per Port		W	300			250					

Electrical Data (TDD) (BASTA11.1)

Frequency(MHz)		4x(2300-3800)	
		2300-2690	3300-3800
Polarization	°	±45°	
Electrical Downtilt		2-12	
Single column beam			
Gain over All Tilts	dBi	14.8±0.8	15.8±0.8
Horizontal 3dB Beamwidth	°	95±15	65±15
Vertical 3dB Beamwidth		7.0±0.6	5.3±0.5
1st Upper Sidelobe Suppression	dB	> 16	> 16
Broadcast 65° beam			
Gain over All Tilts	dBi	15.8	16.8
Horizontal 3dB Beamwidth	°	65	65
Cross-Polar Discrimination at Mechanical Boresight	dB	> 15	> 15
Front to Back Ratio, Total Power, 180° ±30°		> 25	> 22
Service beam			
0° direction Gain over All Tilts	dBi	19.8	20.1
0° direction Horizontal 3dB Beamwidth	°	25	19
30° direction Gain over All Tilts	dBi	18.8	18.9
30° direction Horizontal 3dB Beamwidth	°	29	23
RF Parameters			
Coupling Factor (Cal Port to RF Ports)	dB	-26±2	
Max Amp. Tolerance (Cal Port to RF Ports)		0.9	
Max Phase Tolerance (Cal Port to RF Ports)	°	9	
VSWR		< 1.5	
Intra - Cluster Isolation	dB	25	
Inter - Cluster Isolation		20	
Impedance	Ω	1.5	
Maximum Effective Power per Port	W	50	

— Maximum Effective Power Whole Antenna: 1000 W.

2G2J4XBC-27

16 Port Antenna / 2L2H + 2.3-3.8 TDD / 1.5m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	8 x 4.3-10 Female 2 x Cluster	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	27.7kg	61.1 lb
Shipping Weight	39.6 kg	87.3 lb
Antenna Dimensions (H x W x D)	1500 x 498 x 197 mm	59.1 x 19.6 x 7.8 in
Packing Size (H x W x D)	1650 x 575 x 370 mm	65.0 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	584 / 206 / 708 N	131 / 46 / 159 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F
RAE Type	Integrated RAE	
RAE Protocols	AISG-ES-RAE V2.2.0	

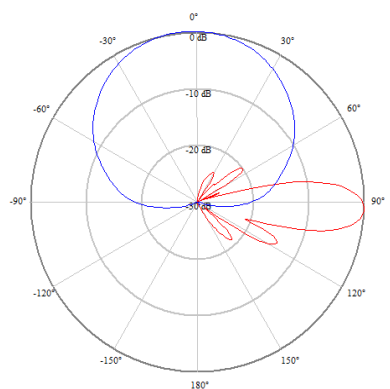


RET Specification (BASTA11.1)

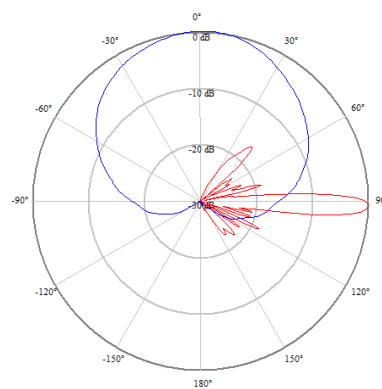
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

698-960

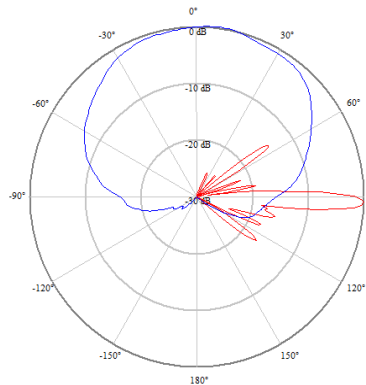


1695-2690

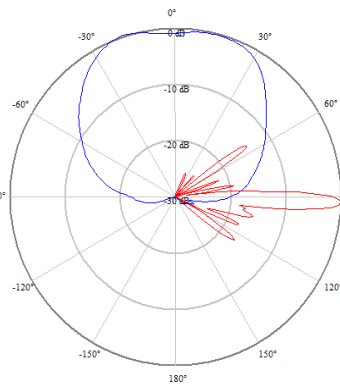


2300-2690

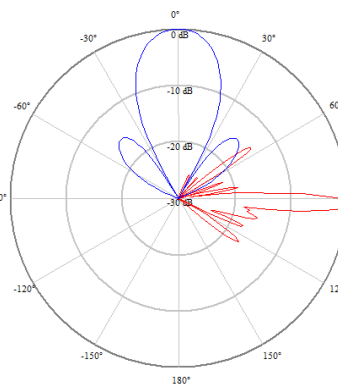
Column beam



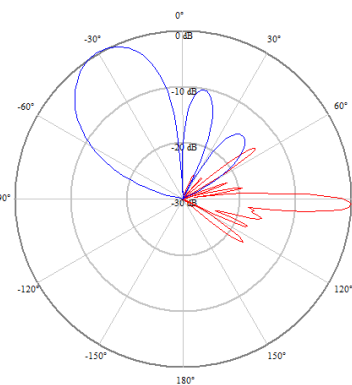
Broadcast beam



0° service beam

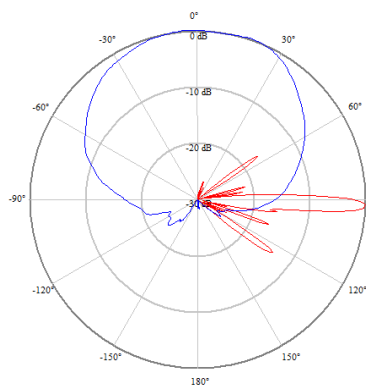


30° service beam

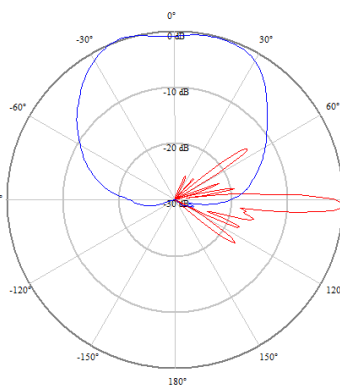


3300-3800

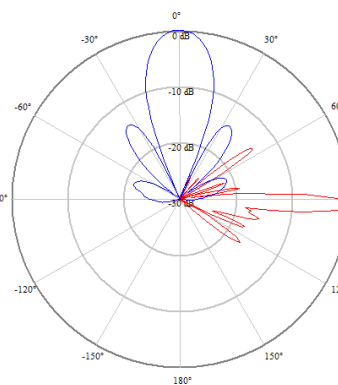
Column beam



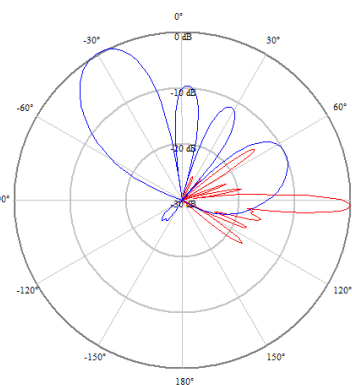
Broadcast beam



0° service beam



30° service beam

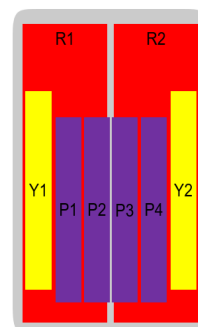
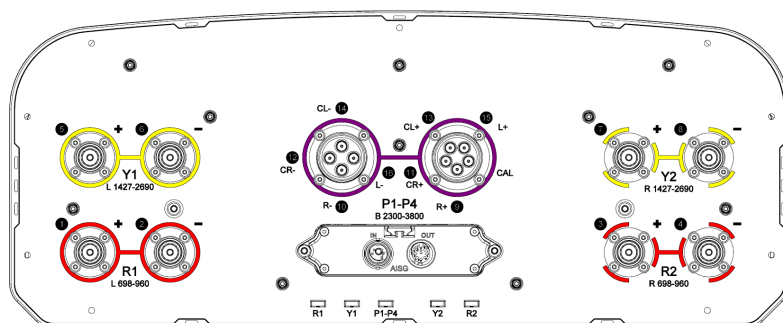


2G2J4XBC-27

16 Port Antenna / 2L2H + 2.3-3.8 TDD / 1.5m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	/	SRET	RB.....XYyxxxx-R1
● R2	3 - 4	698-960	/	SRET	RB.....XYyxxxx-R2
● Y1	5 - 6	1427-2690	/	SRET	RB.....XYyxxxx-Y1
● Y2	7 - 8	1427-2690	/	SRET	RB.....XYyxxxx-Y2
● P1-P4	9 - 16	2300-3800	/	SRET	RB.....XYyxxxx-P1

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

G4W4THC-01

18 Port Antenna / 1L4H + 3.5G TDD / 1.6m

PROSE

- 1x(698-960) + 4x(1695-2690) + 4x(3300-3800) MHz
- Integrated RET (AISG 2.0 Compliant)
- 4.3-10 Connectors

Electrical Data (FDD) (BASTA 11.1)

Frequency(MHz)		1 x (698-960)		4 x (1695-2690)			
		698-896	880-960	1695-1880	1900-2180	2300-2400	2500-2690
Gain	R1 Mid Tilt	14.4	14.4				
	Over All Tilts	14.2 ± 0.8	14.2 ± 0.8				
	Y1-Y4 Mid Tilt			14.2	14.7	15.4	15.9
	Over All Tilts			14.0 ± 0.6	14.5 ± 0.6	15.2 ± 0.6	15.7 ± 0.6
Polarization		°	±45°				

Horizontal Pattern

3dB Azimuth Beamwidth	°	63 ± 5	64 ± 5	67 ± 6	65 ± 6	60 ± 4	58 ± 4
Front to Back Ratio, Total Power, 180°±30°	dB	> 25	> 25	> 28	> 28	> 28	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°		> 18	> 15	> 18	> 18	> 18	> 18

Vertical Pattern

3dB Elevation Beamwidth	°	14.9 ± 1.2	12.8 ± 1.0	13.4 ± 0.8	12.3 ± 0.8	10.9 ± 0.5	10.1 ± 0.5
Electrical Downtilt		2-12		2-12			
1st Upper Sidelobe Suppression	dB	> 15		> 15			

RF Parameters

VSWR		< 1.5					
Intra - Cluster Isolation	dB	25					
3rd PIM(2 x 43 dBm)	dBc	< -153					
Impedance	Ω	50					
Maximum Effective Power Per Port	W	300		250			

Electrical Data (TDD) (BASTA 11.1)

Frequency(MHz)

3300-3800

Polarization	°	±45°
Electrical Downtilt		2-12

Single column beam

Gain over All Tilts	dBi	15.1 ± 0.8
Horizontal 3dB Beamwidth	°	87 ± 15
Vertical 3dB Beamwidth		5.6 ± 0.5
Cross-Polar Discrimination at Mechanical Boresight	dB	> 18
1st Upper Sidelobe Suppression		> 16
Front to Back Ratio, Total Power, 180° ±30°		> 23

Broadcast 65° beam

Gain over All Tilts	dBi	16.0
Horizontal 3dB Beamwidth	°	65
Cross-Polar Discrimination at Mechanical Boresight	dB	> 18
Front to Back Ratio, Total Power, 180° ±30°		> 28

Service beam

0° direction Gain over All Tilts	dBi	20
0° direction Horizontal 3dB Beamwidth	°	26
0° direction Cross-Polar Discrimination at Mechanical Boresight	dB	> 18
0° direction Front to Back Ratio, Total Power, 180° ±30°		> 28
30° direction Gain over All Tilts	dBi	19
30° direction Horizontal 3dB Beamwidth	°	28

RF Parameters

Coupling Factor (Cal Port to RF Ports)	dB	-26 ±2
Max Amp. Tolerance (Cal Port to RF Ports)		0.9
Max Phase Tolerance (Cal Port to RF Ports)	°	7
VSWR		< 1.5
Intra - Cluster Isolation	dB	25
Inter - Cluster Isolation		25
Impedance	Ω	50
Maximum Effective Power Per Port	W	75

— Maximum Effective Power Whole Antenna: 150 W.

G4W4THC-01

18 Port Antenna / 1L4H + 3.5G TDD / 1.6m

PROSE

Mechanical Data (BASTA 11.1)

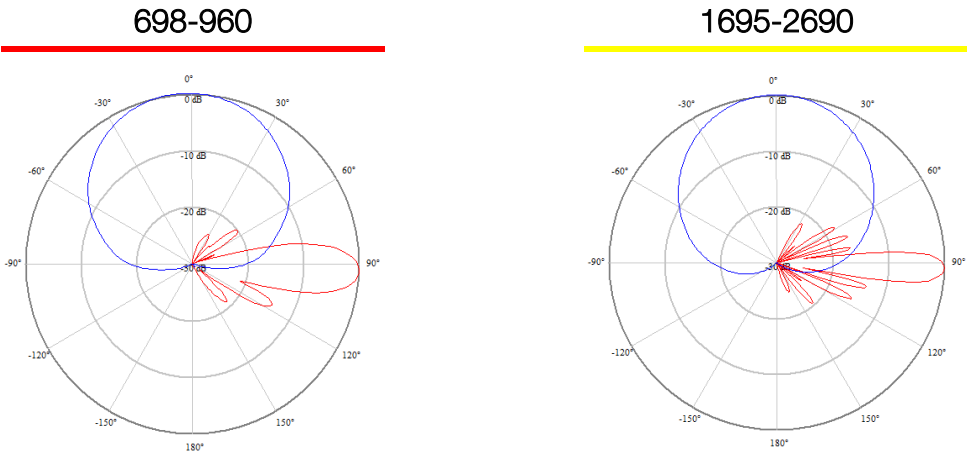
Connector Type	10 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	24.6 kg	54.2 lb
Shipping Weight	29.7 kg	65.5 lb
Antenna Dimensions (H x W x D)	1600 x 396 x 190 mm	63.0 x 15.6 x 7.5 in
Packing Size (H x W x D)	1750 x 508 x 343 mm	68.9 x 20.0 x 13.5 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	518 / 196 / 607 N	116 / 44 / 136 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

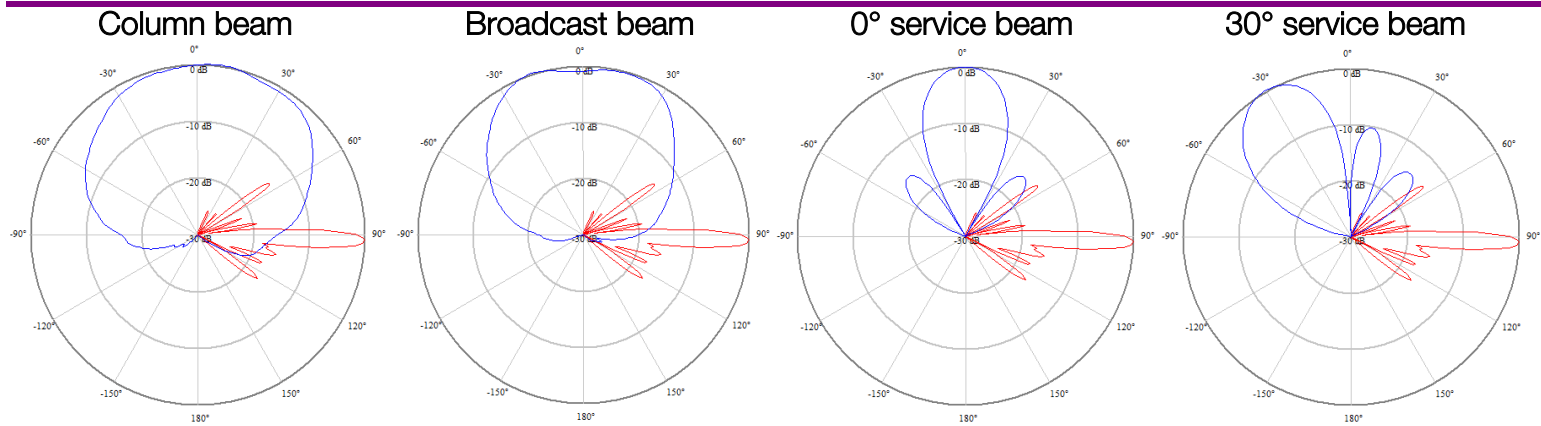


G4W4THC-01

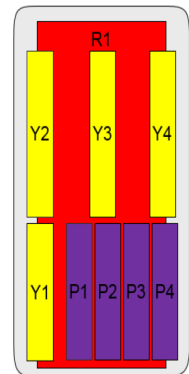
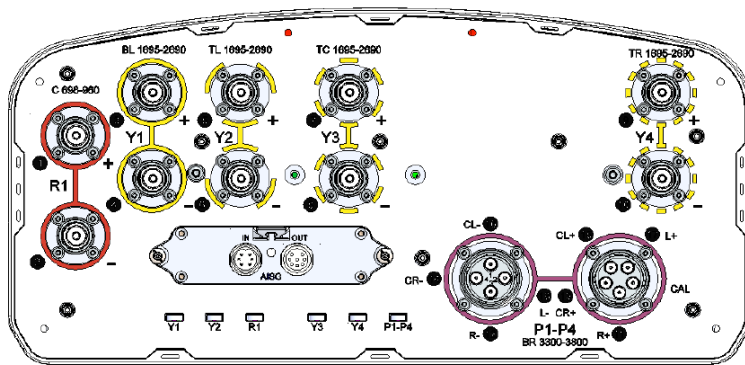
18 Port Antenna / 1L4H + 3.5G TDD / 1.6m

PROSE

3300-3800



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	3	MRET	RB.....XYxxxxx-MM
● Y1	3 - 4	1695-2690	1	MRET	RB.....XYxxxxx-MM
● Y2	5 - 6	1695-2690	2	MRET	RB.....XYxxxxx-MM
● Y3	7 - 8	1695-2690	4	MRET	RB.....XYxxxxx-MM
● Y4	9 - 10	1695-2690	5	MRET	RB.....XYxxxxx-MM
● P1-P4	11 - 18	3300-3800	6	MRET	RB.....XYxxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.5 kg / 5.5 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4W4RBF-01

20 Port Antenna / 2L4H+2.6 TDD / 2.6m

PROSE

- 2x(698-960) + 4x(1695-2690) + 4x(2300-2690)
- Integrated RET (AISG 2.0 Compliant)
- 4.3-10 Connectors

Electrical Data (FDD) (BASTA)

Frequency(MHz)			2 x (698-960)			4 x (1695-2690)				
			698-806	790-862	880-960	1695-1880	1900-2180	2300-2400	2500-2690	
Gain	R1/R2/Y1	Mid Tilt	dBi	15.6	16	15.9	16.0	17	17.0	17.6
	/Y2	Over All Tilts		15.6±0.5	15.9±0.5	15.9±0.5	16.0±0.6	16.9±0.6	17.0±0.5	17.6±0.5
	Y3/Y4	Mid Tilt					15.9	16.7	16.8	17.1
		Over All Tilts					15.8±0.6	16.7±0.6	16.7±0.5	17.1±0.5
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	63±6	60±5	58±5	67±7	65±6	61±5	59±5
Front to Back Ratio, Co-polar, 180°±30°			dB	> 25	> 25	> 25	> 26	> 26	> 26	> 26
Cross-Polar Discrimination										
At Mechanical Boresight 0°				> 18	> 18	> 18	> 16	> 16	> 16	> 16
Over Sector ±60°				> 10	> 8	> 8	> 10	> 8	> 6	> 6
Vertical Pattern										
3dB Elevation Beamwidth			°	8.6±0.8	7.9±0.6	7.2±0.6	7.2±0.7	6.4±0.6	5.6±0.4	5.2±0.4
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 16			> 16			
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 25			> 25			
Inter - Cluster Isolation				> 26						
3rd PIM(2 x 43 dBm)			dBc	< -150						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	300			250			

Electrical Data (TDD) (BASTA)

4×(2300-2690)

Frequency(MHz)

Polarization	°	±45°
Electrical Downtilt		2-12

Single column beam

Gain over All Tilts	dBi	15.3±0.8
Horizontal 3dB Beamwidth	°	90
Vertical 3dB Beamwidth		5.4±0.5
1st Upper Sidelobe Suppression	dB	> 16

Broadcast 65° beam

Gain over All Tilts	dBi	16.8
Horizontal 3dB Beamwidth	°	60
Cross-Polar Discrimination at Mechanical Boresight	dB	> 15
Front to Back Ratio, Co-polar, 180°±30°		> 28

Service beam

0° direction Gain over All Tilts	dBi	21.0
0° direction Horizontal 3dB Beamwidth	°	26
30° direction Gain over All Tilts	dBi	20
30° direction Horizontal 3dB Beamwidth	°	28

RF Parameters

Coupling Factor (Cal Port to RF Ports)	dB	-26±2
Max Amp. Tolerance (Cal Port to RF Ports)		0.9
Max Phase Tolerance (Cal Port to RF Ports)	°	7
VSWR		< 1.5
Intra - Cluster Isolation	dB	25
Inter - Cluster Isolation(co-pol)		25
Inter - Cluster Isolation(x-pol)		20
Impedance	Ω	50
Maximum Effective Power Per Port	W	150

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA)

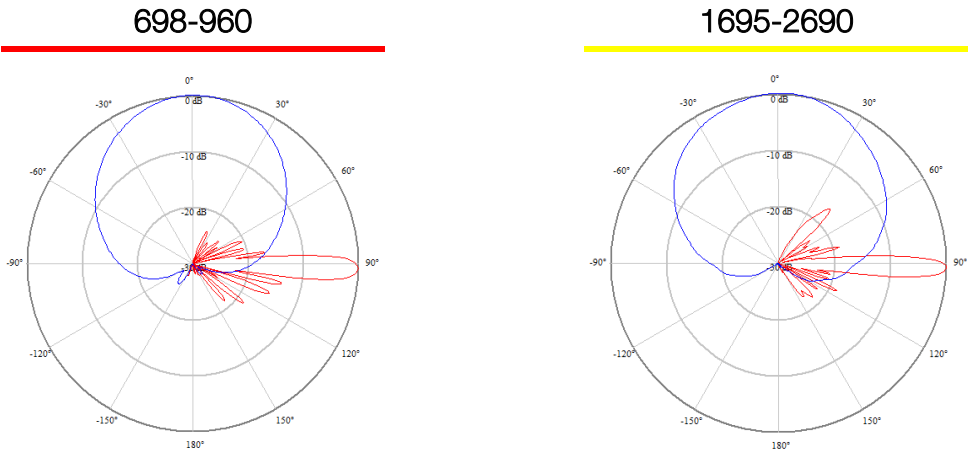
Connector Type	20 x 4.3-10 Female Cal: 1 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	44.4 kg	97.9 lb
Shipping Weight	57.6 kg	127.0 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1115 / 1419 / 321 N	251 / 319 / 72 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

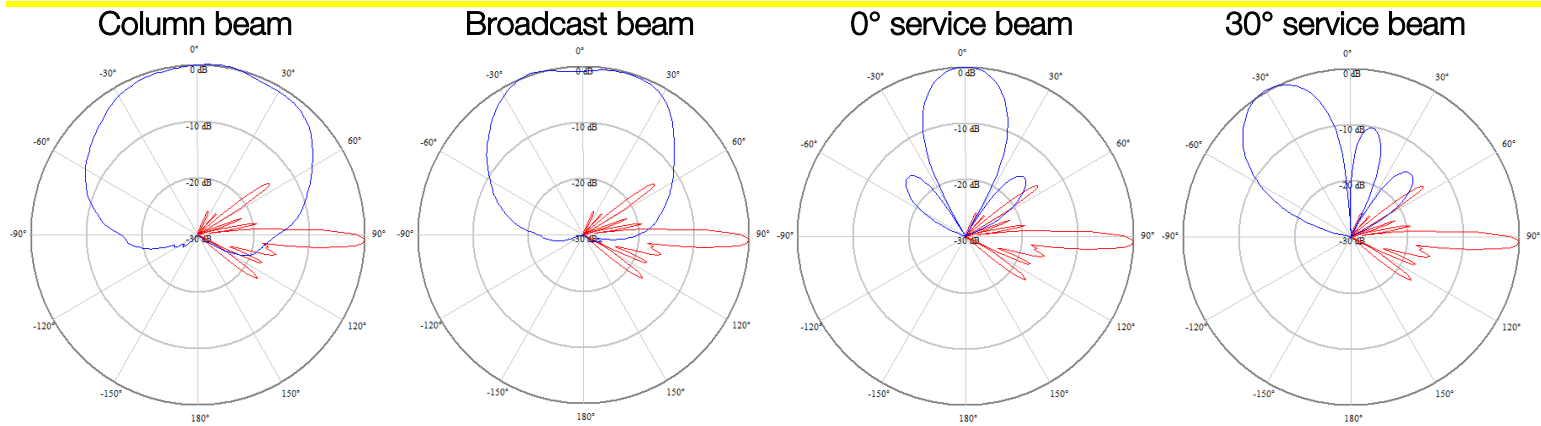


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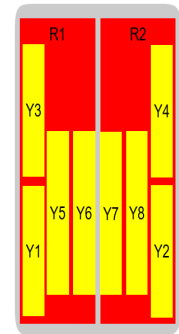
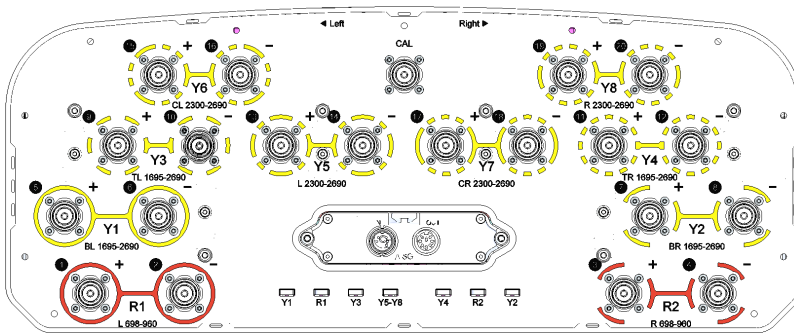
20 Port Antenna / 2L4H+2.6 TDD / 2.6m

PROSE

2300-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	2	MRET	RB.....XYyxxxx-MM
● R2	3 - 4	698-960	6	MRET	RB.....XYyxxxx-MM
● Y1	5 - 6	1695-2690	1	MRET	RB.....XYyxxxx-MM
● Y2	7 - 8	1695-2690	7	MRET	RB.....XYyxxxx-MM
● Y3	9 - 10	1695-2690	3	MRET	RB.....XYyxxxx-MM
● Y4	11 - 12	1695-2690	5	MRET	RB.....XYyxxxx-MM
● Y5-Y8	13 - 20	2300-2690	4	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4W4TBC-27S

20 Port Antenna / 2L4H + 3.5TDD / 1.4m

PROSE

- 2x(698-960) + 4x(1695-2690) + 4x(3300-3800) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors + Cluster

Electrical Data (FDD) (BASTA)

Frequency(MHz)		2 x (698-960)			4 x (1695-2690)				
		698-824	791-894	880-960	1695-1920	1920-2180	2300-2400	2500-2690	
Gain	Mid Tilt	dBi	13.8	14.0	14.3	13.9	14.9	15.1	15.4
	Over All Tilts		13.7±0.8	13.9±0.8	14.2±0.8	13.9±0.6	14.9±0.6	15.0±0.5	15.3±0.5
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	61±7	60±5	65±5	62±6	63±6	65±4	63±4
Front to Back Ratio, Total Power, 180°±30°		dB	> 23	> 24	> 25	> 26	> 26	> 25	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 18	> 18	> 18	> 18	> 16	> 16
Over Sector ±60°			> 12	> 8	> 10	> 10	> 8	> 6	> 6
Vertical Pattern									
3dB Elevation Beamwidth		°	16.7±1.0	15.1±1.0	13.9±1.0	15.5±1.0	13.5±1.0	12.0±0.8	10.9±0.8
Electrical Downtilt			2-12			2-12			
1st Upper Sidelobe Suppression		dB	> 16	> 16	> 16	> 16	> 16	> 16	> 16
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	> 25						
Inter - Cluster Isolation			> 25						
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power Per Port		W	300			250			

Electrical Data (TDD) (BASTA)

Frequency(MHz)		3300-3800
		3300-3800
Polarization	°	±45°
Electrical Downtilt		2-12
Single column beam		
Gain over All Tilts	dBi	15.5±0.5
Horizontal 3dB Beamwidth	°	93±15
Front to Back Ratio, Total Power, 180°±30°	dB	> 2
Vertical 3dB Beamwidth	°	5.8±0.5
1st Upper Sidelobe Suppression	dB	> 1
Broadcast 65° beam		
Gain over All Tilts	dB	16.8
Horizontal 3dB Beamwidth	°	65
Cross-Polar Discrimination at Mechanical Boresight	dB	> 1
Front to Back Ratio, Total Power, 180°±30°		> 2
Service beam		
0° direction Gain over All Tilts	dBi	20.5
0° direction Horizontal 3dB Beamwidth	°	26
0° direction Cross-Polar Discrimination at Mechanical Boresight	dB	> 1
0° direction Front to Back Ratio, Total Power, 180°±30°		> 2
0° direction Horizontal Sidelobe Suppression		> 1
RF Parameters		
Coupling Factor (Cal Port to RF Ports)	dB	-26±2
Max Amp. Tolerance (Cal Port to RF Ports)		< 1.2
Max Phase Tolerance (Cal Port to RF Ports)	°	12
VSWR		< 1.5
Intra - Cluster Isolation	dB	25
Inter - Cluster Isolation		25
Impedance	Ω	50
Maximum Effective Power Per Port	W	75

— Maximum Effective Power Whole Antenna: / W.

2G4W4TBC-27S

20 Port Antenna / 2L4H + 3.5TDD / 1.4m

PROSE

Mechanical Data (BASTA)

Connector Type	12 x 4.3-10 Female + (Cluster4+Cluster5) Connector	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	28.1 kg	61.9 lb
Shipping Weight	35.7 kg	78.7 lb
Antenna Dimensions (H x W x D)	1400 x 498 x 197 mm	55.1 x 19.6 x 7.8 in
Packing Size (H x W x D)	1515 x 568 x 337 mm	59.6 x 22.4 x 13.3 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	543 / 189 / 658 N	122 / 42 / 148 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Mechanical tilt range, degree	0-10	
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

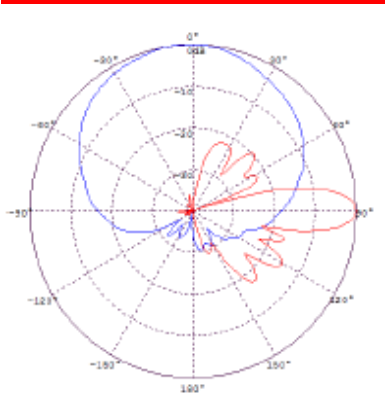
2G4W4TBC-27S

20 Port Antenna / 2L4H + 3.5TDD / 1.4m

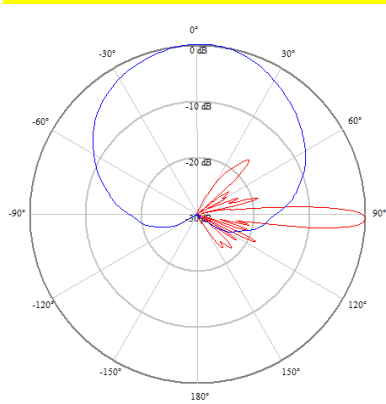


Pattern (Sample for reference)

698-960

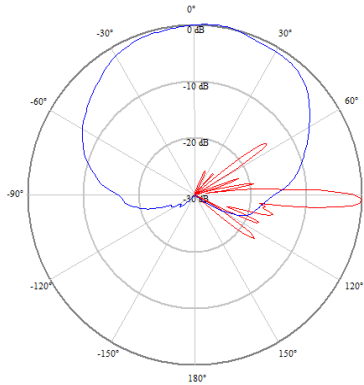


1695-2690

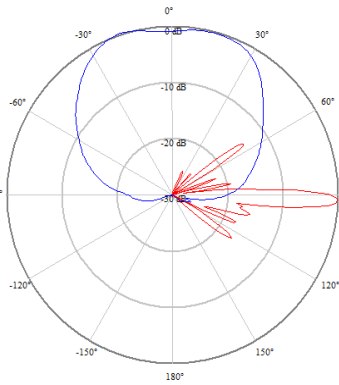


3300-3800

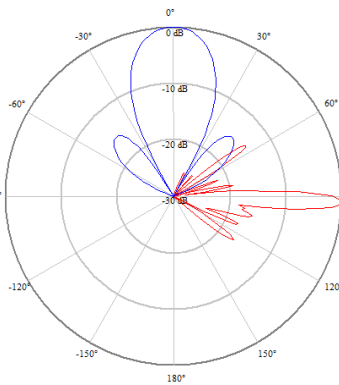
Column beam



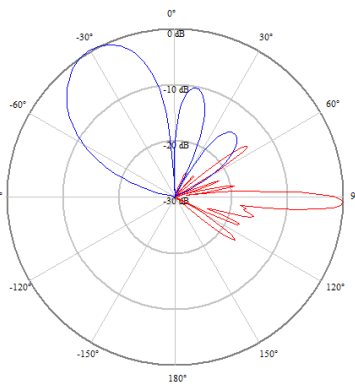
Broadcast beam



0° service beam



30° service beam

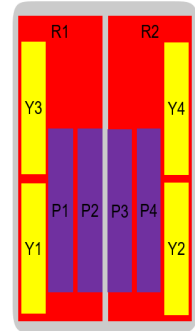
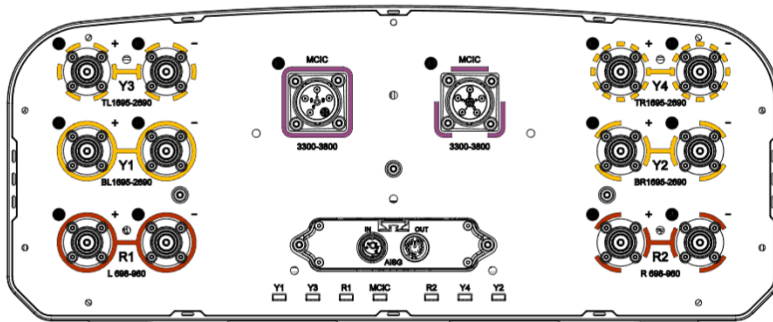


2G4W4TBC-27S

20 Port Antenna / 2L4H + 3.5TDD / 1.4m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	3	MRET	RB.....XYyxxxx-MM
● R2	3 - 4	698-960	5	MRET	RB.....XYyxxxx-MM
● Y1	5 - 6	1695-2690	1	MRET	RB.....XYyxxxx-MM
● Y2	7 - 8	1695-2690	7	MRET	RB.....XYyxxxx-MM
● Y3	9 - 10	1695-2690	2	MRET	RB.....XYyxxxx-MM
● Y4	11 - 12	1695-2690	6	MRET	RB.....XYyxxxx-MM
● MCIC	13 - 14	3300-3800	4	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

2G4W4TBD-27

20 Port Antenna / 2L4H + 3.5G TDD / 2.0m

PROSE

- 2x(698-960) + 4x(1695-2690) + 4x(3300-3800) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors + MQ4&MQ5

Electrical Data (FDD) (BASTA11.1)

Frequency(MHz)		2 x (698-960)			4 x (1695-2690)				
		698-806	790-862	880-960	1695-1880	1900-2180	2300-2400	2500-2690	
Gain	R1/R2/Y1 Mid Tilt	dBi	14.6	14.8	15.0	15.1	16.0	16.2	16.4
	Y2Y3Y4 Over All Tilts		14.5±0.5	14.7±0.5	14.9±0.5	15.0±0.6	15.9±0.7	16.1±0.7	16.3±0.7
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	67±6	61±5	65±5	67±6	65±6	62±4	60±4
Front to Back Ratio, Co-polar, 180°±30°		dB	> 25	> 25	> 25	> 26	> 26	> 26	> 26
Cross-Polar Discrimination At Mechanical Boresight 0°			> 18	> 18	> 18	> 18	> 18	> 18	> 18
Over Sector ±60°			> 12	> 8	> 10	> 9	> 8	> 6	> 6
Vertical Pattern									
3dB Elevation Beamwidth		°	11.0±1.0	10.0±0.6	9.2±0.6	9.4±0.8	8.4±0.6	7.4±0.5	7.0±0.5
Electrical Downtilt			2-12			2-12			
1st Upper Sidelobe Suppression		dB	> 16			> 16			
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	> 25			> 25			
Inter - Cluster Isolation			> 25			> 25			
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power per Port		W	300			250			

Electrical Data (TDD) (BASTA11.1)

Frequency(MHz)		3300-3800
		3300-3800
Polarization	°	±45°
Electrical Downtilt		2-12
Single column beam		
Gain over All Tilts	dBi	15.4±0.8
Horizontal 3dB Beamwidth	°	93±15
Vertical 3dB Beamwidth		5.3±0.5
1st Upper Sidelobe Suppression	dB	> 16
Broadcast 65° beam		
Gain over All Tilts	dBi	16.5
Horizontal 3dB Beamwidth	°	65
Cross-Polar Discrimination at Mechanical Boresight	dB	> 15
Front to Back Ratio, Total Power, 180° ±30°		> 28
Service beam		
0° direction Gain over All Tilts	dBi	20.5
0° direction Horizontal 3dB Beamwidth	°	26
30° direction Gain over All Tilts	dBi	19.5
30° direction Horizontal 3dB Beamwidth	°	28
RF Parameters		
Coupling Factor (Cal Port to RF Ports)	dB	-26±2
Max Amp. Tolerance (Cal Port to RF Ports)		0.9
Max Phase Tolerance (Cal Port to RF Ports)	°	7
VSWR		< 1.5
Intra - Cluster Isolation	dB	20
Inter - Cluster Isolation		25
Impedance	Ω	50
Maximum Effective Power Per Port	W	75

— Maximum Effective Power Whole Antenna: 1000 W.

2G4W4TBD-27

20 Port Antenna / 2L4H + 3.5G TDD / 2.0m

PROSE

Mechanical Data (BASTA11.1)

Connector Type	12 x 4.3-10 Female 1 x MQ4 1 x MQ5	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	36.3 kg	80.0 lb
Shipping Weight	47.4 kg	104.5 lb
Antenna Dimensions (H x W x D)	2000 x 498 x 197 mm	78.7 x 19.6 x 7.8 in
Packing Size (H x W x D)	2140 x 575 x 370 mm	84.3 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	794 / 294 / 961 N	178 / 66 / 216 lbf
Mast Diameter Supported	50 - 122mm	2.0 - 4.8 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F
RAE Type	Integrated RAE	
RAE Protocols	AISG-ES-RAE V2.2.0	



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

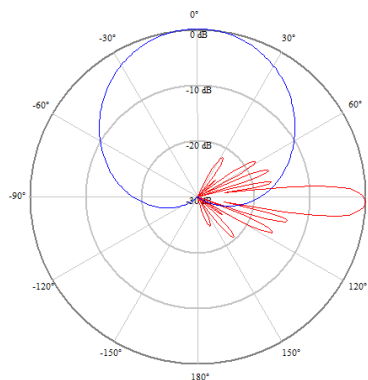
2G4W4TBD-27

20 Port Antenna / 2L4H + 3.5G TDD / 2.0m

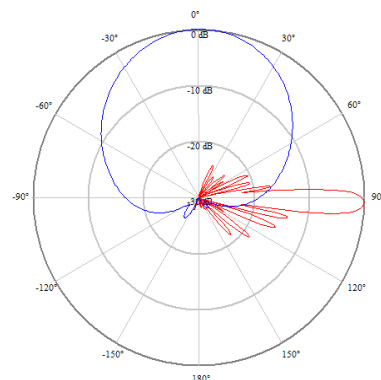
PROSE

Pattern (Sample for reference)

698-960

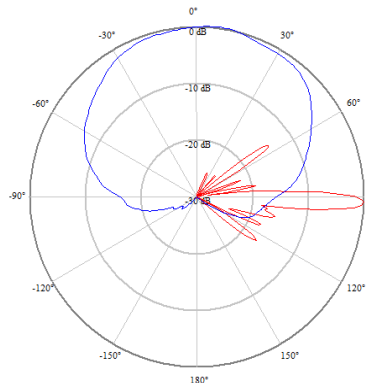


1695-2690

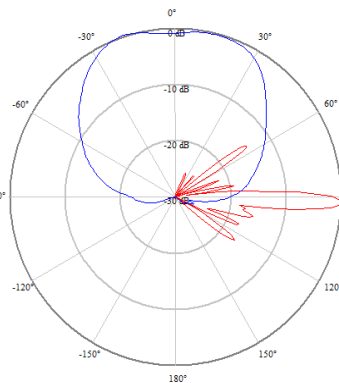


3300-3800

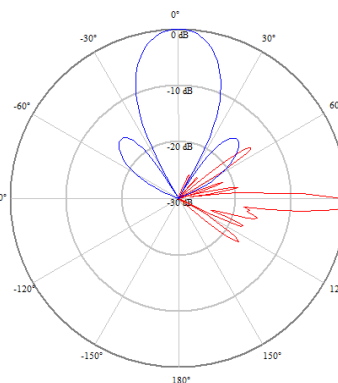
Column beam



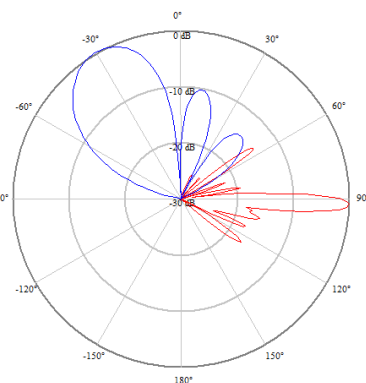
Broadcast beam



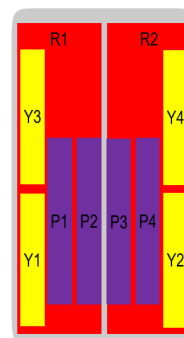
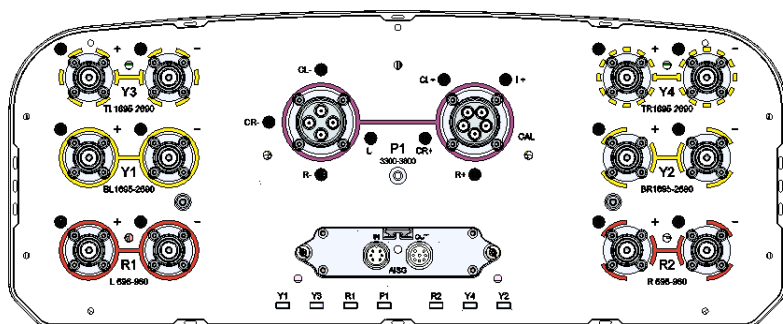
0° service beam



30° service beam



Layout



2G4W4TBD-27

20 Port Antenna / 2L4H + 3.5G TDD / 2.0m

PROSE

Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	/	SRET	RB.....XYYxxxxx-R1
●R2	3 - 4	698-960	/	SRET	RB.....XYYxxxxx-R2
●Y1	5 - 6	1695-2690	/	SRET	RB.....XYYxxxxx-Y1
●Y2	7 - 8	1695-2690	/	SRET	RB.....XYYxxxxx-Y2
●Y3	9 - 10	1695-2690	/	SRET	RB.....XYYxxxxx-Y3
●Y4	11 - 12	1695-2690	/	SRET	RB.....XYYxxxxx-Y4
●P1	13 - 20	3300-3800	/	SRET	RB.....XYYxxxxx-P1

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4W4THF-21

20 Port Antenna / 2L4H + 3.5G TDD / 2.69m

PROSE

- 2 x (698-960) + 4 x (1695-2690) + 4 x (3300-3800) MHz
- Integrated RET (AISG 2.0 Compliant)
- 4.3-10 Connectors

Electrical Data (FDD) (BASTA11.1)

Frequency(MHz)		2 x (698-960)			4 x (1695-2690)					
		698-806	790-862	880-960	1695-1880	1900-2180	2300-2400	2500-2690		
Gain	R1/R2	Mid Tilt	dBi	15.7	16.0	16.1				
		Over All Tilts		15.6±0.5	15.9±0.5	16.1±0.5				
	Y1/Y2/Y3	Mid Tilt					16.3	16.9	17.2	17.5
	/Y4	Over All Tilts					16.2±0.4	16.8±0.5	17.1±0.4	17.5±0.4
Polarization			°	±45°						

Horizontal Pattern

3dB Azimuth Beamwidth	°	63±6	60±5	58±5	65±6	60±6	60±5	59±5
Front to Back Ratio, Total Power, 180°±30°	dB	> 23	> 24	> 25	> 24	> 25	> 23	> 23
Cross-Polar Discrimination								
At Mechanical Boresight 0°		> 18	> 18	> 18	> 18	> 18	> 18	> 18
Over Sector ±60°		> 12	> 8	> 10	> 10	> 8	> 6	> 6

Vertical Pattern

3dB Elevation Beamwidth	°	8.5±0.8	7.6±0.6	6.9±0.6	7.1±0.5	6.2±0.5	5.6±0.4	5.2±0.4
Electrical Downtilt		2-12			2-12			
1st Upper Sidelobe Suppression	dB	> 16			> 16			

RF Parameters

VSWR		< 1.5	
Intra - Cluster Isolation	dB	25	25
Inter - Cluster Isolation		28	28
3rd PIM(2 x 43 dBm)	dBc	< -153	
Impedance	Ω	50	
Maximum Effective Power Per Port	W	300	250

2G4W4THF-21

20 Port Antenna / 2L4H + 3.5G TDD / 2.69m

PROSE

Electrical Data (TDD) (BASTA11.1)

Frequency(MHz)		4 x (3300-3800)
		3300-3800
Polarization	°	±45°
Electrical Downtilt		2-12
Single column beam		
Gain over All Tilts	dBi	15.2±0.8
Horizontal 3dB Beamwidth	°	90±15
Vertical 3dB Beamwidth		5.6±0.4
Cross-Polar Discrimination at Mechanical Boresight	dB	> 15
1st Upper Sidelobe Suppression		> 16
Front to Back Ratio, Total Power, 180° ±30°		> 20
Broadcast 65° beam		
Gain over All Tilts	dBi	16.7
Horizontal 3dB Beamwidth	°	65
Cross-Polar Discrimination at Mechanical Boresight	dB	> 15
Front to Back Ratio, Total Power, 180° ±30°		> 25
Service beam		
0° direction Gain over All Tilts	dBi	21.0
0° direction Horizontal 3dB Beamwidth	°	26
30° direction Gain over All Tilts	dBi	20.0
30° direction Horizontal 3dB Beamwidth	°	28
RF Parameters		
Coupling Factor (Cal Port to RF Ports)	dB	-26±2
Max Amp. Tolerance (Cal Port to RF Ports)		0.9
Max Phase Tolerance (Cal Port to RF Ports)	°	7
VSWR		< 1.5
Intra - Cluster Isolation	dB	25
Inter - Cluster Isolation		20
Impedance	Ω	50
Maximum Effective Power per Port	W	75

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data

(BASTA11.1)

Connector Type	20 x 4.3-10 Female Cal: 1 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	54 kg	119.0 lb
Shipping Weight	74.5 kg	164.2 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



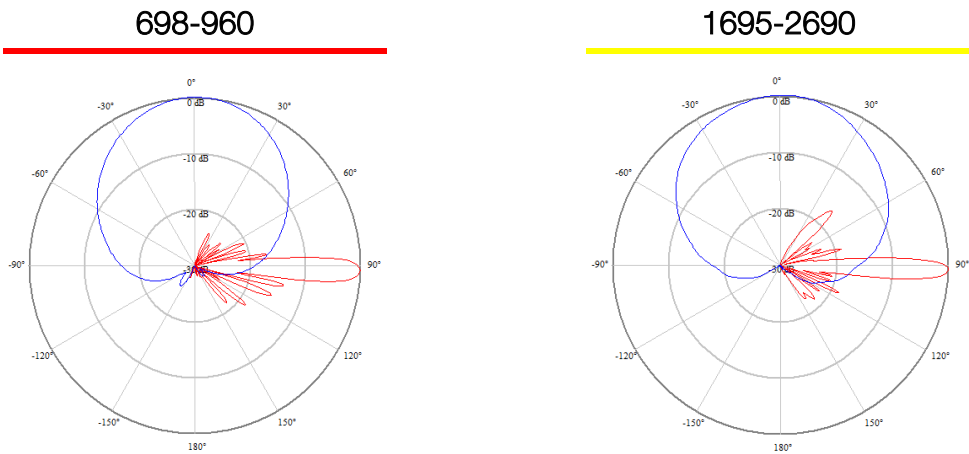
RET Specification

(BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern

(Sample for reference)

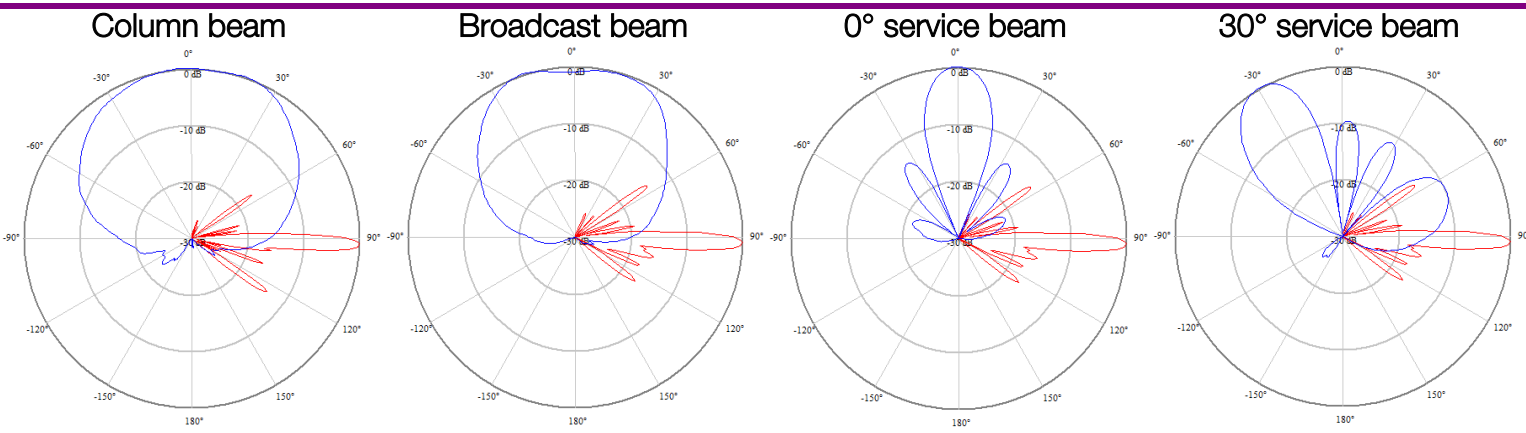


2G4W4THF-21

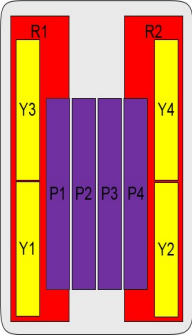
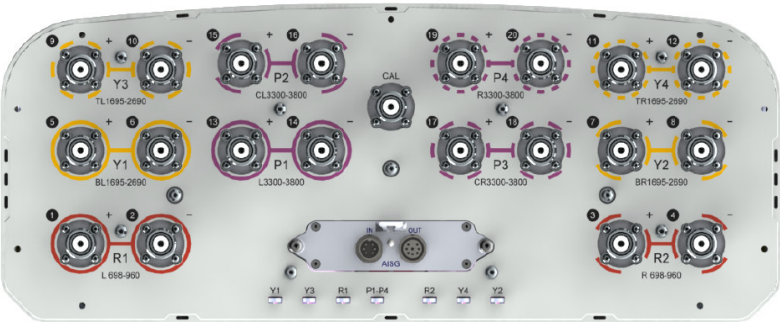
20 Port Antenna / 2L4H + 3.5G TDD / 2.69m

PROSE

3300-3800



Layout



2G4W4THF-21

20 Port Antenna / 2L4H + 3.5G TDD / 2.69m

PROSE

Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	3	MRET	RB.....XYyxxxx-MM
● R2	3 - 4	698-960	5	MRET	RB.....XYyxxxx-MM
● Y1	5 - 6	1695-2690	1	MRET	RB.....XYyxxxx-MM
● Y2	7 - 8	1695-2690	7	MRET	RB.....XYyxxxx-MM
● Y3	9 - 10	1695-2690	2	MRET	RB.....XYyxxxx-MM
● Y4	11 - 12	1695-2690	6	MRET	RB.....XYyxxxx-MM
● P1-P4	13 - 14	3300-3800	4	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4W4XBD-01

20 Port Antenna / 2L4H + 2.3-3.8 TDD / 2.1m

PROSE

- 2x(698-960) + 4x(1695-2690) + 4x(2300-3800) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (FDD) (BASTA11.1)

Frequency(MHz)		2 x (698-960)				4 x (1695-2690)				
		698-806	790-862	880-960	1695-1880	1900-2200	2300-2400	2500-2690		
Gain	R1/R2/Y1	Mid Tilt	dBi	15.0	15.2	15.0	14.7	15.6	16.2	16.6
	Y2	Over All Tilts		14.9±0.6	15.1±0.6	15.0±0.6	14.6±0.6	15.5±0.6	16.2±0.6	16.6±0.6
	Y3/Y4	Mid Tilt					15.1	15.9	15.6	16.1
		Over All Tilts					15.1±0.6	15.8±0.5	15.6±0.5	16.0±0.6
Polarization			°	±45°						

Horizontal Pattern

3dB Azimuth Beamwidth	°	62±6	56±6	58±6	73±6	67±6	68±6	60±6
Front to Back Ratio, Total Power, 180°±30°	dB	> 20	> 21	> 21	> 22	> 23	> 23	> 23
Cross-Polar Discrimination At Mechanical Boresight 0°		> 18	> 20	> 20	> 15	> 15	> 17	> 18
Over Sector ±60°		> 10	> 8	> 8	> 8	> 8	> 6	> 4

Vertical Pattern

3dB Elevation Beamwidth	°	10.4±1.0	9.4±0.6	8.5±0.7	9.4±0.8	8.2±0.8	7.5±0.5	6.9±0.5
Electrical Downtilt		2-12			2-12			
1st Upper Sidelobe Suppression	dB	> 16			> 16			

RF Parameters

VSWR		< 1.5	
Intra - Cluster Isolation	dB	25	25
Inter - Cluster Isolation		25	25
3rd PIM(2 x 43 dBm)	dBc	< -150	
Impedance	Ω	50	
Maximum Effective Power Per Port	W	300	250

Electrical Data (TDD) (BASTA11.1)

Frequency(MHz)		4x(2300-3800)	
		2300-2690	3300-3800
Polarization	°	±45°	
Electrical Downtilt		2-12	
Single column beam			
Gain over All Tilts	dBi	14.7	15.6
Horizontal 3dB Beamwidth	°	93±15	61±15
Vertical 3dB Beamwidth		7.0±0.6	5.2±0.5
1st Upper Sidelobe Suppression	dB	> 16	> 16
Broadcast 65° beam			
Gain over All Tilts	dBi	15.7	15.6
Horizontal 3dB Beamwidth	°	65	65
Cross-Polar Discrimination at Mechanical Boresight	dB	> 15	> 15
Front to Back Ratio, Total Power, 180° ±30°		> 26	> 22
Service beam			
0° direction Gain over All Tilts	dBi	20.0	20.5
0° direction Horizontal 3dB Beamwidth	°	24	19
30° direction Gain over All Tilts	dBi	19.2	19.6
30° direction Horizontal 3dB Beamwidth	°	28.5	19.5
RF Parameters			
Coupling Factor (Cal Port to RF Ports)	dB	-26±2	
Max Amp. Tolerance (Cal Port to RF Ports)		0.9	
Max Phase Tolerance (Cal Port to RF Ports)	°	9	
VSWR		< 1.5	
Intra - Cluster Isolation	dB	25	
Inter - Cluster Isolation		20	
Impedance	Ω	50	
Maximum Effective Power per Port	W	75	

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA11.1)

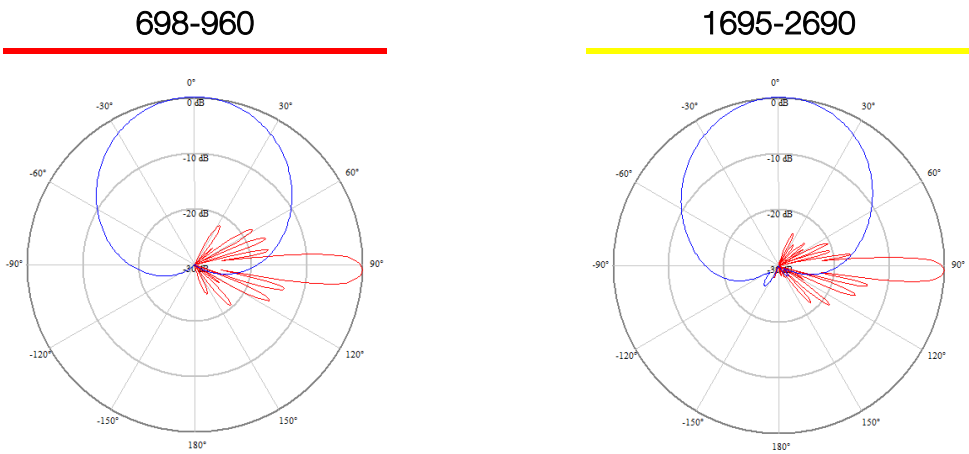
Connector Type	20 x 4.3-10 Female + 1 Cal Port	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	36.7 kg	80.9 lb
Shipping Weight	49.3 kg	108.7 lb
Antenna Dimensions (H x W x D)	2100 x 498 x 197 mm	82.7 x 19.6 x 7.8 in
Packing Size (H x W x D)	2240 x 575 x 370 mm	88.2 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	836 / 312 / 1013 N	188 / 70 / 228 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



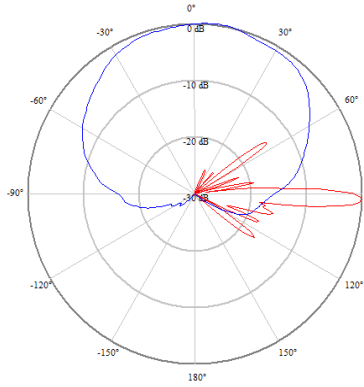
2G4W4XBD-01

20 Port Antenna / 2L4H + 2.3-3.8 TDD / 2.1m

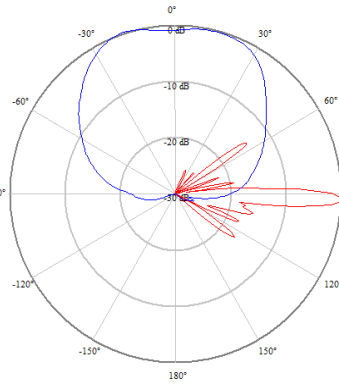
PROSE

2300-2690

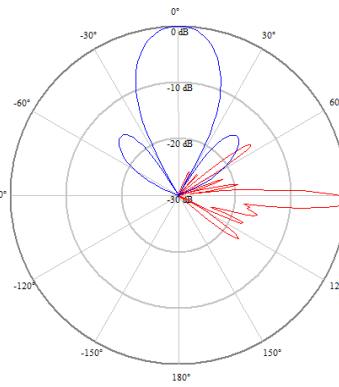
Column beam



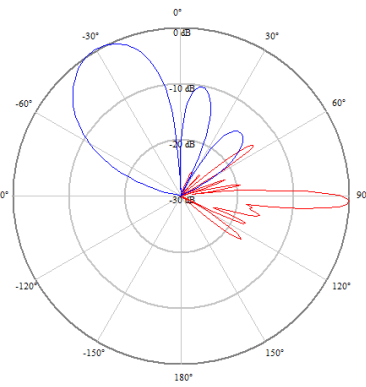
Broadcast beam



0° service beam

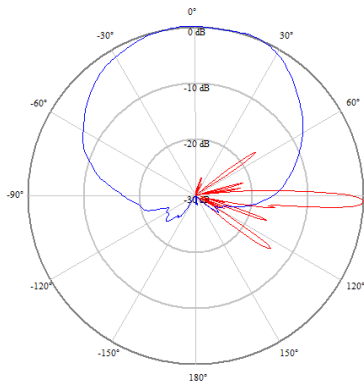


30° service beam

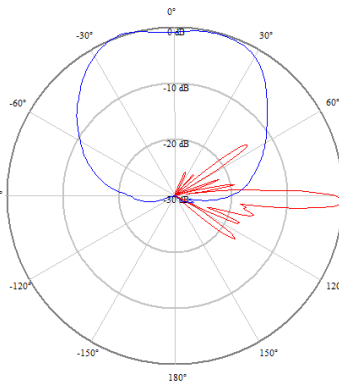


3300-3800

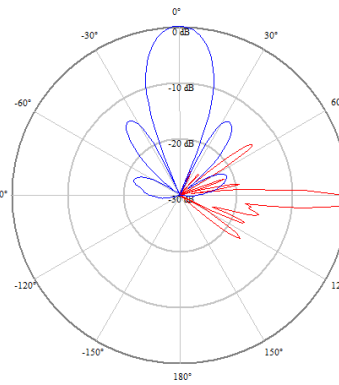
Column beam



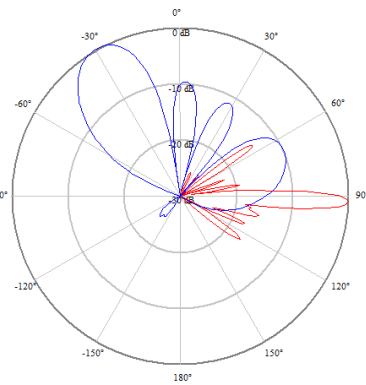
Broadcast beam



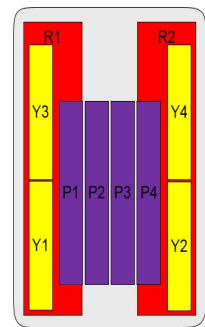
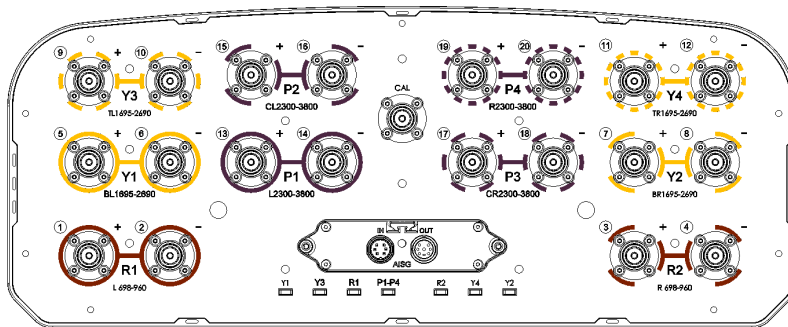
0° service beam



30° service beam



Layout



2G4W4XBD-01

20 Port Antenna / 2L4H + 2.3-3.8 TDD / 2.1m

PROSE

Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	3	MRET	RB.....XYyxxxx-MM
● R2	3 - 4	698-960	5	MRET	RB.....XYyxxxx-MM
● Y1	5 - 6	1695-2690	1	MRET	RB.....XYyxxxx-MM
● Y2	7 - 8	1695-2690	7	MRET	RB.....XYyxxxx-MM
● Y3	9 - 10	1695-2690	2	MRET	RB.....XYyxxxx-MM
● Y4	11 - 12	1695-2690	6	MRET	RB.....XYyxxxx-MM
● P1-P4	13 - 20	2300-3800	4	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G5W4RHF-01

22 Port Antenna / 2L5H + 2.3-2.7G TDD / 2.6m

PROSE

- 2x(698-960) + 5x(1695-2690) + 4x(2300-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (FDD) (BASTA)

Frequency(MHz)		2 x (698-960)			2 x (1695-2690)			
		698-824	791-894	880-960	1695-1920	1920-2180	2300-2400	2500-2690
Gain	Mid Tilt	15.5	15.8	16.2				
	Over All Tilts	15.4±0.5	15.8±0.5	16.1±0.5				
	Mid Tilt				16.5	17.1	17.2	17.7
	Over All Tilts				16.4±0.4	17.0±0.5	17.2±0.4	17.6±0.4
Polarization		° ±45°						

Horizontal Pattern

3dB Azimuth Beamwidth	°	66±6	62±5	60±5	68±6	66±6	62±3	60±3
Front to Back Ratio, Total Power, 180°±30°		> 26	> 28	> 26	> 28	> 28	> 26	> 26
Cross-Polar Discrimination	dB							
At Mechanical Boresight 0°		> 24	> 22	> 22	> 20	> 22	> 22	> 20
Over Sector ±60°		> 12	> 10	> 10	> 10	> 8	> 6	> 6

Vertical Pattern

3dB Elevation Beamwidth	°	8.5±0.8	7.6±0.6	6.9±0.6	7.1±0.4	6.2±0.4	5.7±0.2	5.2±0.3
Electrical Downtilt		2-12			2-12			
1st Upper Sidelobe Suppression	dB	> 16			> 16			

RF Parameters

VSWR		< 1.5	
Intra - Cluster Isolation	dB	> 26	> 26
Inter - Cluster Isolation		> 28	> 28
3rd PIM(2 x 43 dBm)	dBc	< -150	
Impedance	Ω	50	
Maximum Effective Power Per Port	W	500	300

Electrical Data (TDD) (BASTA)

Frequency(MHz)

2300-2690

Polarization	°	±45°
Electrical Downtilt		2-12

Single column beam

Gain over All Tilts	dBi	15.3±0.8
Horizontal 3dB Beamwidth	°	90±10
Vertical 3dB Beamwidth		5.3±0.4
Cross-Polar Discrimination at Mechanical Boresight		> 18
1st Upper Sidelobe Suppression	dB	> 16
Front to Back Ratio, Total Power, 180° ±30°		> 23

Broadcast 65° beam

Gain over All Tilts	dBi	16.9±0.5
Horizontal 3dB Beamwidth	°	65±10
Cross-Polar Discrimination at Mechanical Boresight		> 18
Front to Back Ratio, Total Power, 180° ±30°	dB	> 25

Service beam

0° direction Gain over All Tilts	dBi	21.0±0.5
0° direction Horizontal 3dB Beamwidth	°	25±2
0° direction Cross-Polar Discrimination at Mechanical Boresight		> 18
0° direction Front to Back Ratio, Total Power, 180° ±30°	dB	> 25
30° direction Gain over All Tilts	dBi	20.0±0.5
30° direction Horizontal 3dB Beamwidth	°	27±2

Soft Split beam

Gain over All Tilts	dBi	18.5±0.5
Horizontal 3dB Beamwidth	°	32±2
Cross-Polar Discrimination at Beampeak		> 18
Horizontal Sidelobe	dB	> 20

RF Parameters

Coupling Factor (Cal Port to RF Ports)		-26 ±2
Max Amp. Tolerance (Cal Port to RF Ports)	dB	0.9
Max Phase Tolerance (Cal Port to RF Ports)	°	7
VSWR		< 1.5
Intra - Cluster Isolation		25
Inter - Cluster Isolation	dB	26
Impedance	Ω	50
Maximum Effective Power Per Port	W	75

— Maximum Effective Power Whole Antenna: 250 W.

Mechanical Data (BASTA)

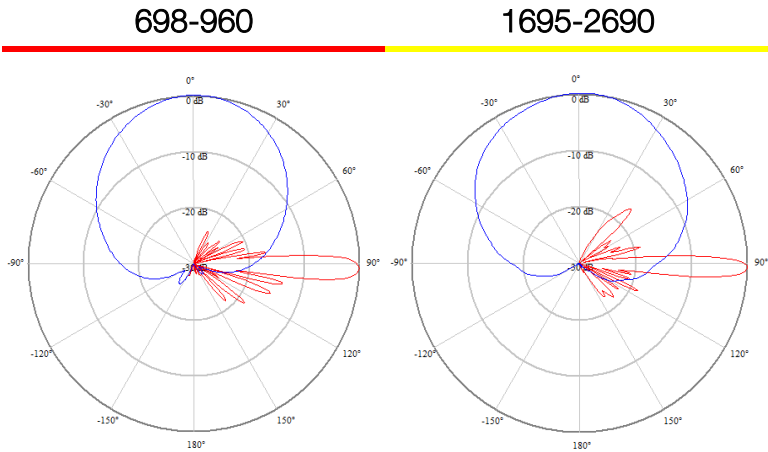
Connector Type	22 x 4.3-10 Female 1 x Cal	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	54 kg	119.0 lb
Shipping Weight	74.5 kg	164.2 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2840 x 575 x 370 mm	111.8 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

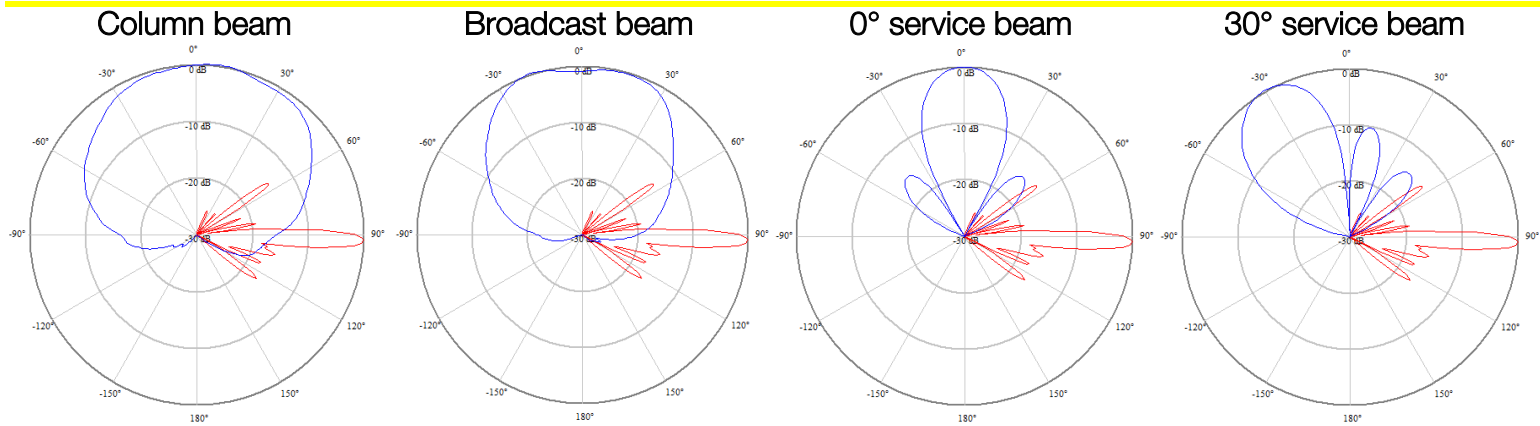


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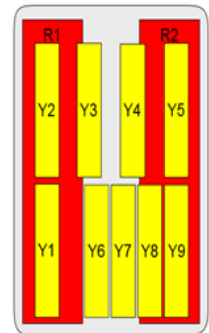
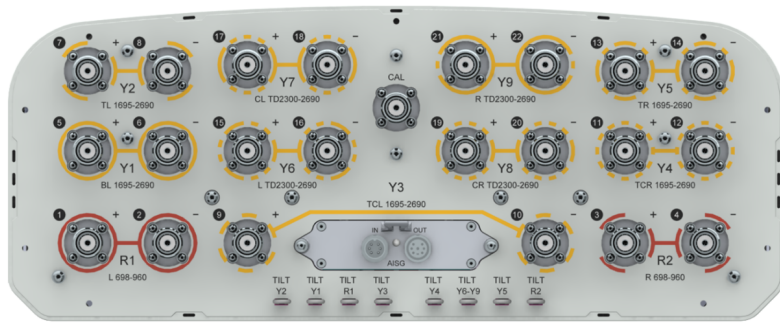
22 Port Antenna / 2L5H + 2.3-2.7G TDD / 2.6m

PROSE

2300-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	3	MRET	RB.....XYXxxxx-MM
● R2	3 - 4	698-960	8	MRET	RB.....XYXxxxx-MM
● Y1	5 - 6	1695-2690	2	MRET	RB.....XYXxxxx-MM
● Y2	7 - 8	1695-2690	1	MRET	RB.....XYXxxxx-MM
● Y3	9 - 10	1695-2690	4	MRET	RB.....XYXxxxx-MM
● Y4	11 - 12	1695-2690	5	MRET	RB.....XYXxxxx-MM
● Y5	13 - 14	1695-2690	7	MRET	RB.....XYXxxxx-MM
● Y6 - Y9	15 - 16	3300-3800	6	MRET	RB.....XYXxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	185-1	11.1 kg / 24.5 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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ACG4W4RBD-07

22 Port Antenna / 3L4H+2.6G TDD / 2.0m

PROSE

- (698-862) +(880-960) +(698-960) + 4 x (1695-2690) + 4 x (2300-2690) MHz
- Integrated RET (AISG 2.0 Compliant)
- 4.3-10 Connectors & Cluster Connector

Electrical Data (FDD) (BASTA)

Frequency(MHz)		(698-862) // (880-960) // (698-960)			4 x (1695-2690)					
		698-806	790-862	880-960	1695-1880	1900-2180	2300-2400	2500-2690		
Gain	R1/Y1/Y2	Mid Tilt	dBi	14.4	14.5		15.0	15.6	16.2	16.4
		Over All Tilts		14.3±0.6	14.4±0.4		14.9±0.5	15.5±0.5	16.1±0.5	16.3±0.4
	R2/Y3/Y4	Mid Tilt		14.6			15.0	15.3	15.8	15.9
		Over All Tilts		14.5±0.5			14.9±0.5	15.3±0.5	15.7±0.6	15.8±0.5
	R3	Mid Tilt		14.7	14.9	14.9				
		Over All Tilts		14.6±0.6	14.8±0.4	14.8±0.5				
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	60±6	58±6	58±5	69±6	67±5	62±5	60±5	
Front to Back Ratio, Co-polar, 180°±30°		dB	> 23	> 25	> 25	> 24	> 26	> 26	> 26	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 20	> 20	> 17	> 18	> 18	> 18	
Over Sector ±60°			> 8	> 10	> 11	> 9	> 6	> 5	> 5	
Vertical Pattern										
3dB Elevation Beamwidth		°	10.9±0.9	9.9±1.0	8.9±0.6	9.3±0.8	8.3±0.8	7.5±0.6	7.0±0.6	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 16			> 17				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	25			25				
Inter - Cluster Isolation			28			28				
3rd PIM(2 x 43 dBm)		dBc	< -150							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300			250				

Electrical Data (TDD) (BASTA)

Frequency(MHz)		4 x (2300-2690)
		2300-2690
Polarization	°	±45°
Electrical Downtilt		2-12
Single column beam		
Gain over All Tilts	dBi	15.3±0.8
Horizontal 3dB Beamwidth	°	94±15
Vertical 3dB Beamwidth		5.2±0.6
1st Upper Sidelobe Suppression	dB	> 16
Broadcast 65° beam		
Gain over All Tilts	dBi	17.0
Horizontal 3dB Beamwidth	°	60
Cross-Polar Discrimination at Mechanical Boresight	dB	> 16
Front to Back Ratio, Co-polar, 180°±30°		> 28
Service beam		
0° direction Gain over All Tilts	dBi	20
0° direction Horizontal 3dB Beamwidth	°	26
30° direction Gain over All Tilts	dBi	19
30° direction Horizontal 3dB Beamwidth	°	28
RF Parameters		
Coupling Factor (Cal Port to RF Ports)	dB	-26 ±2
Max Amp. Tolerance (Cal Port to RF Ports)		0.9
Max Phase Tolerance (Cal Port to RF Ports)	°	7
VSWR		< 1.5
Intra - Cluster Isolation	dB	25
Inter - Cluster Isolation		20
Impedance	Ω	50
Maximum Effective Power per Port	W	150

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA)

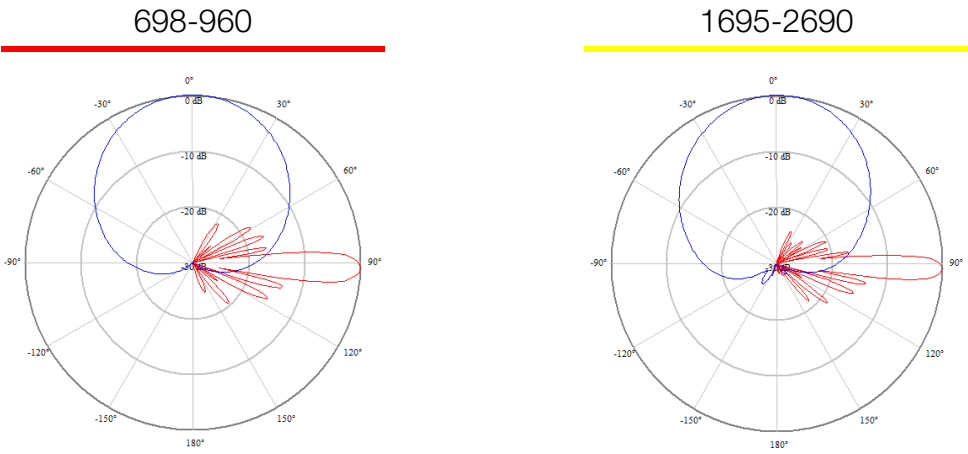
Connector Type	14 x 4.3-10 Female 1 x Cluster	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	40.4	89.1 lb
Shipping Weight	50.1	110.5 lb
Antenna Dimensions (H x W x D)	2000 x 498 x 197 mm	78.7 x 19.6 x 7.8 in
Packing Size (H x W x D)	2150 x 575 x 370 mm	84.6 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	794 / 294 / 962 N	178 / 66 / 216 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

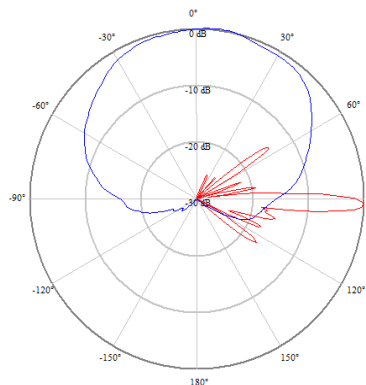
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

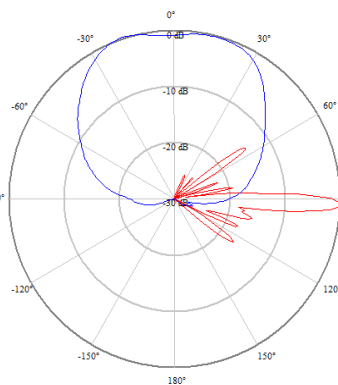


2300-2690

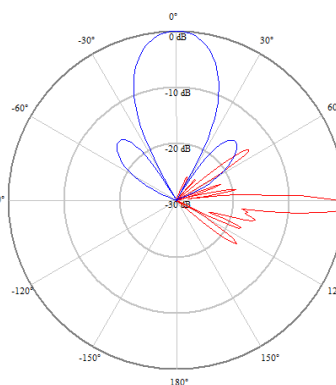
Column beam



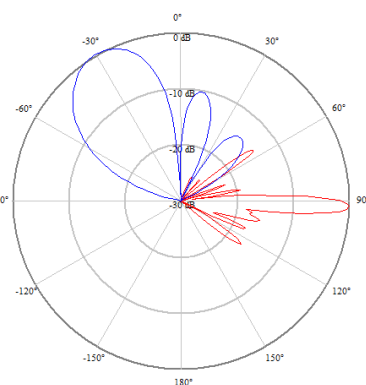
Broadcast beam



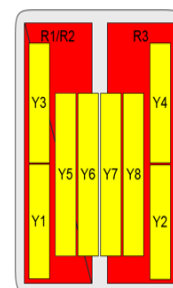
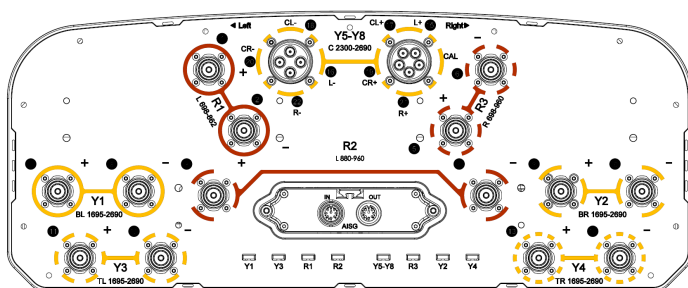
0° service beam



30° service beam



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-862	3	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	880-960	4	MRET	RB.....XYyxxxx-MM
●R3	5 - 6	698-960	6	MRET	RB.....XYyxxxx-MM
●Y1	7 - 8	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	9 - 10	1695-2690	7	MRET	RB.....XYyxxxx-MM
●Y3	11 - 12	1695-2690	2	MRET	RB.....XYyxxxx-MM
●Y4	13 - 14	1695-2690	8	MRET	RB.....XYyxxxx-MM
●Y5-Y8	15 - 22	2300-2690	5	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week, xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

ACG4W4RBF-07

22 Port Antenna / 3L4H+2.6GTDD / 2.6m

PROSE

- (698-862)+(880-960)+(698-960)+4x(1695-2690)+4x(2300-2690) MHz
- Integrated RET (AISG 2.0 Compliant)
- 4.3-10 Connectors & Cluster Connector

Electrical Data (FDD) (BASTA)

Frequency(MHz)		(698-862) // (880-960) // (698-960)			4 x (1695-2690)					
		698-806	790-862	880-960	1695-1880	1900-2180	2300-2400	2500-2690		
Gain	R1/Y1/Y2	Mid Tilt	dBi	15.4	15.6	16.3	17.0	17.7	17.8	
		Over All Tilts		15.3±0.6	15.5±0.4	16.2±0.8	16.9±0.6	17.6±0.5	17.7±0.5	
	R2/Y3/Y4	Mid Tilt		15.5		16.0	16.9	17.0	17.2	
		Over All Tilts		15.4±0.5		15.9±0.6	16.8±0.5	16.9±0.6	17.1±0.5	
	R3	Mid Tilt		15.7	16.0	15.7				
		Over All Tilts		15.6±0.6	15.9±0.4	15.7±0.5				
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	64±6	60±6	61±6	68±6	64±6	60±5	59±5	
Front to Back Ratio, Co-polar, 180°±30°		dB	> 25	> 25	> 25	> 27	> 27	> 27	> 27	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 22	> 22	> 19	> 16	> 18	> 18	> 17	
Over Sector ±60°			> 10	> 9	> 7	> 10	> 8	> 6	> 6	
Vertical Pattern										
3dB Elevation Beamwidth		°	8.7±0.7	8.0±0.6	7.2±0.5	7.2±0.6	6.3±0.6	5.5±0.4	5.0±0.4	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 16			> 17				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	26			26				
Inter - Cluster Isolation			28			28				
3rd PIM(2 x 43 dBm)		dBc	< -150							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300			250				

Electrical Data (TDD) (BASTA)

Frequency(MHz)		4 x (2300-2690)
		2300-2690
Polarization	°	±45°
Electrical Downtilt		2-12
Single column beam		
Gain over All Tilts	dBi	15.2±0.8
Horizontal 3dB Beamwidth	°	91±15
Vertical 3dB Beamwidth		5.3±0.4
1st Upper Sidelobe Suppression	dB	> 16
Broadcast 65° beam		
Gain over All Tilts	dBi	17.0
Horizontal 3dB Beamwidth	°	60
Cross-Polar Discrimination at Mechanical Boresight	dB	> 16
Front to Back Ratio, Co-polar, 180°±30°		> 28
Service beam		
0° direction Gain over All Tilts	dBi	20.0
0° direction Horizontal 3dB Beamwidth	°	26
30° direction Gain over All Tilts	dBi	19
30° direction Horizontal 3dB Beamwidth	°	28
RF Parameters		
Coupling Factor (Cal Port to RF Ports)	dB	-26 ±2
Max Amp. Tolerance (Cal Port to RF Ports)		0.9
Max Phase Tolerance (Cal Port to RF Ports)	°	7
VSWR		< 1.5
Intra - Cluster Isolation	dB	25
Inter - Cluster Isolation		20
Impedance	Ω	50
Maximum Effective Power per Port	W	150

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA)

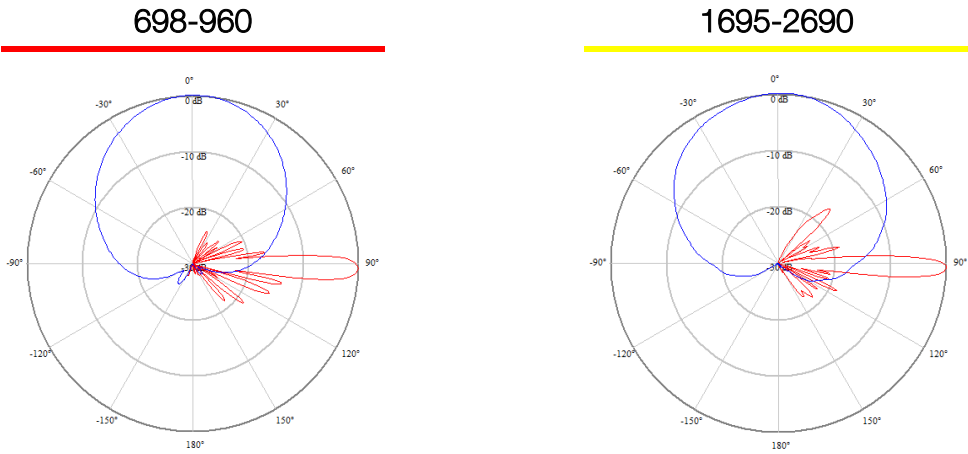
Connector Type	14 x 4.3-10 Female Cluster: 1× MQ4&MQ5	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	49.9 kg	110.0 lb
Shipping Weight	61.1 kg	134.7 lb
Antenna Dimensions (H x W x D)	2690 x 498 x 197 mm	105.9 x 19.6 x 7.8 in
Packing Size (H x W x D)	2825 x 575 x 370 mm	111.2 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	1042 / 421 / 1263 N	234 / 95 / 284 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

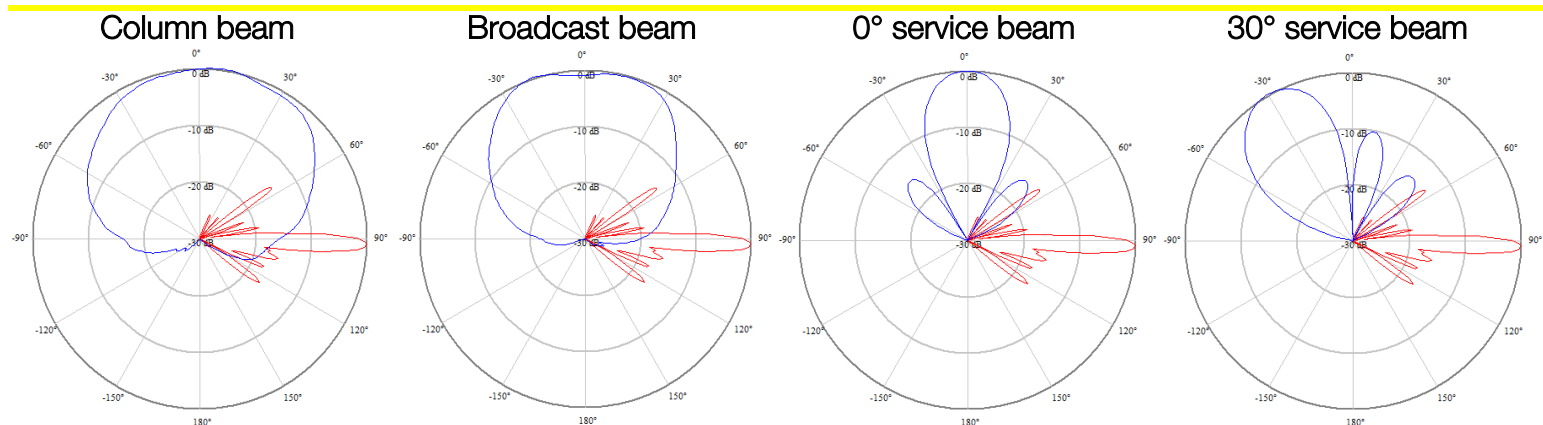


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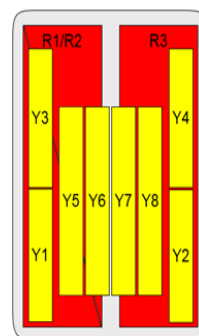
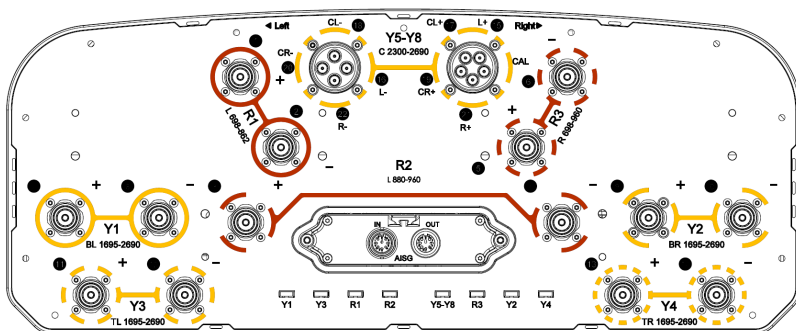
22 Port Antenna / 3L4H+2.6GTDD / 2.6m

PROSE

2300-2690



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-862	3	MRET	RB.....XYyxxxx-MM
● R2	3 - 4	880-960	4	MRET	RB.....XYyxxxx-MM
● R3	5 - 6	698-960	6	MRET	RB.....XYyxxxx-MM
● Y1	7 - 8	1695-2690	1	MRET	RB.....XYyxxxx-MM
● Y2	9 - 10	1695-2690	7	MRET	RB.....XYyxxxx-MM
● Y3	11 - 12	1695-2690	2	MRET	RB.....XYyxxxx-MM
● Y4	13 - 14	1695-2690	8	MRET	RB.....XYyxxxx-MM
● Y5-Y8	15 - 22	2300-2690	5	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G2W4W4R4TAE-07

32 Port Antenna / Hybrid 2L2H+2TB+2.6TDD+3.5TDD / 2.0m

PROSE

- 2 x (698-960) + 2 x (1710-2690) + 4 x (1710-2690) (twinbeam) MHz + 4 x (2300-2690) (TDD) + 4 x (3300-3800) (TDD)
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors + MQ4&MQ5
- Integrated diplexer in element level for TDD array, indepentend tilt control

Electrical Data (FDD) (BASTA)

Frequency(MHz)			2 x (698-960)			2 x (1710-2690)				
			698-806	790-862	880-960	1710-1900	1900-2180	2300-2400	2500-2690	
Gain	R1/R2/Y5	Mid Tilt	dBi	15.0	15.2	15.5	15.8	16.4	16.5	17.0
	-Y10	Over All Tilts		14.9±0.6	15.2±0.6	15.4±0.6	15.8±0.6	16.4±0.6	16.5±0.5	17.0±0.5
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	66±6	65±5	63±6	62±5	64±6	65±6	60±5
Beam Peak Position			dB	/	/	/	/	/	/	/
Front to Back Ratio, Total Power, 180°±30°				> 2	> 2	> 2	> 2	> 2	> 2	> 2
Cross-Polar Discrimination										
At Mechanical Boresight 0°				> 1	> 1	> 1	> 2	> 2	> 2	> 1
Over Sector -10dB				>	>	>	> 1	>	>	>
Vertical Pattern										
3dB Elevation Beamwidth			°	10.8±1.0	9.8±0.8	9.0±0.8	9.2±0.8	8.0±0.8	7.2±0.6	6.3±0.6
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 1	> 1	> 1	> 1	> 1	> 1	> 1
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	25			25			
Inter - Cluster Isolation				26						
Beam Isolation				/			/			
3rd PIM(2 x 43 dBm)			dBc	< -150						
Impedance			Ω	50						
Maximum Effective Power Per Port			W	300			250			

Electrical Data (FDD) (BASTA)

4 x (1710-2690)(twinbeam)

Frequency(MHz)

		dBi	1710-1920	1920-2170	2300-2400	2500-2690
R1/R2/Y5	Mid Tilt		16.3	16.9	17.4	17.4
Gain	-Y10	Over All Tilts	16.2±0.5	16.9±0.5	17.3±0.5	17.4±0.5
Polarization		°	±45°			

Horizontal Pattern

3dB Azimuth Beamwidth	°	34±3	32±2	28±2	25±2
Beam Peak Position	dB	±29	±28	±23	±22
Front to Back Ratio, Total Power, 180°±30°		> 2	> 2	> 2	> 2
Cross-Polar Discrimination		> 2	> 2	> 1	> 1
At Mechanical Boresight 0°		> 2	> 2	> 1	> 1
Over Sector -10dB		> 1	> 1	>	> 1

Vertical Pattern

3dB Elevation Beamwidth	°	9.2±0.8	8.0±0.8	7.2±0.6	6.5±0.6
Electrical Downtilt		2-10			
1st Upper Sidelobe Suppression	dB	> 1	> 1	> 1	> 1

RF Parameters

VSWR		< 1.5
Intra - Cluster Isolation	dB	25
Inter - Cluster Isolation		26
Beam Isolation		16
3rd PIM(2 x 43 dBm)	dBc	< -150
Impedance	Ω	50
Maximum Effective Power Per Port	W	200

Electrical Data (TDD) (BASTA)

Frequency(MHz)		4 x (2300-2690)		4 x (3300-3800)	
		2300-2690		3300-3800	
Polarization	°	±45°			
Electrical Downtilt		2-12			
Single column beam					
Gain over All Tilts	dBi	14.3		14.8	
Horizontal 3dB Beamwidth	°	93±15		65±15	
Vertical 3dB Beamwidth		7.0±0.6		5.2±0.5	
Cross-Polar Discrimination at Mechanical Boresight	dB	> 1		> 1	
1st Upper Sidelobe Suppression		> 1		> 1	
Front to Back Ratio, Total Power, 180°±30°		> 2		> 2	
Broadcast 65° beam					
Gain over All Tilts	dBi	16.3		14.8	
Horizontal 3dB Beamwidth	°	65		65	
Cross-Polar Discrimination at Mechanical Boresight	dB	> 1		> 1	
Front to Back Ratio, Total Power, 180°±30°		> 2		> 2	
Service beam					
0° direction Gain over All Tilts	dBi	20.1		19.4	
0° direction Horizontal 3dB Beamwidth	°	25		19	
30° direction Gain over All Tilts	dBi	19.3		18.6	
30° direction Horizontal 3dB Beamwidth	°	29		23	
Soft split beam					
Coupling Factor (Cal Port to RF Ports)	dB	-26±2			
Max Amp. Tolerance (Cal Port to RF Ports)		0.9			
Max Phase Tolerance (Cal Port to RF Ports)	°	9			
RF Parameters					
VSWR		< 1.5			
Intra - Cluster Isolation	dB	25			
Inter - Cluster Isolation		20			
Impedance	Ω	50			
Maximum Effective Power Per Port	W	75			

2G2W4W4R4TAE-07

32 Port Antenna / Hybrid 2L2H+2TB+2.6TDD+3.5TDD / 2.0m

PROSE

Mechanical Data (BASTA)

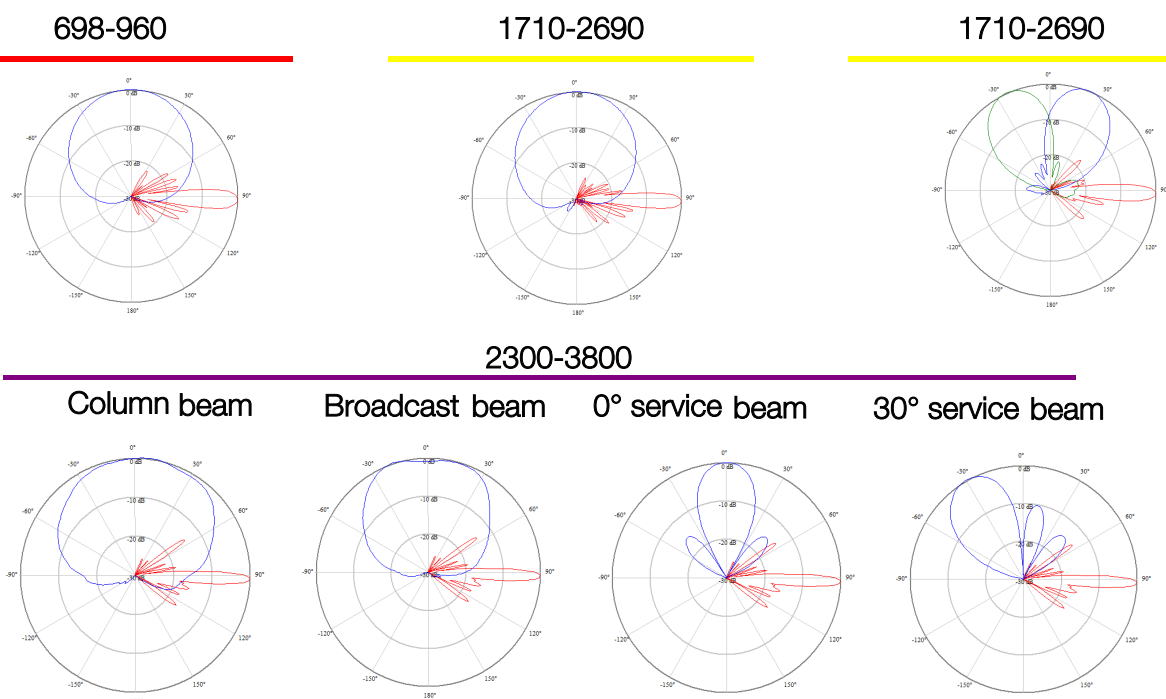
Connector Type	16 x 4.3-10 Female + 4 x Cluster	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	48.7 kg	107.4 lb
Shipping Weight	58.6 kg	129.2 lb
Antenna Dimensions (H x W x D)	2070 x 580 x 210 mm	81.5 x 22.8 x 8.3 in
Packing Size (H x W x D)	2220 x 725 x 345 mm	87.4 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	626 / 287 / 987 N	141 / 65 / 222 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

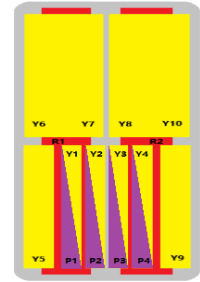
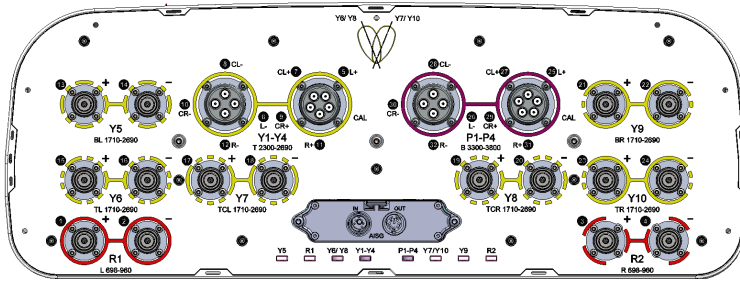


2G2W4W4R4TAE-07

32 Port Antenna / Hybrid 2L2H+2TB+2.6TDD+3.5TDD / 2.0m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
● R1	1 - 2	698-960	2	MRET	RB.....XXYxxxx-MM
● R2	3 - 4	698-960	8	MRET	RB.....XXYxxxx-MM
● Y1	5 - 6	2300-2690	4	MRET	RB.....XXYxxxx-MM
● Y2	7 - 8	2300-2690	4	MRET	RB.....XXYxxxx-MM
● Y3	9 - 10	2300-2690	4	MRET	RB.....XXYxxxx-MM
● Y4	11 - 12	2300-2690	4	MRET	RB.....XXYxxxx-MM
● Y5	13 - 14	1710-2690	1	MRET	RB.....XXYxxxx-MM
● Y6	15 - 16	1710-2690	3	MRET	RB.....XXYxxxx-MM
● Y7	17 - 18	1710-2690	6	MRET	RB.....XXYxxxx-MM
● Y8	19 - 20	1710-2690	3	MRET	RB.....XXYxxxx-MM
● Y9	21 - 22	1710-2690	7	MRET	RB.....XXYxxxx-MM
● Y10	23 - 24	1710-2690	6	MRET	RB.....XXYxxxx-MM
● P1	25 - 26	3300-3800	5	MRET	RB.....XXYxxxx-MM
● P2	27 - 28	3300-3800	5	MRET	RB.....XXYxxxx-MM
● P3	29 - 30	3300-3800	5	MRET	RB.....XXYxxxx-MM
● P4	31 - 32	3300-3800	5	MRET	RB.....XXYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

2G4WFC-21D-N43

12 Port Antenna / 2L4H / 1.5m

PROSE

- 2x(698-960) + 4x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors
- Y1-Y4 Support FDD Beamforming

Electrical Data (BASTA 12.0)

Frequency(MHz)		2×(698-960)			4×(1695-2690)					
		698-806	790-862	880-960	1695-1880	1920-2200	2300-2400	2500-2690		
Gain	R1/R2	Mid Tilt	dBi	13.5	13.6	13.8				
		Over All Tilts		13.4±0.5	13.6±0.5	13.7±0.5				
	Y1/Y2/Y3	Mid Tilt					14.8	15.7	16.2	16.5
	/Y4	Over All Tilts					14.8±0.8	15.6±0.8	16.2±0.8	16.4±0.8
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	69±6	66±5	64±5	93±15	88±12	74±8	69±15	
Front to Back Ratio, Co-pol, 180°±30°		dB	> 24	> 25	> 25	> 25	> 25	> 25	> 25	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 20	> 20	> 15	> 17	> 20	> 20	
Over Sector ±60°			> 9	> 9	> 9	> 9	> 9	> 7	> 4	
Vertical Pattern										
3dB Elevation Beamwidth		°	15.9±1.3	15.0±0.7	14.1±0.9	7.7±0.7	6.9±0.5	6.0±0.4	5.4±0.4	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 16			> 16				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	> 25			> 25				
Inter - Cluster Isolation			> 25			> 22				
3rd PIM(2 x 43 dBm)		dBc	< -153							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300			250				

— Maximum Effective Power Whole Antenna: 1000 W.

5G NR Electrical Properties

Frequency(MHz)	1695-2690				
		1695-1880	1920-2200	2300-2400	2500-2690
Single column beam					
Gain	dBi	14.8±0.8	15.6±0.8	16.2±0.8	16.4±0.8
Cross polar ratio (0°)	dB	16	16	16	16
Front to back ratio	dB	24	25	25	25
Vertical 3dB beam width	°	7.7±0.7	6.9±0.5	6.0±0.4	5.4±0.4
Side lobe suppression for frist side lobe above main beam	dB	16	16	16	16
NR Broadcast beam					
Gain	dBi	16.3	16.7	16.7	16.8
Cross polar ratio (0°)	°	16	16	16	16
Front to back ratio	dB	24	25	25	25
Vertical 3dB beam width	°	7.7±0.7	6.9±0.5	6.0±0.4	5.4±0.4
NR Service beam					
0°direct beam gain	dBi	20.3	21.2	22.0	22.0
0°direction beam horizontal 3dB beam width	°	25	23	20	18
30°direction beam gain	dB	19.6	20.4	20.0	20.0
30°direction beam horizontal 3dB beam width	dB	28	26	24	22

Mechanical Data (BASTA 12.0)

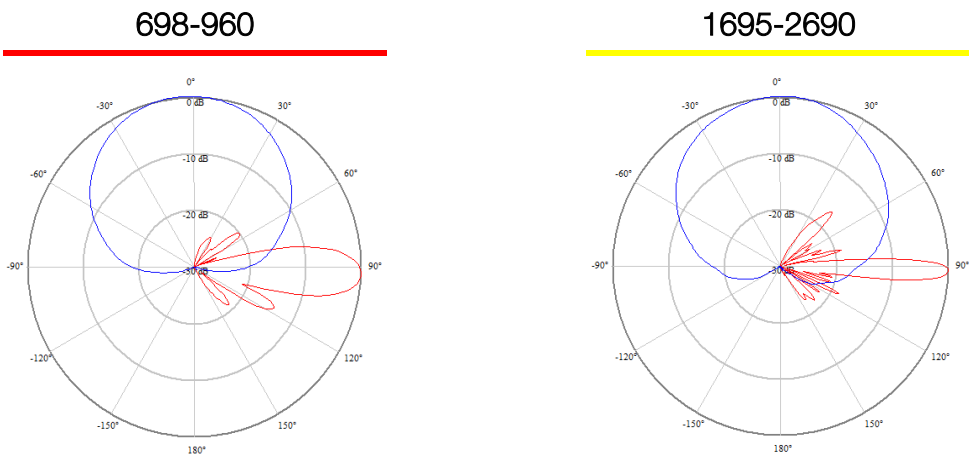
Connector Type	12 x 4.3-10 Female Cal:1 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	MRPP	
Radome Color	Light Grey	
Antenna Net Weight	22.9 kg	50.5 lb
Shipping Weight	31.1 kg	68.6 lb
Antenna Dimensions (H x W x D)	1530 x 429 x 199 mm	60.2 x 16.9 x 7.8 in
Packing Size (H x W x D)	1665 x 538 x 358 mm	65.6 x 21.2 x 14.1 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	409 / 225 / 541 N	92 / 51 / 122 lbf
Mast Diameter Supported	50 - 115 mm	2.0 - 4.5 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 12.0)

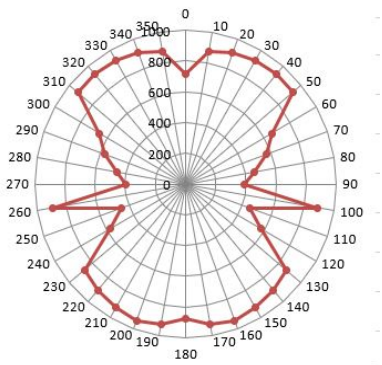
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

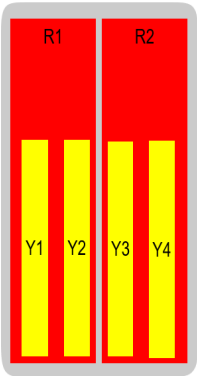
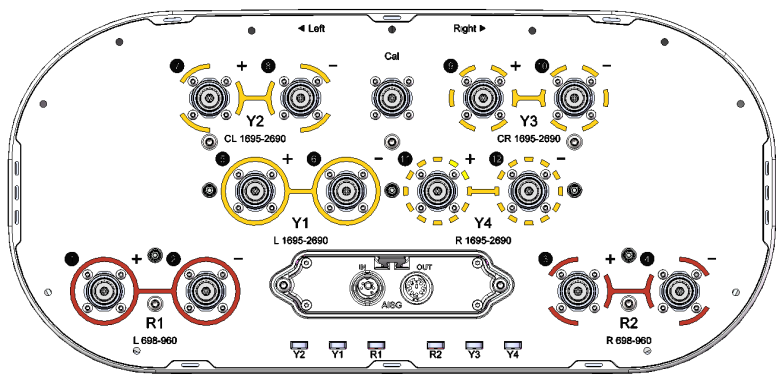


Polar Chart

Wind Load @150 km/h



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	3	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	698-960	4	MRET	RB.....XYyxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYyxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y3	9 - 10	1695-2690	5	MRET	RB.....XYyxxxx-MM
●Y4	11 - 12	1695-2690	6	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4WFD-21D-N43

12 Port Antenna / 2L4H / 2.0m

PROSE

- 2x(698-960) + 4x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors
- Y1-Y4 Support FDD Beamforming

Electrical Data (BASTA 12.0)

Frequency(MHz)		2x(698-960)			4x(1695-2690)					
		698-806	790-862	880-960	1695-1880	1920-2200	2300-2400	2500-2690		
Gain	R1/R2	Mid Tilt	dBi	14.5	14.8	14.8				
		Over All Tilts		14.4±0.5	14.7±0.5	14.7±0.5				
	Y1/Y2/Y3	Mid Tilt					15.7	16.7	17.3	17.2
	/Y4	Over All Tilts					15.6±0.8	16.6±0.8	17.2±0.8	17.2±0.8
Polarization		°	±45°							
Horizontal Pattern										
3dB Azimuth Beamwidth		°	64±6	60±5	57±5	94±15	90±12	73±8	68±15	
Front to Back Ratio, Co-pol, 180°±30°		dB	> 24	> 25	> 25	> 25	> 25	> 25	> 25	
Cross-Polar Discrimination At Mechanical Boresight 0°			> 21	> 21	> 21	> 18	> 18	> 18	> 18	
Ratio Sector ±60°			> 10	> 9	> 9	> 10	> 10	> 7	> 7	
Vertical Pattern										
3dB Elevation Beamwidth		°	11.4±1.0	10.6±0.5	9.5±0.6	5.3±0.5	4.8±0.5	4.3±0.4	4.0±0.4	
Electrical Downtilt			2-12			2-12				
1st Upper Sidelobe Suppression		dB	> 16			> 16				
RF Parameters										
VSWR			< 1.5							
Intra - Cluster Isolation		dB	> 25			> 25				
Inter - Cluster Isolation			> 25			> 22				
3rd PIM(2 x 43 dBm)		dBc	< -153							
Impedance		Ω	50							
Maximum Effective Power per Port		W	300			250				

— Maximum Effective Power Whole Antenna: 1000 W.

5G NR Electrical Properties

Frequency(MHz)		1695-2690			
		1695-1880	1920-2200	2300-2400	2500-2690
Single column beam					
Gain	dBi	15.6±0.8	16.6±0.8	17.2±0.8	17.2±0.8
Cross polar ratio (0°)	dB	16	16	16	16
Front to back ratio	dB	24	25	25	25
Vertical 3dB beam width	°	5.3±0.5	4.8±0.5	4.3±0.4	4.0±0.4
Side lobe suppression for frist side lobe above main beam	dB	16	16	16	16
NR Broadcast beam					
Gain	dBi	17.1	17.5	17.7	17.8
Cross polar ratio (0°)	°	16	16	16	16
Front to back ratio	dB	24	25	25	25
Vertical 3dB beam width	°	5.3±0.5	4.8±0.5	4.3±0.4	4.0±0.4
NR Service beam					
0°direct beam gain	dBi	21.1	22.2	22.8	22.9
0°direction beam horizontal 3dB beam width	°	25	23	20	18
30°direction beam gain	dB	20.1	21.2	21.1	21.2
30°direction beam horizontal 3dB beam width	dB	28	26	24	22

Mechanical Data (BASTA 12.0)

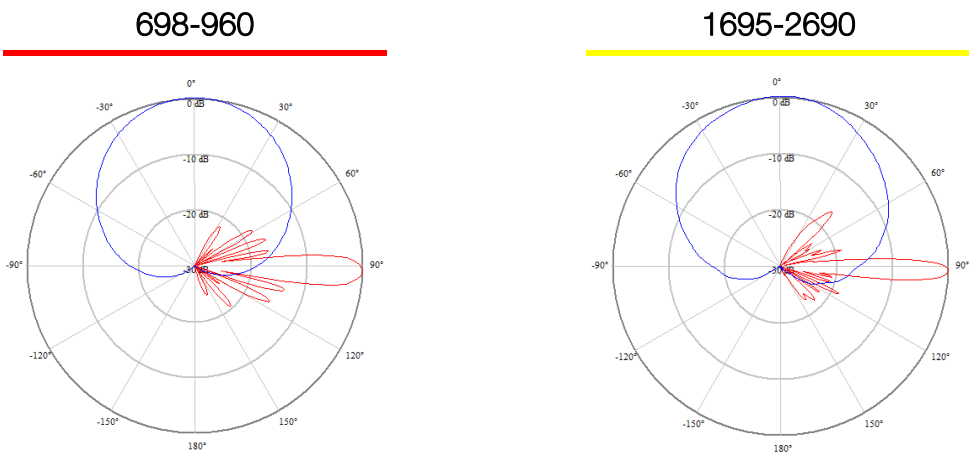
Connector Type	12 x 4.3-10 Female, 1 x 4.3-10 Cal	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	MRPP	
Radome Color	Light Grey	
Antenna Net Weight	25.6 kg	56.4 lb
Shipping Weight	35.0 Kg	77.2 lb
Antenna Dimensions (H x W x D)	1940 x 429 x 199 mm	76.4 x 16.9 x 7.8 in
Packing Size (H x W x D)	2070 x 538 x 358 mm	81.5 x 21.2 x 14.1 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	518 / 285 / 686 N	116 / 64 / 154 lbf
Mast Diameter Supported	50 - 122 mm	2.0 - 4.8 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 12.0)

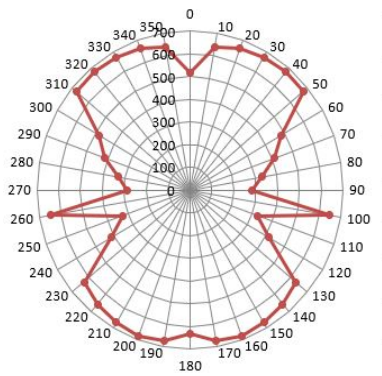
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

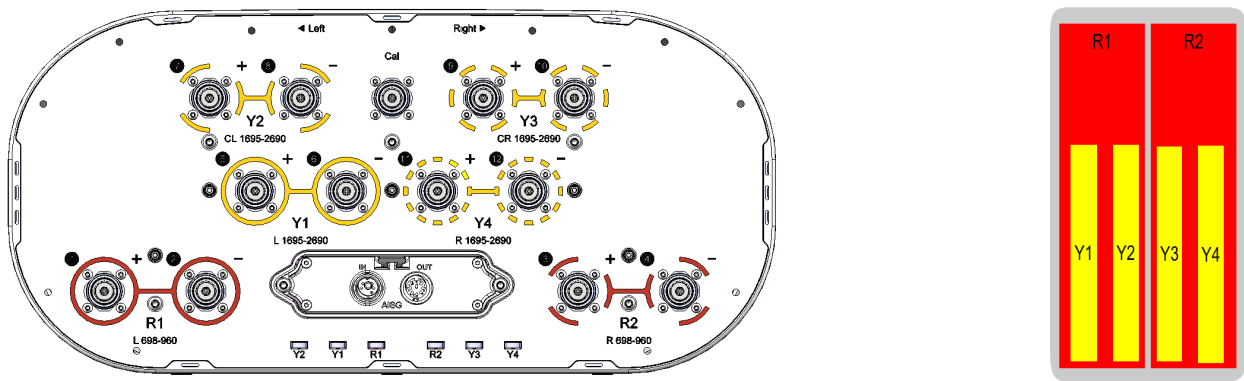


Polar Chart

Wind Load @150 km/h



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	3	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	4	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYYxxxx-MM
●Y3	9 - 10	1695-2690	5	MRET	RB.....XYYxxxx-MM
●Y4	11 - 12	1695-2690	6	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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Model	Port	Antenna Type	Frequency(MHz)	Gain(dBi)	3dB HBW	L x W x D(mm)	Page
2WC-71-H	4	Panel	2 x (1695-2690)	19.7	65	1385 x 293 x 129	404
2D2WE-71-H	8	Panel	2 x (617-894) 2 x (1695-2690)	16.6/19.6	65-65	2437 x 580 x 210	407
2D4WE-71-H	12	Panel	2 x (617-894) 4 x (1695-2690)	16.6/19.5	65-65	2437 x 580 x 210	410
2G2WD-21-H	8	Panel	2 x (698-960) 2 x (1695-2690)	15.5/19.3	65-65	1995 x 448 x 210	413
2G4WD-21-H	12	Panel	2 x (698-960) 4 x (1695-2690)	15.6/19.0	65-65	2000 x 498 x 220	417

2WC-71-H

4 Port Antenna / 2H / 1.3m

PROSE

- 2 x (1695-2690) MHz, high gain antenna
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA11.1)

Frequency(MHz)			2 x (1695-2690)					
			1695-1880	1850-1990	1920-2180	2300-2400	2490-2690	
Gain	Y1/Y2	Mid Tilt	dBi	18.3	18.6	18.8	19.4	19.7
		Over All Tilts		18.2±0.5	18.5±0.5	18.7±0.5	19.3±0.5	19.6±0.5
Polarization			°	±45°				
Horizontal Pattern								
3dB Azimuth Beamwidth			°	66±5	65±5	64±5	61±5	57±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 24	> 24	> 24	> 25	> 26
CPR @ Boresight 0°				> 24	> 24	> 24	> 24	> 20
CPR Over Sector ±60				> 13	> 12	> 9	> 6	> 7
Vertical Pattern								
3dB Elevation Beamwidth			°	6.4±0.5	5.9±0.5	5.7±0.5	4.9±0.5	4.4±0.5
Electrical Downtilt				2-12				
1st Upper Sidelobe Suppression			dB	> 15	> 15	> 16	> 18	> 18
Upper Sidelobe Suppression @ Peak to 30°				> 15	> 15	> 15	> 15	> 15
RF Parameters								
VSWR				< 1.5				
Intra - Cluster Isolation			dB	28				
3rd PIM (2 x 46 dBm)			dBc	< -153				
Impedance			Ω	50				
Maximum Effective Power Per Port			W	250				

— Maximum Effective Power Whole Antenna: 800 W.

2WC-71-H

4 Port Antenna / 2H / 1.3m

PROSE

Mechanical Data (BASTA11.1)

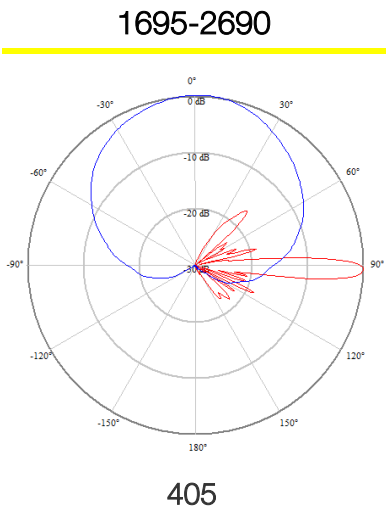
Connector Type	4 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	MRPP	
Radome Color	Light Grey	
Antenna Net Weight	13 kg	28.7 lb
Antenna Dimensions (H x W x D)	1385 x 293 x 129 mm	54.5 x 11.5 x 5.1 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	251 / 102 / 257 N	56 / 23 / 58 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA11.1)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

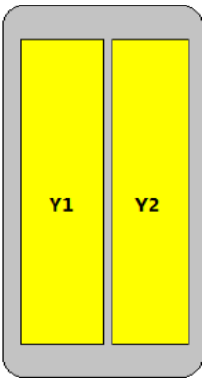
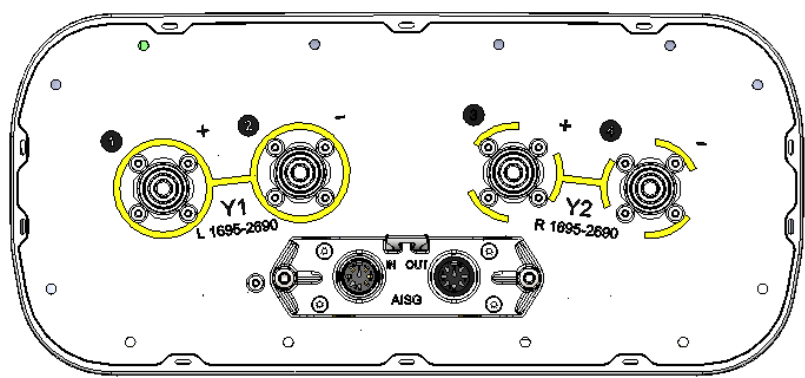


2WC-71-H

4 Port Antenna / 2H / 1.3m

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●Y1	1 - 2	1695-2690	1	MRET	RB.....XXYxxxx-MM
●Y2	3 - 4	1695-2690	2	MRET	RB.....XXYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-T750-L1	2.4 kg / 5.3 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2D2WE-71-H

8 Port Antenna / 4L4H / 8ft

PROSE

- 4x (617-894) + 4x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)			4x (617-894)			4x (1695-2690)				
			617-698	698-806	806-894	1695-1900	1900-2180	2300-2500	2500-2690	
Gain	R1/R2/Y1 /Y2	Mid Tilt Over All Tilts	dBi	15.9	16.6	16.6	18.4	18.6	19.2	19.6
				15.6±0.5	16.4±0.4	16.4±0.3	18.0±0.5	18.7±0.4	18.9±0.3	19.3±0.5
Polarization			°	±45°						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	66±6	60±4	60±7	61±5	57±4	57±7	56±6
Front to Back Ratio, Total Power, 180°±30°			dB	> 21	> 22	> 22	> 24	> 26	> 28	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°				> 20	> 25	> 20	> 19	> 20	> 20	> 19
Over Sector ±60°				> 12	> 12	> 10	> 6	> 4	> 5	> 8
Vertical Pattern										
3dB Elevation Beamwidth			°	10±0.7	8.7±0.8	7.8±0.5	5.8±0.5	5.2±0.5	4.5±0.4	4.1±0.3
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 15	> 15	> 15	> 15	> 15	> 15	> 15
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	25			25			
Inter - Cluster Isolation				25						
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power per Port			W	300			200			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA)

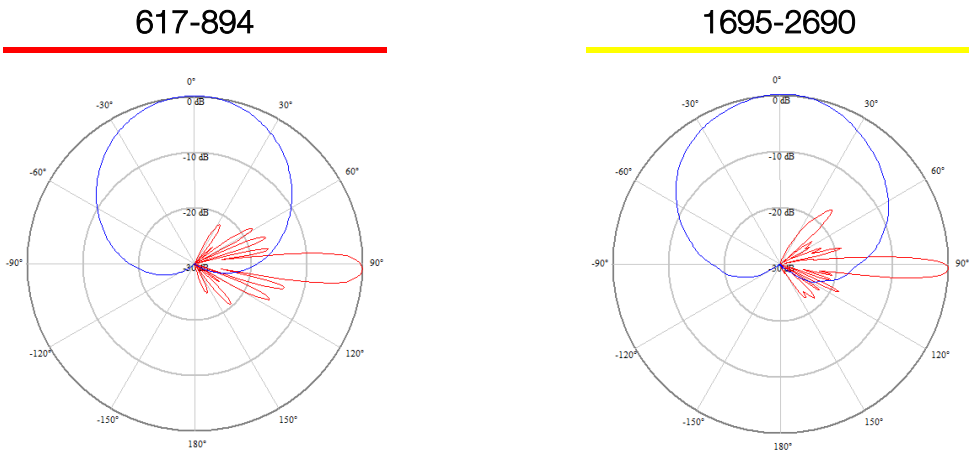
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	39 kg	98.8 lb
Shipping Weight	59.0 kg	130.1 lb
Antenna Dimensions (H x W x D)	2437 x 580 x 210 mm	95.9 x 22.8 x 8.3 in
Packing Size (H x W x D)	2587 x 725 x 345 mm	101.9 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	658 / 308 / 1038 N	148 / 69 / 233 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

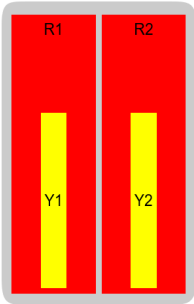
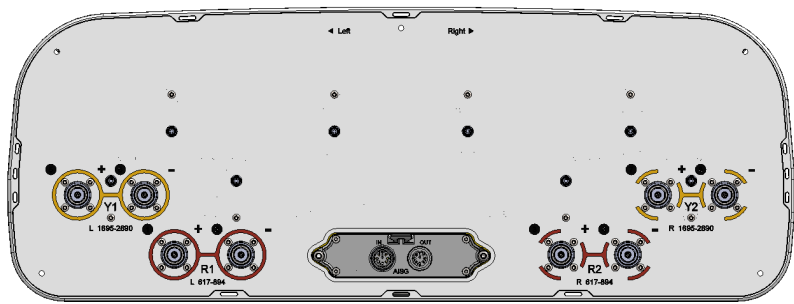


2D2WE-71-H

8 Port Antenna / 4L4H / 8ft

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	1	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	617-894	4	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2D4WE-71-H

12 Port Antenna / 4L8H / 8ft

PROSE

- 4x (617-894) + 8x (1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)			4x (617-894)			8x (1695-2690)			
			617-698	698-806	806-894	1695-1900	1900-2180	2300-2500	2500-2690
Gain	R1/R2/Y1 Mid Tilt	dBi	15.9	16.6	16.6	18.4	18.6	19.2	19.6
	Y2/Y3/Y4 Over All Tilts		15.8±0.5	16.5±0.4	16.5±0.3	18.3±0.5	18.6±0.4	19.1±0.3	19.5±0.5
Polarization		°	±45°						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	62±5	58±4	59±8	61±5	57±4	57±7	56±6
Front to Back Ratio, Total Power, 180°±30°		dB	> 23	> 23	> 22	> 26	> 27	> 29	> 29
Cross-Polar Discrimination At Mechanical Boresight 0°			> 20	> 25	> 20	> 20	> 20	> 21	> 21
Over Sector ±60°			> 12	> 12	> 10	> 5	> 4	> 7	> 8
Vertical Pattern									
3dB Elevation Beamwidth		°	10±0.7	8.7±0.8	7.8±0.5	5.8±0.5	5.2±0.5	4.5±0.4	4.1±0.3
Electrical Downtilt			2-12			2-12			
1st Upper Sidelobe Suppression		dB	> 15	> 15	> 15	> 15	> 15	> 15	> 15
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	25			25			
Inter - Cluster Isolation			25						
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power per Port		W	300			200			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA)

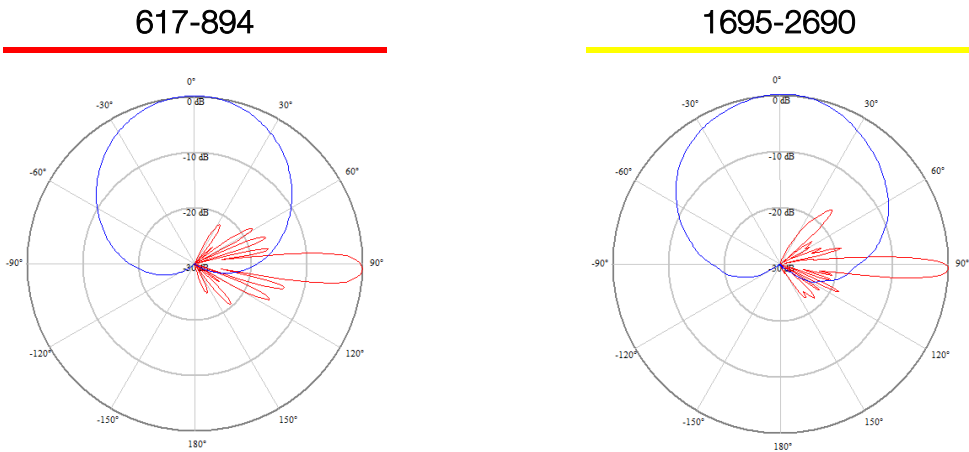
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	44.8 kg	98.8 lb
Shipping Weight	59.0 kg	130.1 lb
Antenna Dimensions (H x W x D)	2437 x 580 x 210 mm	95.9 x 22.8 x 8.3 in
Packing Size (H x W x D)	2587 x 725 x 345 mm	101.9 x 28.5 x 13.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	658 / 308 / 1038 N	148 / 69 / 233 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

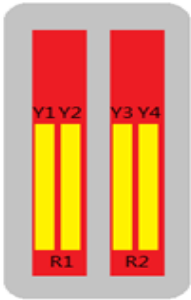
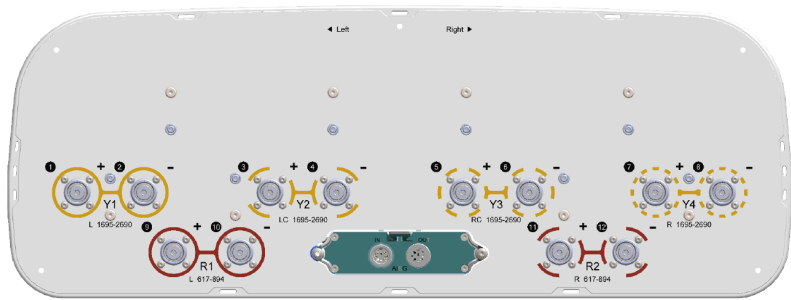


2D4WE-71-H

12 Port Antenna / 4L8H / 8ft

PROSE

Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	617-894	2	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	617-894	2	MRET	RB.....XYyxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y2	7 - 8	1695-2690	1	MRET	RB.....XYyxxxx-MM
●Y3	9 - 10	1695-2690	3	MRET	RB.....XYyxxxx-MM
●Y4	11 - 12	1695-2690	3	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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2G2WD-21-H

8 Port Antenna / 2L2H / 2.0m

PROSE

- 2x(698-960) + 2x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors
- SLLP application in middle band & low band

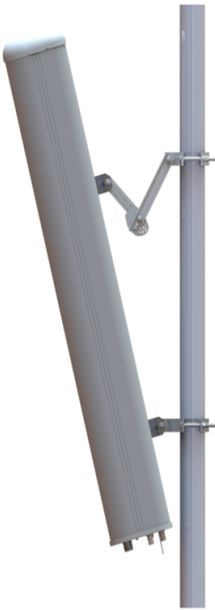
Electrical Data (BASTA)

Frequency(MHz)		2x(698-960)			2x(1695-2690)				
		698-806	790-862	880-960	1695-1880	1920-2200	2300-2400	2500-2690	
Gain	R1/R2 Mid Tilt	dBi	15.0	15.3	15.4				
	Over All Tilts		14.9±0.6	15.2±0.6	15.4±0.6				
	Y1/Y2 Mid Tilt					18.8	19.2	19.7	20.1
	Over All Tilts					18.0±0.5	18.5±0.5	18.9±0.5	19.0±0.5
Polarization		°	±45						
Horizontal Pattern									
3dB Azimuth Beamwidth		°	65±6	63±5	64±5	65±6	63±6	60±6	58±5
Front to Back Ratio, Total Power, 180°±30°		dB	> 21	> 22	> 22	> 23	> 24	> 24	> 24
Cross-Polar Discrimination									
At Mechanical Boresight 0°			> 16	> 18	> 18	> 16	> 18	> 18	> 18
Over Sector ±60°			> 10	> 8	> 7	> 8	> 6	> 4	> 4
Vertical Pattern									
3dB Elevation Beamwidth		°	10.7±0.8	9.7±0.7	8.7±0.7	5.8±0.5	5.2±0.5	4.4±0.4	4.1±0.4
Electrical Downtilt			2-12			2-12			
1st Upper Sidelobe Suppression		dB	> 15			> 15			
RF Parameters									
VSWR			< 1.5						
Intra - Cluster Isolation		dB	> 25			> 25			
Inter - Cluster Isolation			> 25			> 25			
3rd PIM(2 x 43 dBm)		dBc	< -153						
Impedance		Ω	50						
Maximum Effective Power per Port		W	300			250			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA 12.0)

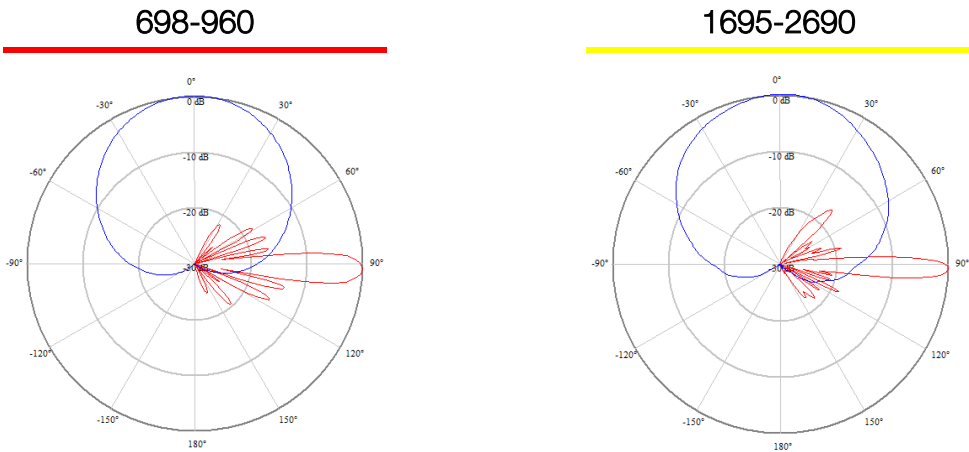
Connector Type	8 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	FRP	
Radome Color	Light Grey	
Antenna Net Weight	29.5 kg	60.0 lb
Shipping Weight	36 kg	79.4 lb
Antenna Dimensions (H x W x D)	1995 x 448 x 210 mm	78.5 x 17.6 x 8.3 in
Packing Size (H x W x D)	2135 x 560 x 370 mm	84.1 x 22.0 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	474 / 444 / 756N	107 / 100 / 170 lbf
Mast Diameter Supported	50 - 122 mm	2.0 - 4.8 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



RET Specification (BASTA 12.0)

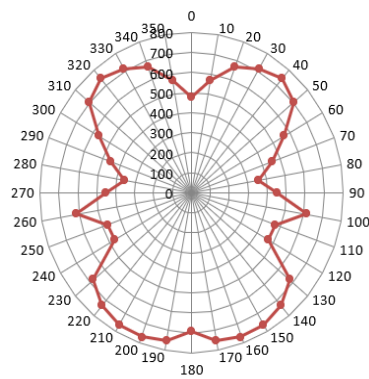
Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)

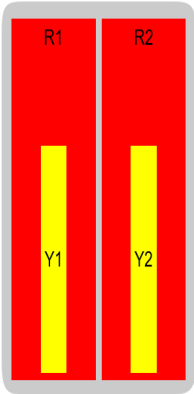
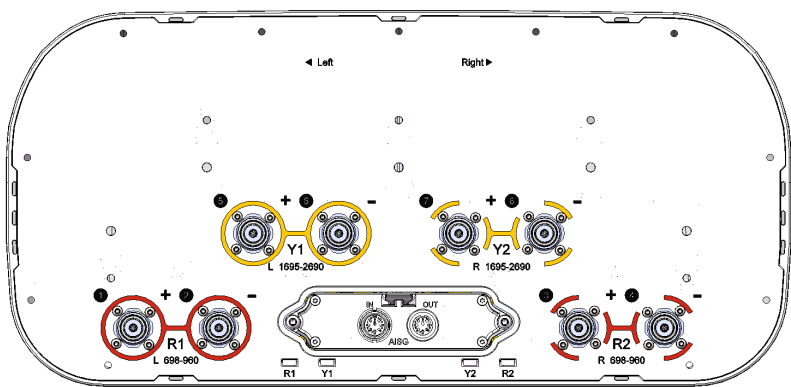


Polar Chart

Wind Load @150 km/h



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XYYxxxx-MM
●R2	3 - 4	698-960	4	MRET	RB.....XYYxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYYxxxx-MM
●Y2	7 - 8	1695-2690	3	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-01	3.8 kg / 8.4 lb	0-10

Compliance

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2G4WD-21-H

12 Port Antenna / 2L4H / 2.0m

PROSE

- 2x(698-960) + 4x(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors
- SLLP application in middle band & low band

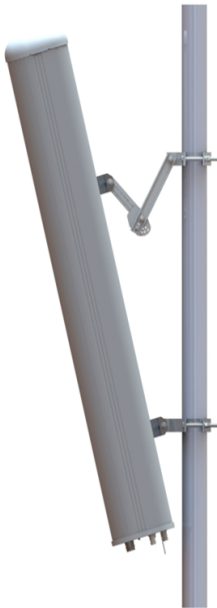
Electrical Data (BASTA)

Frequency(MHz)			2×(698-960)			4×(1695-2690)				
			698-806	790-862	880-960	1695-1880	1920-2200	2300-2400	2500-2690	
Gain	R1/R2	Mid Tilt	dBi	15.2	15.7	15.6				
		Over All Tilts		15.2±0.6	15.6±0.6	15.5±0.6				
	Y1/Y2/Y3	Mid Tilt					17.6	18.6	19.0	19.0
	/Y4	Over All Tilts					17.5±0.5	18.5±0.5	18.9±0.5	19.0±0.5
Polarization			°	±45						
Horizontal Pattern										
3dB Azimuth Beamwidth			°	61±6	59±6	62±6	67±6	63±6	57±5	56±5
Front to Back Ratio, Total Power, 180°±30°			dB	> 21	> 22	> 22	> 24	> 26	> 28	> 28
Cross-Polar Discrimination At Mechanical Boresight 0°				> 18	> 18	> 18	> 16	> 18	> 18	> 18
Over Sector ±60°				> 10	> 8	> 8	> 8	> 5	> 6	> 5
Vertical Pattern										
3dB Elevation Beamwidth			°	11.0±1.0	9.9±0.9	9.1±0.8	5.9±0.5	5.1±0.5	4.5±0.4	4.0±0.4
Electrical Downtilt				2-12			2-12			
1st Upper Sidelobe Suppression			dB	> 15			> 15			
RF Parameters										
VSWR				< 1.5						
Intra - Cluster Isolation			dB	> 25			> 25			
Inter - Cluster Isolation				> 25			> 25			
3rd PIM(2 x 43 dBm)			dBc	< -153						
Impedance			Ω	50						
Maximum Effective Power per Port			W	300			250			

— Maximum Effective Power Whole Antenna: 1000 W.

Mechanical Data (BASTA)

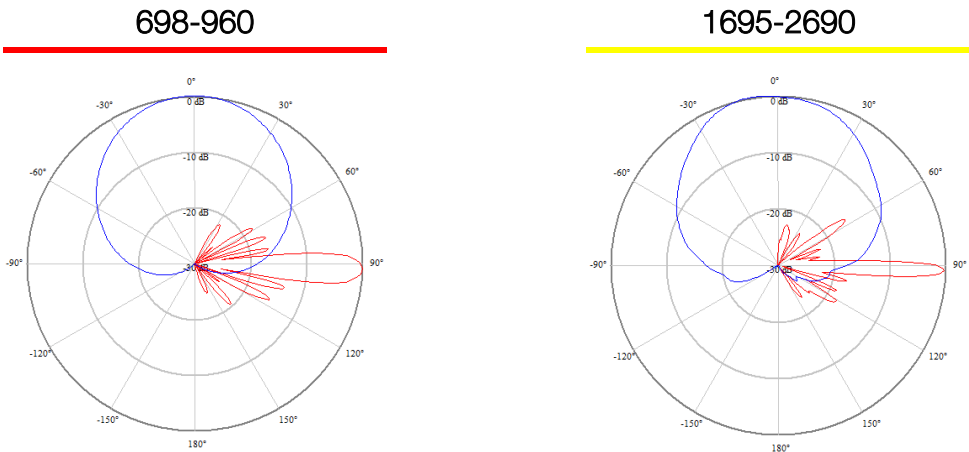
Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	35.5 kg	76.1 lb
Shipping Weight	46.5 kg	102.5 lb
Antenna Dimensions (H x W x D)	2000 x 498 x 220 mm	78.7 x 19.6 x 8.7 in
Packing Size (H x W x D)	2160 x 575 x 370 mm	85.0 x 22.6 x 14.6 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	518 / 273 / 865 N	116 / 61 / 194 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



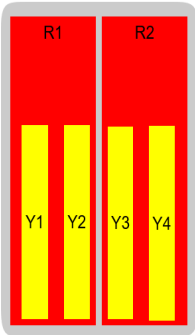
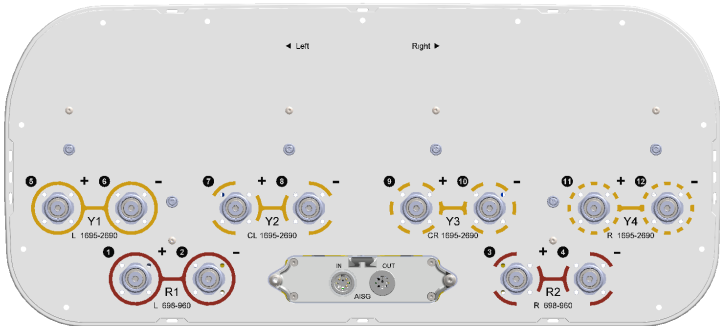
RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	1	MRET	RB.....XYyxxxx-MM
●R2	3 - 4	698-960	6	MRET	RB.....XYyxxxx-MM
●Y1	5 - 6	1695-2690	2	MRET	RB.....XYyxxxx-MM
●Y2	7 - 8	1695-2690	3	MRET	RB.....XYyxxxx-MM
●Y3	9 - 10	1695-2690	4	MRET	RB.....XYyxxxx-MM
●Y4	11 - 12	1695-2690	5	MRET	RB.....XYyxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Compliance

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Small Cell Antennas

Model	Port	Antenna Type	Frequency(MHz)	Gain(dBi)	3dB HBW	L x W x D(mm)	Page
C2W2TB-21	10	Panel	1 x (698-894) 2 x (1695-2690) 2 x (3300-4200)	11.3/15.4/13.6	65-65-65	760 x 350 x 200	421
2G4W4TBA-27P	20	Panel	2 x (698-960) 4 x (1695-2690) 4 x (3300-3800)	10.5/11.0/9.5	65-65-90	396 x 396 x 190	424

C2W2TB-21

10 Port Antenna / Small / Macro Cell Panel Antenna

PROSE

- 698-894 + 2 x 1695-2690 + 2 x 3300-4200 MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (BASTA)

Frequency(MHz)		698-894		1695-2690				3300-4200	
		698-894	1695-1850	1850-2000	2000-2200	2200-2400	2400-2690	3300-4200	
Gain	R1/Y1/Y2 Mid Tilt	11.3	13.5	14.3	14.8	14.9	15.4	13.6	
	/P1/P2 Over All Tilts	11.2±0.5	13.5±0.5	14.2±0.5	14.7±0.5	14.9±0.5	15.3±0.5	13.5±0.6	
Polarization		°	±45°						

Horizontal Pattern

3dB Azimuth Beamwidth	°	70±5	67±5	63±5	65±6	65±6	58±6	57±8
Front to Back Ratio, Total Power, 180°±30°		> 20	> 23	> 23	> 24	> 24	> 22	> 20
Cross-Polar Discrimination	dB	> 15	> 15	> 15	> 15	> 15	> 15	> 14
At Mechanical Boresight 0°								
Over Sector ±60°		> 8	> 6	> 6	> 6	> 4	> 3	> 2

Vertical Pattern

3dB Elevation Beamwidth	°	27.5±5	14.3±1	13.2±1	12.1±1	11.2±1	10.1±1	14.8±1
Electrical Downtilt		2-12	2-12				2-12	

RF Parameters

VSWR		< 1.5		
Intra - Cluster Isolation	dB	> 25	> 25	> 24
Inter - Cluster Isolation		> 24		
3rd PIM(2 x 43 dBm)	dBc	< -150	< -150	NA
Impedance	Ω	50		
Maximum Effective Power Per Port	W	200	200	100

— Maximum Effective Power Whole Antenna: 600 W.

C2W2TB-21

10 Port Antenna / Small / Macro Cell Panel Antenna

PROSE

Mechanical Data (BASTA)

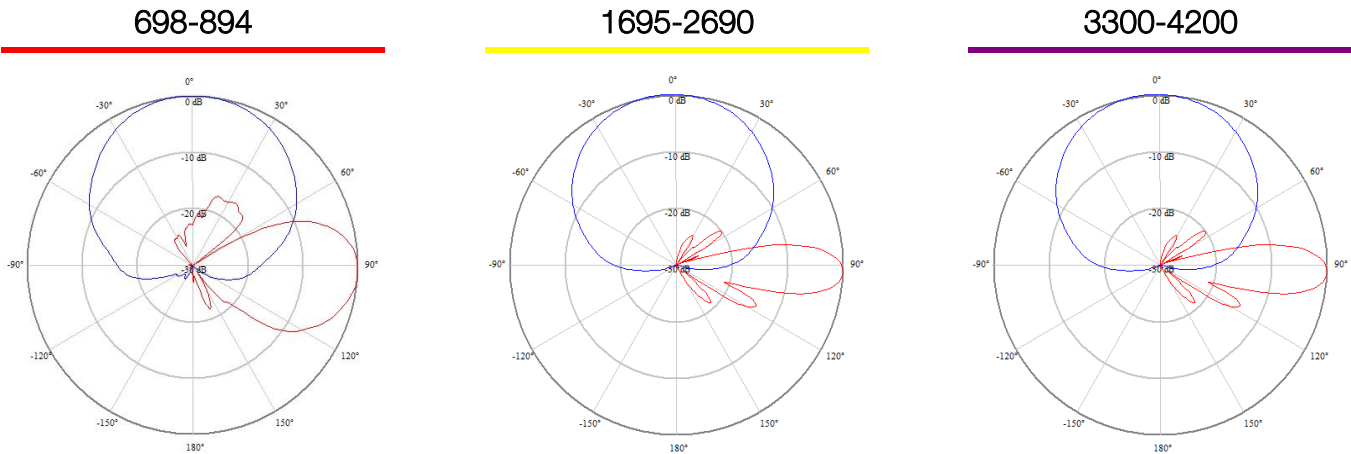
Connector Type	10 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	11.6 kg	25.6 lb
Shipping Weight	16.97 kg	37.4 lb
Antenna Dimensions (H x W x D)	760 x 350 x 200 mm	29.9 x 13.8 x 7.9 in
Packing Size (H x W x D)	895 x 435 x 350 mm	35.2 x 17.1 x 13.8 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	183 / 89 / 234 N	41 / 20 / 53 lbf
Mast Diameter Supported	50 - 110 mm	2.0 - 4.3 in
Relative Humidity	5% - 95%	
Operating Temperature Range	-40 ~ +70 °C	-40 ~ +158 °F



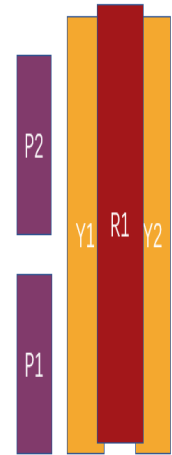
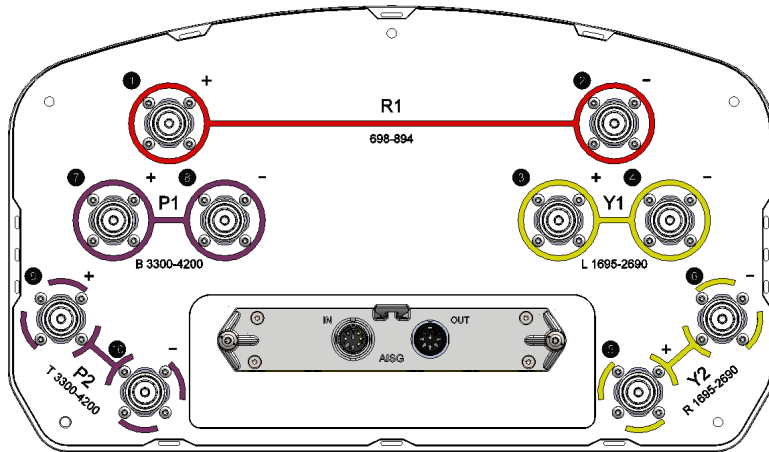
RET Specification (BASTA)

Compatible Standards	AISG2.0/ 3GPP
Power Consumption	≤2(stand by); ≤13(operating)
Configuration Management	Integrated RET, pre-configured
Software Upgradability	True
Replaceability in Field	True

Pattern (Sample for reference)



Layout



Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-894	3	MRET	RB.....XYYxxxx-MM
●Y1	3 - 4	1695-2690	4	MRET	RB.....XYYxxxx-MM
●Y2	5 - 6	1695-2690	5	MRET	RB.....XYYxxxx-MM
●P1	7 - 8	3300-4200	2	MRET	RB.....XYYxxxx-MM
●P2	9 - 10	3300-4200	1	MRET	RB.....XYYxxxx-MM

*Remark: X – Year, YY – Week , xxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-L1	2.4 kg / 5.3 lb	0-12

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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2G4W4TBA-27P

20 Port Antenna / 2L4H + 3.5TDD / 0.3m

PROSE

- 2x(698-960) + 4x(1710-2690) + 4x(3300-3800) MHz
- Fixed Electrical Tilt
- 4.3-10 Connectors + Cluster

Electrical Data (FDD) (BASTA)

Frequency(MHz)		2 x (698-960)			4 x (1710-2690)			
		698-806	790-862	880-960	1710-1920	1920-2180	2300-2400	2490-2690
Gain	dBi	9.5±0.5	10.0±0.6	10.5±0.5	10.1±0.6	10.4±0.6	10.8±0.6	11.0±0.6
Polarization	°	±45°						
Horizontal Pattern								
3dB Azimuth Beamwidth	°	69±7	65±7	68±7	65±5	67±5	64±5	61±5
Front to Back Ratio, Total Power, 180°±30°	dB	> 20	> 21	> 22	> 23	> 24	> 25	> 25
Cross-Polar Discrimination At Mechanical Boresight 0°		> 16	> 16	> 16	> 18	> 18	> 16	> 16
Vertical Pattern								
3dB Elevation Beamwidth	dB	38±4	35±4	33±4	37±4	35±4	32±4	30±4
Electrical Downtilt	°	fixed 3			fixed 3			
1st Upper Sidelobe Suppression	dB	> 13	> 13	> 13	> 13	> 13	> 13	> 13
RF Parameters								
VSWR	°	< 1.5						
Intra - Cluster Isolation	dB	20						
Inter - Cluster Isolation		20						
3rd PIM(2 x 43 dBm)	dBc	< -153						
Impedance	Ω	50						
Maximum Effective Power Per Port	W	250			200			

Electrical Data (TDD) (BASTA)

Frequency(MHz)		3300-3800
		3300-3800
Polarization	°	±45°
Electrical Downtilt		fixed 3
Single column beam		
Gain over All Tilts	dBi	9.5±0.5
Horizontal 3dB Beamwidth	°	75
Vertical 3dB Beamwidth		32
Cross-Polar Discrimination at Mechanical Boresight		> 15
Front to Back Ratio, Total Power, 180° ±30°	dB	> 23
Broadcast 65° beam		
Gain over All Tilts	dBi	10.3
Horizontal 3dB Beamwidth	°	65
Cross-Polar Discrimination at Mechanical Boresight		> 15
Front to Back Ratio, Total Power, 180° ±30°	dB	> 25
Service beam		
0° direction Gain over All Tilts	dBi	13.3
0° direction Horizontal 3dB Beamwidth	°	20
0° direction Cross-Polar Discrimination at Mechanical Boresight		> 15
0° direction Front to Back Ratio, Total Power, 180°±30°	dB	> 25
RF Parameters		
Coupling Factor (Cal Port to RF Ports)	dB	-26±2
Max Amp Deviation		< 1.5
Max Phase Deviation	degree	15
VSWR		< 1.5
Interband Isolation	dB	> 20
Maximum Effective Power Per Port	W	75

— Maximum Effective Power Whole Antenna: 800 W.

2G4W4TBA-27P

20 Port Antenna / 2L4H + 3.5TDD / 0.3m

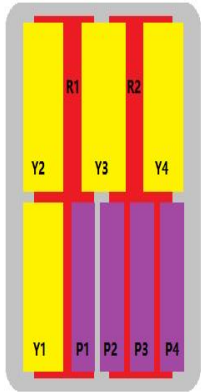
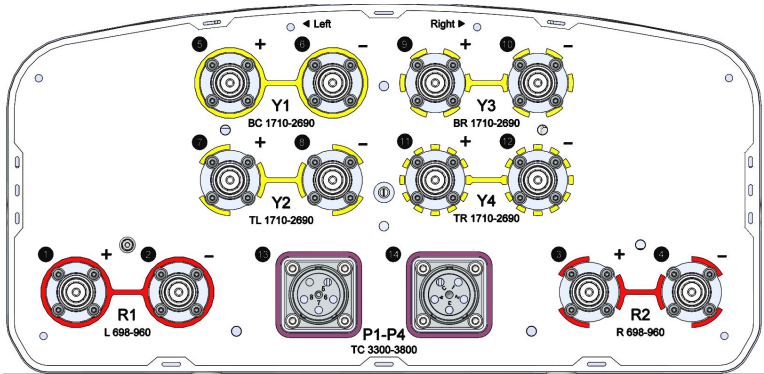
PROSE

Mechanical Data (BASTA)

Connector Type	12 x 4.3-10 Female + 1 x cluster 4 + 1 x cluster 5
Connector Position	Bottom
Lightning Protection	DC Ground
Radome Material	Fiberglass
Radome Color	Light Grey
Antenna Net Weight	6 kg
Antenna Dimensions (H x W x D)	396 x 396 x 190 mm
Survival Wind Speed	241 km/h
Wind Load @150 km/h (Frontal / Lateral / Rearside)	117 / 43 / 137 N
Mast Diameter Supported	50 - 110 mm
Mechanical tilt range, degree	-25~25
Relative Humidity	5% - 95%
Operating Temperature Range	-40 ~ +70 °C



Layout



Array	Connector	Frequency (MHz)
● R1	1 - 2	698-960
● R2	3 - 4	698-960
● Y1	5 - 6	1710-2690
● Y2	7 - 8	1710-2690
● Y3	9 - 10	1710-2690
● Y4	11 - 12	1710-2690
● P1	13 - 14	3300-3800

*Remark: X – Year, YY – Week , xxxxx – Serial Number

Accessories

Item	Model	Weight	Mechanical Tilt Range (°)
Mounting Kit	RAPMK-85-5C-01	1.8 kg / 4.0 lb	±25°

Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
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RET Product

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ECU-002N	433
ECU-003N	434
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SCU-002L-BT	437
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RET Tool

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Mounting Bracket

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BSAMK 150-1	449
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CF15-BV1-XXX	463
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- Switch Control Unit

Main Features

Switch Control Unit (SCU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

Support 3GPP/AISG 2.0 and 3GPP/AISG 3.0 standards

Compatible with other major vendors' control units

Compact size. Daisy chain feasibility

Designed for outdoor operations.

Remote software upgradable. RAE device optional.

Max Support Ten Channel Actuator

In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0 and 3GPP/AISG 3.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7);
Adjustable time (full range)	100 sec (typically, depending on antenna type)
Adjustable cycles	Typically > 1,000 (each unit)
Electrical Safety standard	EN 60950
Lightning Protection	IEC 61000-4-5, AISG interface (each pin) 5kA (8/20 μ s).

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +70°C
Protection class	IP65 (with antenna).

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9 Daisy chain out 8 pin female connector according to IEC
Connector Position	Bottom
Color	silver
Dimensions	186x132x32mm
Weight	≤ 490 g
Housing material	Profile: Aluminum alloy; zinc diecast alloy

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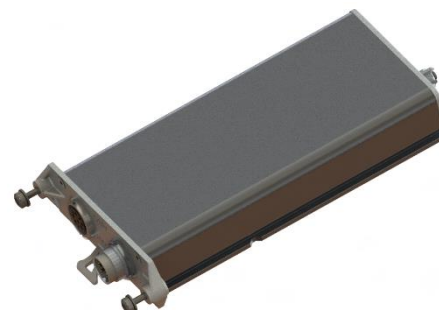
- Embedded Control Unit



Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

- Compliant to 3GPP/AISG 2.0 standards
- Compatible with other major vendors' control units
- Compact size. Daisy chain feasibility
- Designed for outdoor operations
- Remote software upgradable
- Max Support One Channel Actuator
- In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7); 100 sec (typically, depending on antenna type)
Adjustable time (full range)	> 1,000 cycles
Adjustable cycles	EN 60950
Electrical Safety standard	IEC 61000-4-5, AISG interface (each pin)
Lightning Protection	5 kA (8/20 μ s)

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-40°C to +75°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9
Connector Position	Daisy chain out 8 pin female connector according to IEC 60130-9
Color	Bottom silver
Dimensions	183x102x29 mm
Weight	≤ 380 g
Housing material	Profile: Aluminum alloy

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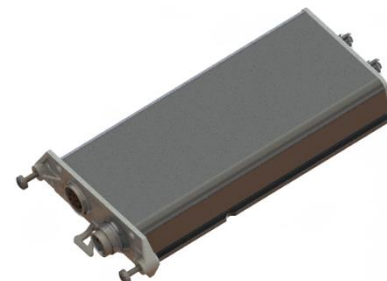
- Embedded Control Unit



Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

- Compliant to 3GPP/AISG 2.0 standards
- Compatible with other major vendors' control units
- Compact size. Daisy chain feasibility
- Designed for outdoor operations
- Remote software upgradable
- Max Support Two Channel Actuator
- In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7); 100 sec (typically, depending on antenna type)
Adjustable time (full range)	> 1,000 cycles
Electrical Safety standard	EN 60950
Lightning Protection	IEC 61000-4-5, AISG interface (each pin) 5 kA (8/20 μ s)

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +75°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9
Connector Position	Daisy chain out 8 pin female connector according to IEC 60130-9
Color	Bottom
Dimensions	silver
Weight	183x102x29 mm
Housing material	≤ 430 g
	Profile: Aluminum alloy;

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- Embedded Control Unit

Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

- Compliant to 3GPP/AISG 2.0 standards
- Compatible with other major vendors' control units
- Compact size. Daisy chain feasibility
- Designed for outdoor operations
- Remote software upgradable
- Max Support Three Channel Actuator
- In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7)
Adjustable time (full range)	100 sec (typically, depending on antenna type)
Adjustable cycles	> 1,000
Electrical Safety standard	EN 60950
Lightning Protection	IEC 61000-4-5, AISG interface (each pin) 5 kA (8/20 μ s)

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +75°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9
Connector Position	Daisy chain out 8 pin female connector according to IEC 60130-9
Color	Bottom
Dimensions	silver
Weight	183x138x29 mm
Housing material	≤ 610 g
	Profile: Aluminum alloy

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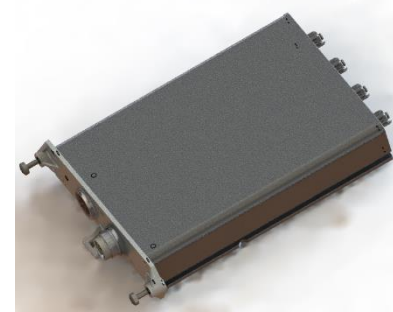
- Embedded Control Unit



Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

- Compliant to 3GPP/AISG 2.0 standards
- Compatible with other major vendors' control units
- Compact size. Daisy chain feasibility
- Designed for outdoor operations
- Remote software upgradable
- Max Support Four Channel Actuator
- In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7)
Adjustable time (full range)	100 sec (typically, depending on antenna type)
Adjustable cycles	> 1,000
Electrical Safety	EN 60950
Lightning Protection	IEC 61000-4-5, AISG interface (each pin) 5 kA (8/20 μ s)

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +75°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9
Connector Position	Daisy chain out 8 pin female connector according to IEC 60130-9
Color	Bottom
Dimensions	silver
Weight	183x138x29 mm
Housing material	≤ 680 g
	Profile: Aluminum alloy

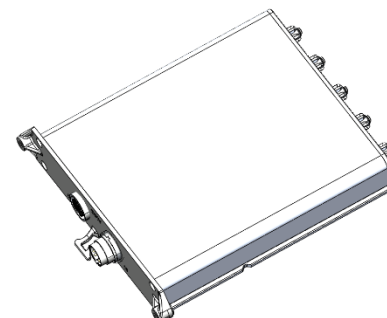
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- Embedded Control Unit

Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

- Compliant to 3GPP/AISG 2.0 standards
- Compatible with other major vendors' control units
- Compact size. Daisy chain feasibility
- Designed for outdoor operations
- Remote software upgradable
- Max Support Five Channel Actuator
- In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7)
Adjustable time (full range)	100 sec (typically, depending on antenna type)
Adjustable cycles	> 1,000
Electrical Safety standard	EN 60950
Lightning Protection	IEC 61000-4-5, AISG interface (each pin) 5 kA (8/20 μ s)

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +75°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9
Connector Position	Daisy chain out 8 pin female connector according to IEC 60130-9
Color	Bottom
Dimensions	silver
Weight	183x163x31 mm
Housing material	≤ 850 g
	Profile: Aluminum alloy

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- Switch Control Unit

Main Features

Switch Control Unit (SCU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

Support 3GPP/AISG 2.0 and 3GPP/AISG 3.0 standards

Compatible with other major vendors' control units

Compact size. Daisy chain feasibility

Designed for outdoor operations.

Remote software upgradable. RAE device optional.

Max Support Ten Channel Actuator

In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0 and 3GPP/AISG 3.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7);
Adjustable time (full range)	100 sec (typically, depending on antenna type)
Adjustable cycles	Typically > 1,000 (each unit)
Electrical Safety standard	EN 60950
Lightning Protection	IEC 61000-4-5, AISG interface (each pin) 5kA (8/20 μ s), SBT's SMA interface 5 kA (8/20 μ s).

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +70°C
Protection class	IP65 (with antenna).

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9 Daisy chain out 8 pin female connector according to IEC 60130-9 and 1 pcs SMA connectors.
Connector Position	Bottom
Color	silver
Dimensions	186x132x32mm
Weight	≤ 495 g
Housing material	Profile: Aluminum alloy; zinc diecast alloy

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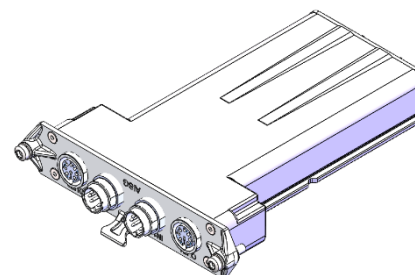
- Embedded Control Unit



Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

- Support 3GPP/AISG 2.0 and 3GPP/AISG 3.0 standards
- Compatible with other major vendors' control units
- Compact size. Daisy chain feasibility
- Designed for outdoor operations
- Remote software upgradable. RAE device optional. Max
- Support Two Channel Actuator
- Two way antenna sharing feasibility
- In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0 and 3GPP/AISG 3.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7); 100 sec (typically, depending on antenna type)
Adjustable time (full range)	Adjustable
cycles	Typically > 1,000 (each unit)
Electrical Safety standard	EN 60950
Lightning Protection	IEC 61000-4-5, AISG interface (each pin)
	5 kA (8/20 μ s)

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +70°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 2 x 8 pin (4 spare) male connector according to IEC 60130-9. Daisy chain out 2 x 8 pin female connector according to IEC 60130-9. (2 IN and 2 OUT).
Connector Position	Bottom
Color	cool grey
Dimensions	183x138x29 mm
Weight	TBD
Housing material	Profile: Aluminum alloy; zinc diecast alloy

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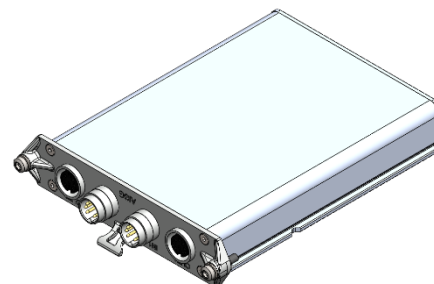
- Embedded Control Unit



Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

- Support 3GPP/AISG 2.0 and 3GPP/AISG 3.0 standards
- Compatible with other major vendors' control units
- Compact size. Daisy chain feasibility
- Designed for outdoor operations
- Remote software upgradable. RAE device optional. Max
- Support Three Channel Actuator
- Two way antenna sharing feasibility
- In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0 and 3GPP/AISG 3.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7); 100 sec (typically, depending on antenna type)
Adjustable time (full range)	Adjustable
cycles	Typically > 1,000 (each unit)
Electrical Safety standard	EN 60950
Lightning Protection	IEC 61000-4-5, AISG interface (each pin)
	5 kA (8/20 μ s)

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +70°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 2 x 8 pin (4 spare) male connector according to IEC 60130-9. Daisy chain out 2 x 8 pin female connector according to IEC 60130-9. (2 IN and 2 OUT).
Connector Position	Bottom
Color	cool grey
Dimensions	183x138x29 mm
Weight	TBD
Housing material	Profile: Aluminum alloy; zinc diecast alloy

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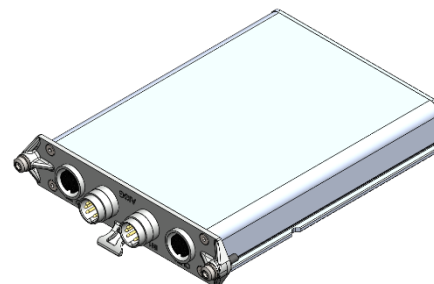
- Embedded Control Unit



Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

- Support 3GPP/AISG 2.0 and 3GPP/AISG 3.0 standards
- Compatible with other major vendors' control units
- Compact size. Daisy chain feasibility
- Designed for outdoor operations
- Remote software upgradable. RAE device optional. Max
- Support Four Channel Actuator
- Two way antenna sharing feasibility
- In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0 and 3GPP/AISG 3.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7); 100 sec (typically, depending on antenna type)
Adjustable time (full range)	Adjustable
cycles	Typically > 1,000 (each unit)
Electrical Safety standard	EN 60950
Lightning Protection	IEC 61000-4-5, AISG interface (each pin)
	5 kA (8/20 μ s)

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +70°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 2 x 8 pin (4 spare) male connector according to IEC 60130-9. Daisy chain out 2 x 8 pin female connector according to IEC 60130-9. (2 IN and 2 OUT).
Connector Position	Bottom
Color	cool grey
Dimensions	183x138x29 mm
Weight	TBD
Housing material	Profile: Aluminum alloy; zinc diecast alloy

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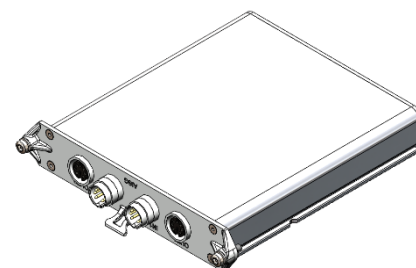
- Embedded Control Unit



Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

- Support 3GPP/AISG 2.0 and 3GPP/AISG 3.0 standards
- Compatible with other major vendors' control units
- Compact size. Daisy chain feasibility
- Designed for outdoor operations
- Remote software upgradable. RAE device optional. Max
- Support Five Channel Actuator
- Two way antenna sharing feasibility
- In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0 and 3GPP/AISG 3.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7); 100 sec (typically, depending on antenna type)
Adjustable time (full range)	Adjustable
cycles	Typically > 1,000 (each unit)
Electrical Safety standard	EN 60950
Lightning Protection	IEC 61000-4-5, AISG interface (each pin)
	5 kA (8/20 μ s)

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +70°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 2 x 8 pin (4 spare) male connector according to IEC 60130-9. Daisy chain out 2 x 8 pin female connector according to IEC 60130-9. (2 IN and 2 OUT).
Connector Position	Bottom
Color	cool grey
Dimensions	183x163x31 mm
Weight	TBD
Housing material	Profile: Aluminum alloy; zinc diecast alloy

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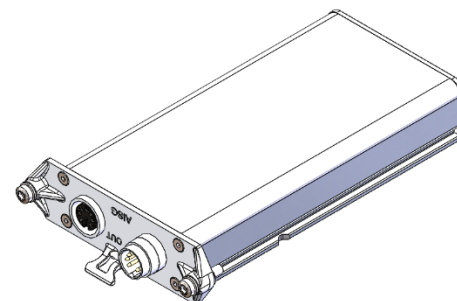
- Embedded Control Unit



Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

Compliant to 3GPP/AISG 2.0 standards
Compatible with other major vendors' control units
Compact size. Daisy chain feasibility
Designed for outdoor operations
Remote software upgradable. RAE device optional.
Max Support One Channel Actuator
In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7); 100 sec (typically, depending on antenna type)
Adjustable time (full range)	> 1,000 cycles
Adjustable cycles	EN 60950
Electrical Safety standard	IEC 61000-4-5, AISG interface (each pin)
Lightning Protection	5 kA (8/20 μ s), SBT's SMA interface 5 kA (8/20 μ s) with Antenna.

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-40°C to +75°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9. Daisy chain out 8 pin female connector according to IEC 60130-9. 1 pcs SMA connectors.
Connector Position	Bottom
Color	silver
Dimensions	183x102x29 mm
Weight	TBD
Housing material	Profile: Aluminum alloy

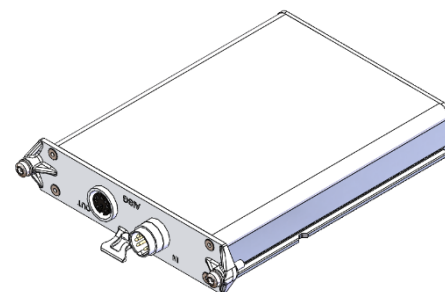
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- Embedded Control Unit

Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

Compliant to 3GPP/AISG 2.0 standards
Compatible with other major vendors' control units
Compact size. Daisy chain feasibility
Designed for outdoor operations
Remote software upgradable. RAE device optional.
Max Support Two Channel Actuator
In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7); 100 sec (typically, depending on antenna type)
Adjustable time (full range)	> 1,000 cycles
Adjustable cycles	EN 60950
Electrical Safety standard	IEC 61000-4-5, AISG interface (each pin)
Lightning Protection	5 kA (8/20 μ s), SBT's SMA interface 5 kA (8/20 μ s) with Antenna.

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +75°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9. Daisy chain out 8 pin female connector according to IEC 60130-9. 1 pcs SMA connectors.
Connector Position	Bottom
Color	silver
Dimensions	183x138x29 mm
Weight	TBD
Housing material	Profile: Aluminum alloy

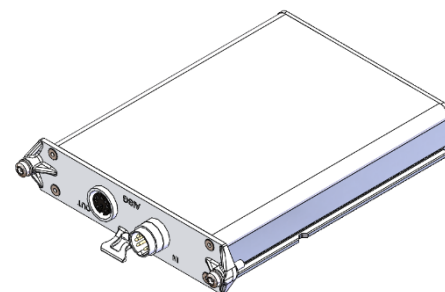
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- Embedded Control Unit

Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

Compliant to 3GPP/AISG 2.0 standards
Compatible with other major vendors' control units
Compact size. Daisy chain feasibility
Designed for outdoor operations
Remote software upgradable. RAE device optional.
Max Support Three Channel Actuator
In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7); 100 sec (typically, depending on antenna type)
Adjustable time (full range)	> 1,000 cycles
Adjustable cycles	EN 60950
Electrical Safety standard	IEC 61000-4-5, AISG interface (each pin)
Lightning Protection	5 kA (8/20 μ s), SBT's SMA interface 5 kA (8/20 μ s) with Antenna.

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +75°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9. Daisy chain out 8 pin female connector according to IEC 60130-9. 1 pcs SMA connectors.
Connector Position	Bottom
Color	silver
Dimensions	183x138x29 mm
Weight	TBD
Housing material	Profile: Aluminum alloy

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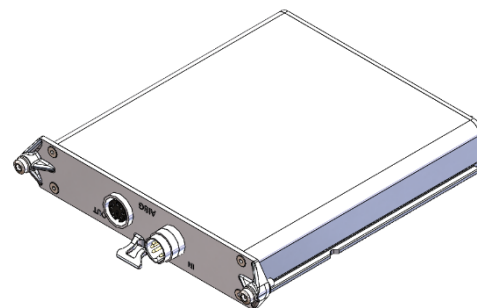
- Embedded Control Unit



Main Features

Embedded Control Unit (ECU) for PROSE antennas with adjustable electrical downtilt and appropriate mechanical interface

Compliant to 3GPP/AISG 2.0 standards
Compatible with other major vendors' control units
Compact size. Daisy chain feasibility
Designed for outdoor operations
Remote software upgradable. RAE device optional.
Max Support Four Channel Actuator
In-field extractable for easy replacement



Electrical Data

Protocol	3GPP/AISG 2.0
Tilt Accuracy	$\pm 0.5^\circ$ (resolution: $\pm 0.1^\circ$)
Input voltage range	10...30 V (pin 6)
Power consumption	< 2 W (typically stand by); < 13 W (typically motor activated)
Hardware interfaces	RS 485A/B (pin 5, pin 3); power supply (pin 6); DC return (pin 7); 100 sec (typically, depending on antenna type)
Adjustable time (full range)	> 1,000 cycles
Adjustable cycles	EN 60950
Electrical Safety standard	IEC 61000-4-5, AISG interface (each pin)
Lightning Protection	5 kA (8/20 μ s), SBT's SMA interface 5 kA (8/20 μ s) with Antenna.

Environmental Data

Operating temperature range	-40°C to +70°C
Storage temperature range	-55°C to +75°C
Protection class	IP65 (with antenna)

Mechanical Data

Connector Type	Daisy chain in 8 pin (4 spare) male connector according to IEC 60130-9. Daisy chain out 8 pin female connector according to IEC 60130-9. 1 pcs SMA connectors.
Connector Position	Bottom
Color	silver
Dimensions	183x163x31 mm
Weight	TBD
Housing material	Profile: Aluminum alloy

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- Portable Control Unit

Main Features

The PCU-003 is a handheld AISG communication device for reading information from Prose Technologies Inc and adjusting the antenna electrical beam down tilt.

Compliant to 3GPP/AISG 2.0/AISG 3.0 standards.

Battery powered with LCD and touch board.

Control via AISG cable with RET Master.

Equipped with USB Type-B connector for communicating with PC. Remote software upgradable.

Equipped with charge port and special adaptor for charging.



Electrical Data

Protocol	3GPP/AISG 2.0/AISG 3.0
Battery	16.8V, 2000mAh
Output voltage range	16V(typical) with battery or 24V with adaptor
Output current	< 2A
Hardware interfaces	RS485A/B(pin5, pin3); power supply (pin1 not connect,pin6); DC return(pin7);
Display	blue-mask LCD
Adaptor	Input: 100-240VAC 50-60Hz, Output:24V/2A
Electrical Safety standard	EN 60950

Environmental Data

Operating temperature range	-20°C to +40°C
Storage temperature range	-20°C to +70°C
Protection class	IP65(with antenna)

Mechanical Data

Output	1 × 8 pin(Female) connector according to IEC
Color	60130-9 Yellow
Dimensions	211.5x92x34.5mm
Weight	480g
Housing material	ABS

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- Protocol Convert Adapter

Main Features

The PCA-100 is an integral part of the PROSE remote antenna control system. The device links the PC to the AISG antenna system and is used in coordination with PROSE's OMT-ALD software to control ALD.



- Support 3GPP/AISG 2.0 and 3GPP/AISG 3.0 standards
- Compact and easy to carry for on-site RET antenna setup and optimization
- Compact size. Daisy chain feasibility
- Simple connection to any USB port of the PC-driver provided
- Software and hardware switch power supply



Electrical Data

Protocol	3GPP/AISG 2.0 and 3GPP/AISG 3.0
Input voltage range	24 V(pin 6)
Output Current at Voltage	1A@24V
Hardware interfaces	RS 485A/B(pin 5, pin 3); power supply (pin6); DC return(pin7);
Electrical Safety standard	EN 60950
Power Supply	DC Jack

Environmental Data

Operating temperature range	0°C to +40°C
Relative Humidity	Up to 95%, noncondensing

Mechanical Data

Connector Type	1 × 8 pin connector according to IEC 60130-9 conforms to AISG RF-connector SMA
Color	RAL 7035,lightgrey
Dimensions	151x52x49mm
Weight	192g
Housing material	Profile: Aluminum;Cover: Zinc diecast

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General:

Panel Antenna Mechanical Downtilt Mounting Kit For OD:50~114 mm (2.0~4.5 in) Mast.

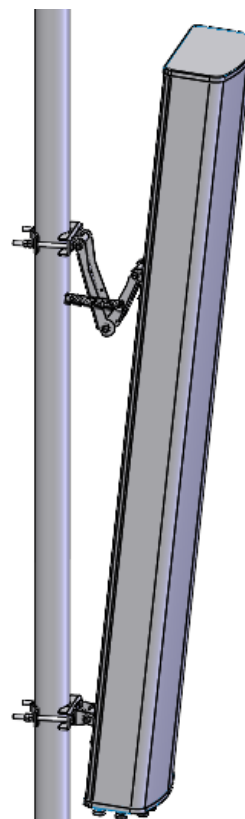
Mounting Kits Contains One Top Bracket And One Down Bracket.

General Specification:

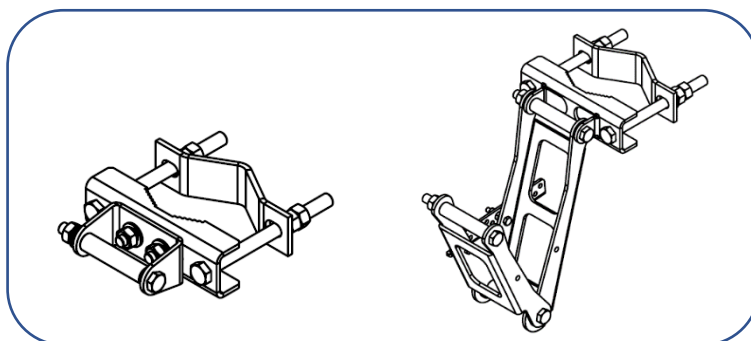
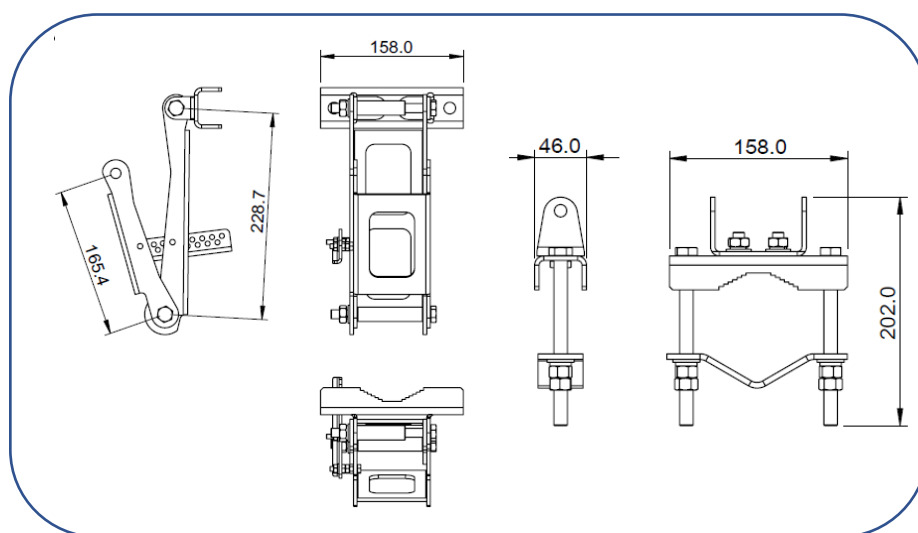
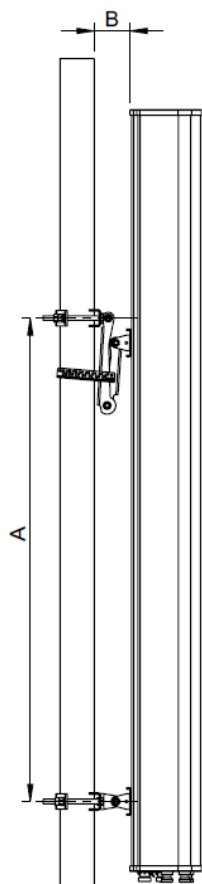
Package Quantity	1 Set
Kit Includes	Brackets & Hardware
Color	Silver
Material Type	Galvanized Carbon Steel
Application	Outdoor
Environment	RoHS Compliant

Mechanical Specification

Compatible Mast Diameter Maximum:	114mm / 4.5 in
Compatible Mast Diameter Minimum:	50mm / 2.0 in
Net Weight:	4.0 kg / 8.8lb
Pack Size:	440*230*85mm
Mass Weight:	4.2Kg/9.3lb
Bracket Distance (A):	Maximum 1700mm
Antenna to Pipe Distance (B):	93 mm Nominal
Mechanical Downtilt:	0°- 12°

**Design And Manufacture**

This Mounting Kits Is Designed, Manufactured, Distributed Under *PROSE*.



General:

Panel Antenna Mechanical Downtilt Mounting Kit For OD:50~115 mm (2.0~4.5 in) Mast.

General Specification:

Package Quantity	1 Set
Kit Includes	Brackets & Hardware
Color	Silver White
Material Type	SUS316
Application	Outdoor
Environment	RoHS Compliant

Mechanical Specification

Compatible Mast Diameter Maximum: 115mm / 4.5 in

Compatible Mast Diameter Minimum: 50mm / 2.0 in

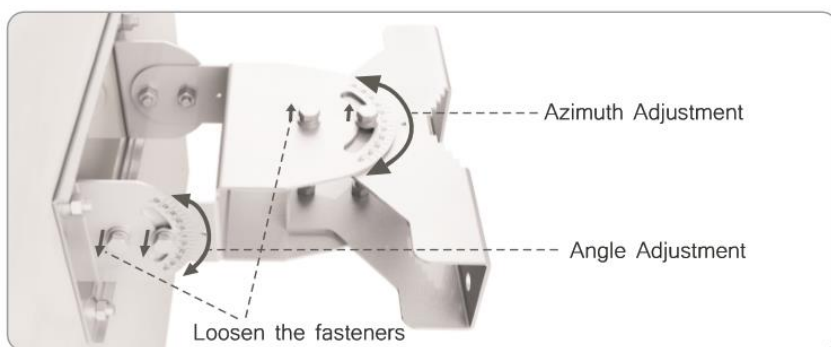
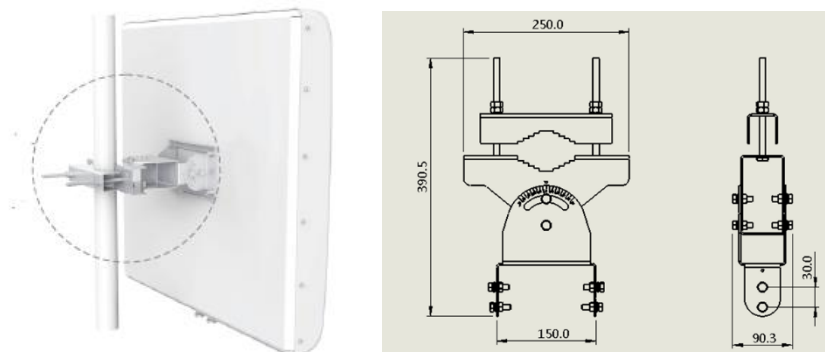
Net Weight: 2.4 kg / 5.3lb

Pack Size: 276x221x85mm

Mass Weight: 2.5Kg/5.5lb

Design And Manufacture

This Mounting Kits Is Designed, Manufactured, Distributed Under *PROSE*.



General:

Panel Antenna Mechanical Downtilt Mounting Kit For OD:63~115 mm (2.5~4.5 in) Mast.

Mounting Kits Contains Two Top Brackets And One Down Bracket.

General Specification:

Package Quantity	1 Set
Kit Includes	Brackets & Hardware
Color	Silver
Material Type	Galvanized Carbon Steel
Application	Outdoor
Environment	RoHS Compliant

Mechanical Specification

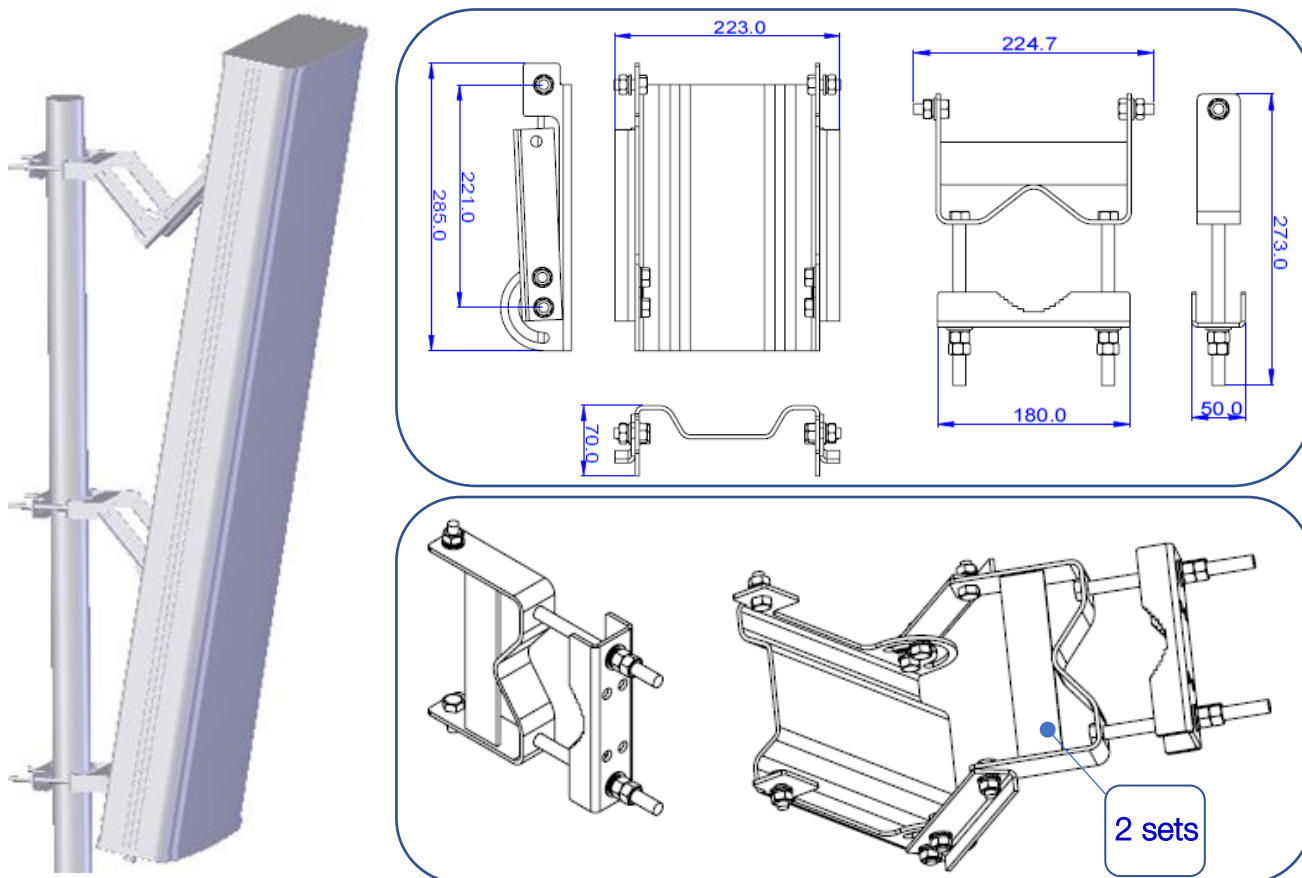
Compatible Mast Diameter Maximum: 115mm / 4.5 in

Compatible Mast Diameter Minimum: 63mm / 2.5 in

Net Weight: 11.0 kg / 24.3 lb

Design And Manufacture

This Mounting Kits Is Designed, Manufactured, Distributed Under *PROSE*.



General:

Panel Antenna Mechanical Tilt Mounting Kit For OD:50~115 mm (2.0~4.5 in) Pipe.

General Specification:

Package Quantity	1 Set
Kit Includes	Brackets & Hardware
Color	Silver White
Bracket Material	Aluminum Alloy 6061 T6
Hardware Material	Carbon Steel (Hot-dip Galvanization)
Application	Outdoor
Environment	RoHS Compliant

Mechanical Specification

Compatible Mast Diameter Maximum: 115mm / 4.5 in

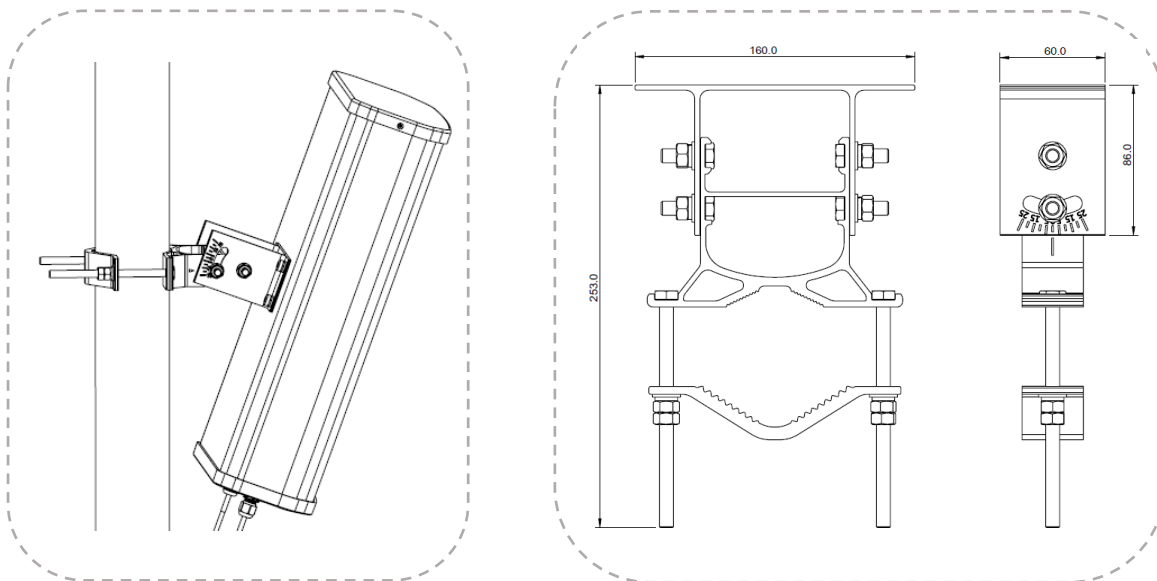
Compatible Mast Diameter Minimum: 50mm / 2.0 in

Net Weight: 1.0kg / 2.2lb

Tilt Angle: +/-25°

Design And Manufacture

This Mounting Kits Is Designed, Manufactured, Distributed Under **PROSE**.



General:

Mounting Kit Clamps For OD:115~230 mm (4.5~9.0 in) Mast.

Clamp Set Contains 4 Clamps And Hardware.

General Specification:

Package Quantity	1 Set
Kit Includes	Clamps & Hardware
Color	Silver White
Clamp Material	Carbon Steel (Hot-dip galvanization)
Hardware Material Application	Carbon Steel (Hot-dip galvanization)
Environment	Outdoor
	RoHS Compliant

Mechanical Specification

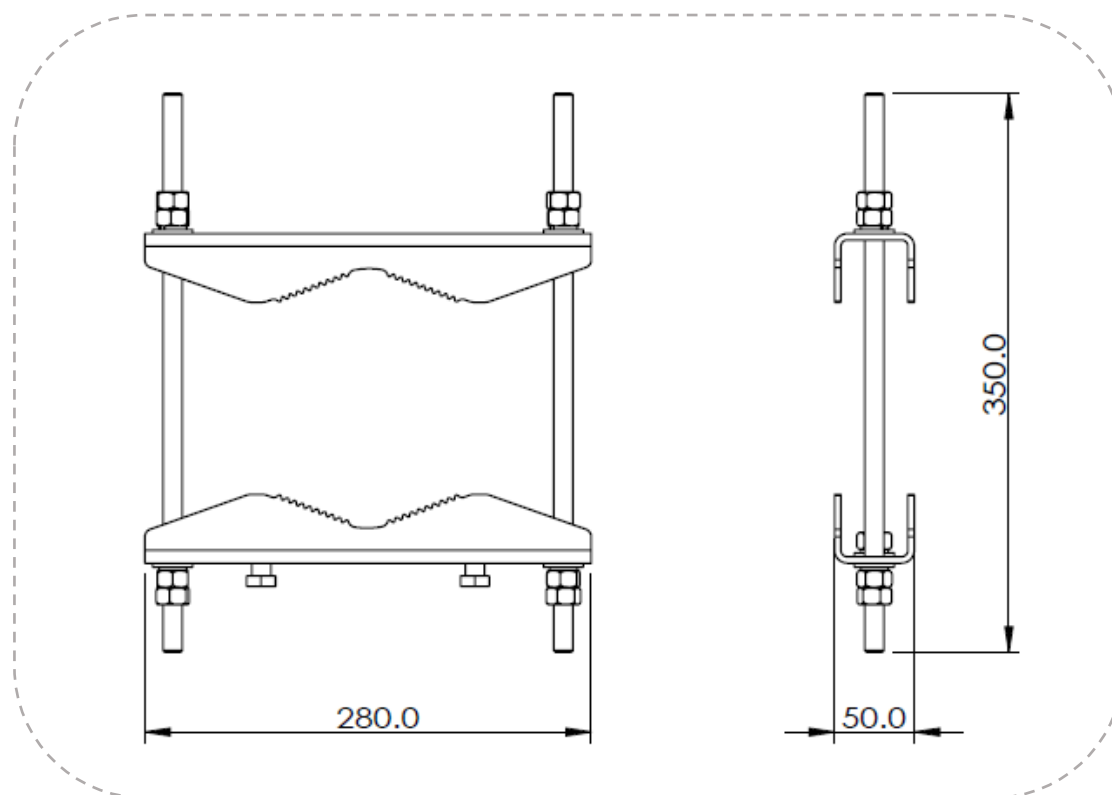
Compatible Mast Diameter Maximum: 230mm / 9.0 in

Compatible Mast Diameter Minimum: 115mm / 4.5 in

Net Weight: 2.7kg / 6.0lb

Design And Manufacture

This Clamp Kits Is Designed, Manufactured, Distributed Under *PROSE*.



General:

Mounting Kit Clamps For OD:115~230 mm (4.5~9.0 in) Mast.

Clamp Set Contains 4 Clamps And Hardware.

General Specification:

Package Quantity	1 Set
Kit Includes	Clamps & Hardware
Color	Silver White
Clamp Material	Carbon Steel (Hot-dip galvanization)
Hardware Material	Carbon Steel (Hot-dip galvanization)
Application	Outdoor
Environment	RoHS Compliant

Mechanical Specification

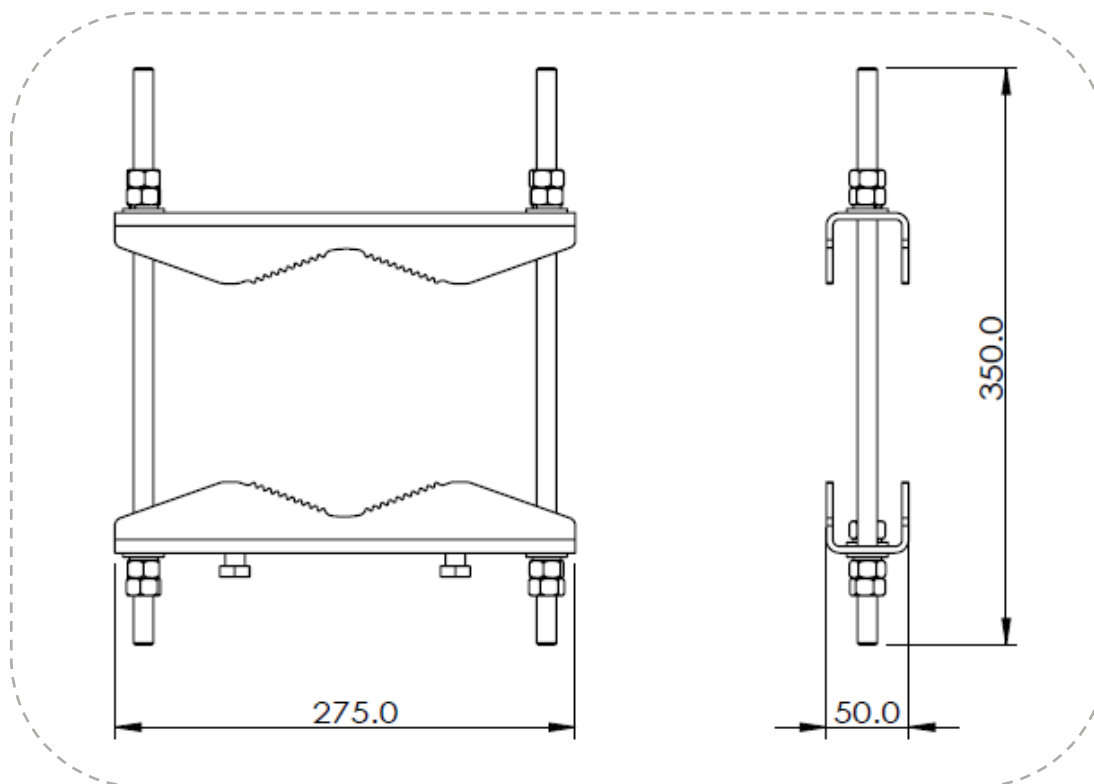
Compatible Mast Diameter Maximum: 230mm / 9.0 in

Compatible Mast Diameter Minimum: 115mm / 4.5 in

Net Weight: 2.4kg / 5.3lb

Design And Manufacture

This Clamp Kits Is Designed, Manufactured, Distributed Under *PROSE*.



General:

Mounting Kit Clamps For OD:50~122 mm (2.0~4.8 in) Mast. Higher
Kit Contains: 2 Clamps & Highers, Also Include Hardware.

General Specification:

Package Quantity	2 Sets
Kit Includes	Clamps & Hardware
Color	Silver White
Clamp Material	Carbon Steel (Hot-dip galvanization)
Hardware Material	Carbon Steel (Hot-dip galvanization)
Application	Outdoor
Environment	RoHS Compliant

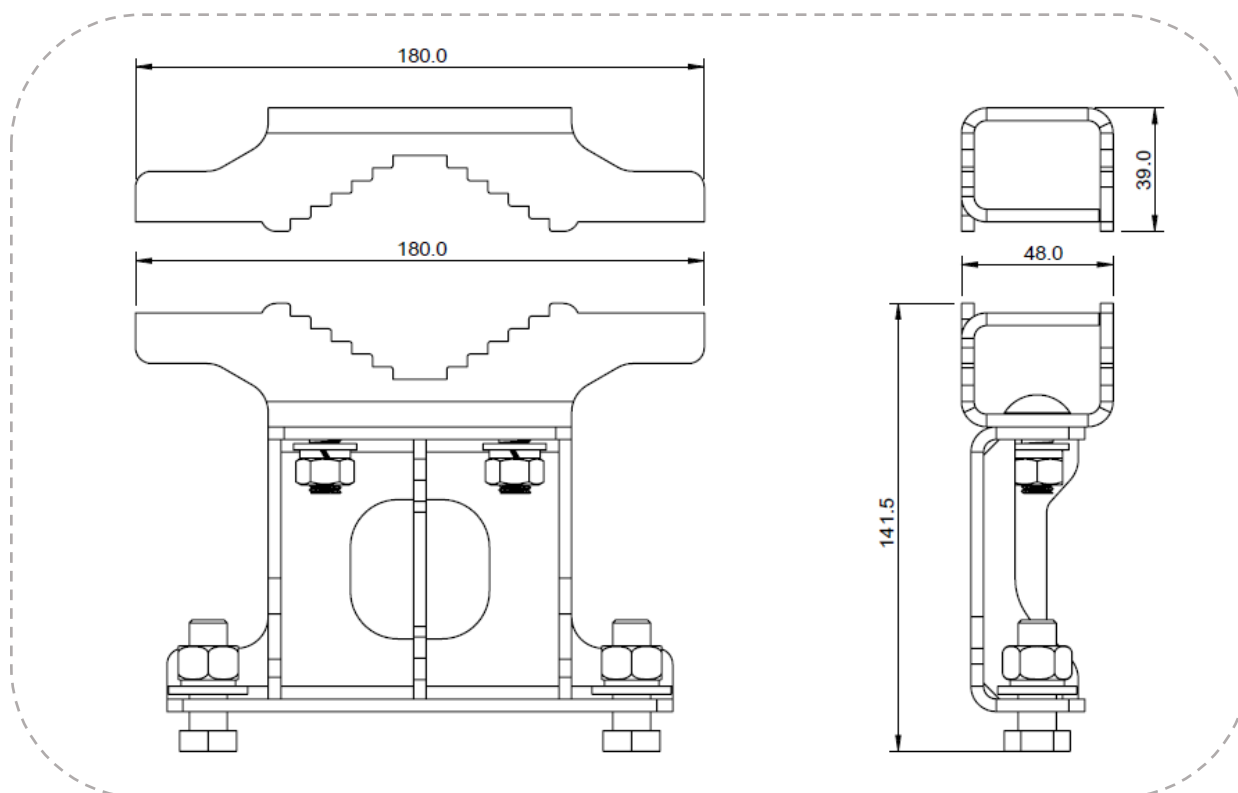
Compatible Mast Diameter Maximum: 122mm / 4.8 in

Compatible Mast Diameter Minimum: 50mm / 2.0 in

Net Weight: 3.4kg / 7.5 lb

Design And Manufacture

This Clamp Kits Is Designed, Manufactured, Distributed Under *PROSE*.



General:

Mounting Kit Clamps For OD:50~122 mm (2.0~4.8 in) Mast. Higher
Kit Contains: 2 Clamps & Highers, Also Include Hardwares.

General Specification:

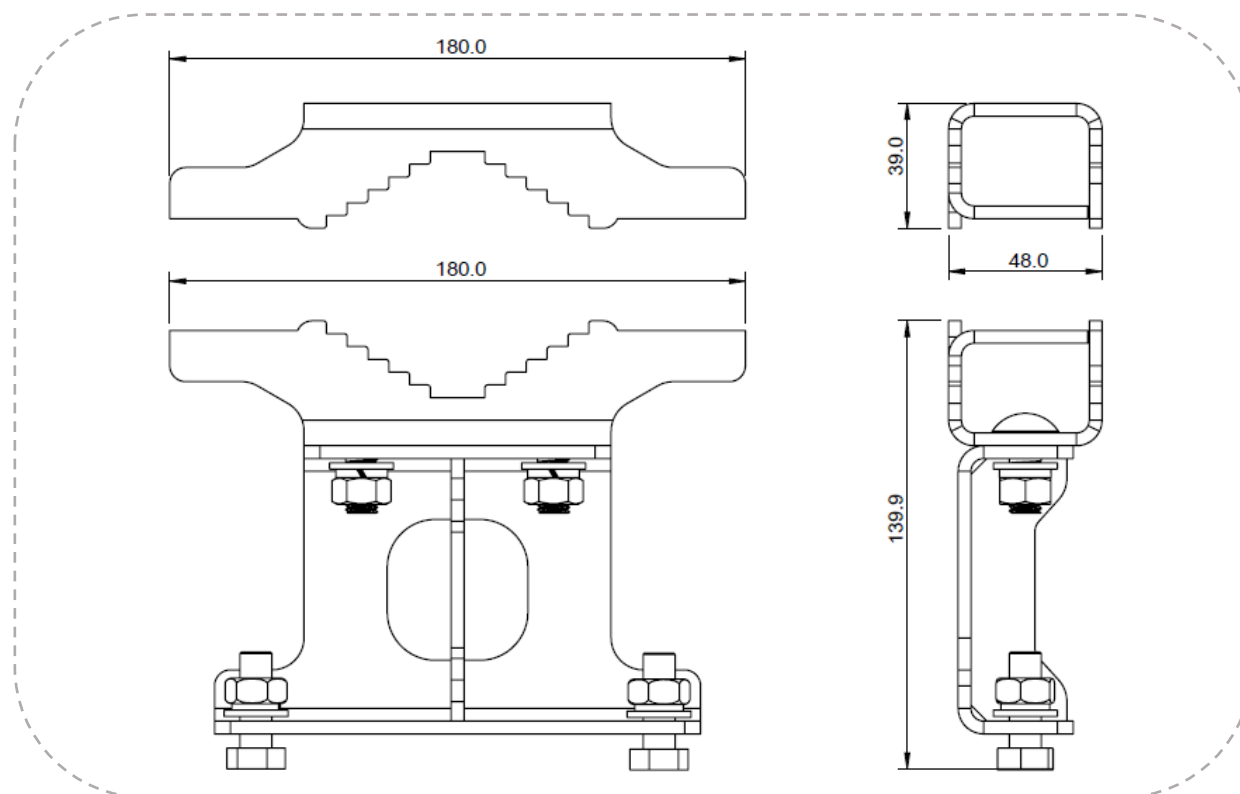
Package Quantity	2 Sets
Kit Includes	Clamps & Hardware
Color	Silver White
Material	Carbon Steel (Hot-dip galvanization)
Hardware Material	Carbon Steel (Hot-dip galvanization)
Application	Outdoor
Environment	RoHS Compliant

Mechanical Specification

Compatible Mast Diameter Maximum:	122mm / 4.8 in
Compatible Mast Diameter Minimum:	50mm / 2.0 in
Net Weight:	3.1kg / 6.8 lb

Design And Manufacture

This Clamp Kits Is Designed, Manufactured, Distributed Under *PROSE*.



General:

Panel Antenna Mechanical Downtilt Mounting Kit For OD:50~114 mm (2.0~4.5 in) Mast.

Mounting Kits Contains One Top Bracket And One Down Bracket.

General Specification:

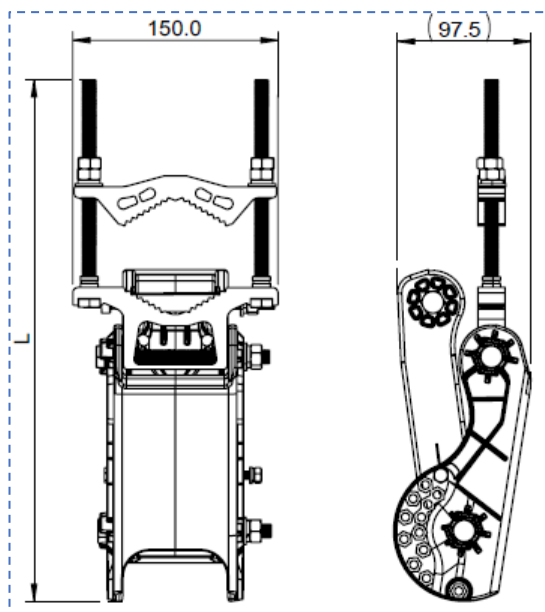
Package Quantity	1 Set
Kit Includes	Brackets & Hardware
Color	Gray & Silver
Material Type	High Performance Plastics & Aluminium Alloy.
Hardware Material:	Carbon Steel (Hot-dip galvanization)
Application	Outdoor
Environment	RoHS Compliant

Mechanical Specification

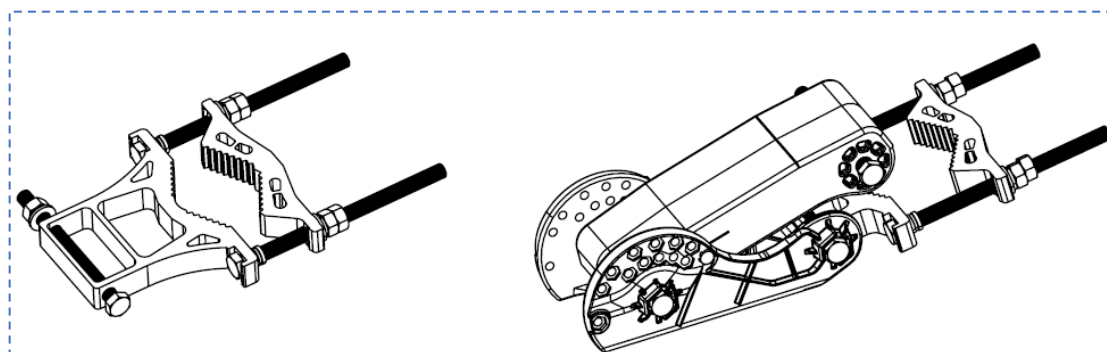
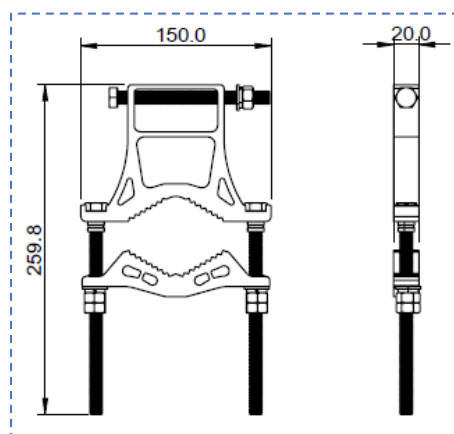
Compatible Mast Diameter Maximum:	114mm / 4.5 in
Compatible Mast Diameter Minimum:	0mm / 2.0 in
Net Weight:	2.0 kg (4.4lb) / 2.4(5.3lb)
Mechanical Downtilt:	0°- 12°

Design And Manufacture

This Mounting Kits Is Distributed Under *PROSE*.



Bracket Type	L(mm)	Weight(kg)
RAPMK-T1200-PL	381.9	2.0
RAPMK-T1700-PL	441.5	2.4



General:

Panel Antenna Mechanical Downtilt Mounting Kit For OD:50~122 mm (2.0~4.8 in) Mast.
Mounting Kits Contains One Top Bracket And One Down Bracket.

General Specification:

Package Quantity	1 Set
Kit Includes	Brackets & Hardware
Color	Silver White
Bracket Material	Aluminum Alloy 6061 T6
Hardware Material	Carbon Steel (Hot-dip galvanization)
Application	Outdoor
Environment	RoHS Compliant

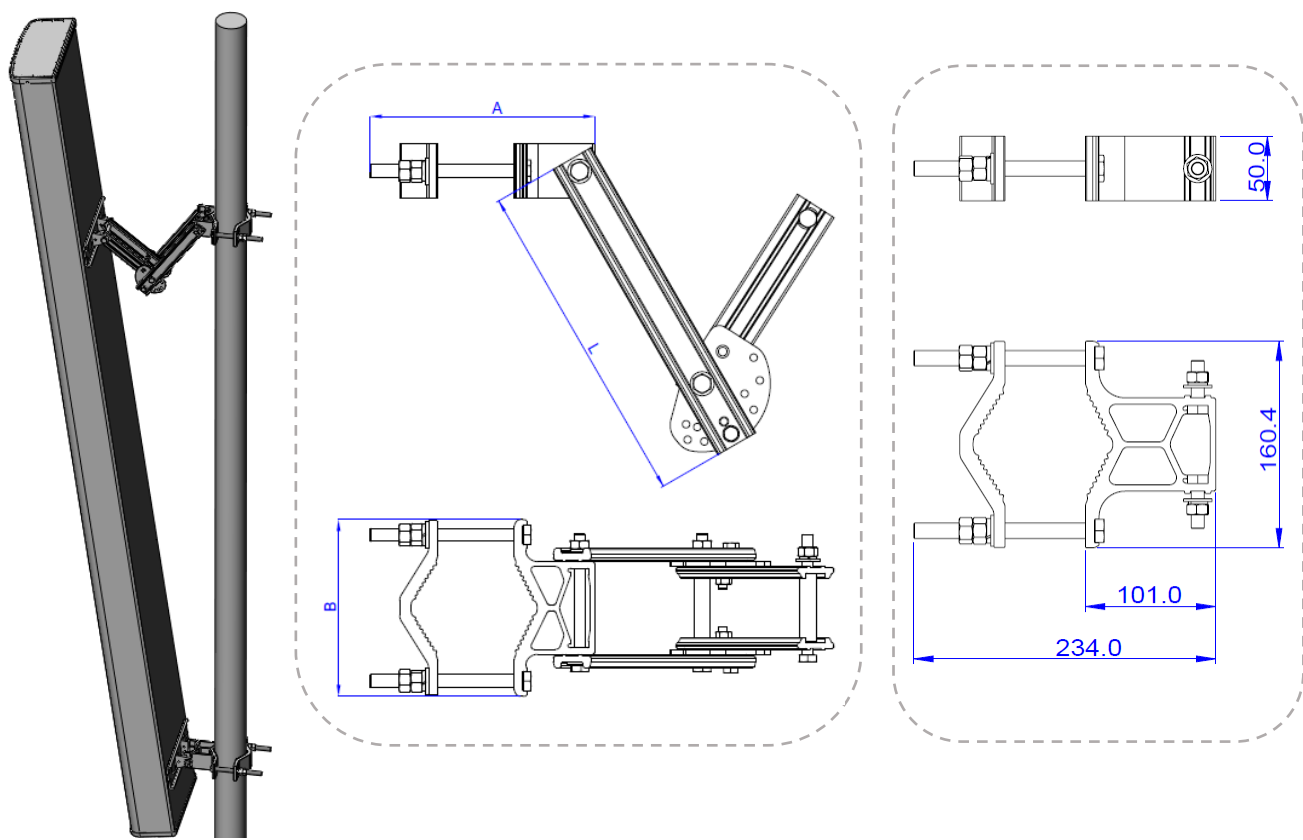
Mechanical Specification

Compatible Mast Diameter Maximum:	122mm / 4.8 in
Compatible Mast Diameter Minimum:	50mm / 2.0 in
Net Weight:	3.5kg / 7.7lb

ITEM No.	L(mm)	A(mm)	B(mm)
683545	302	207.7	162
684942	282	207.7	162
684943	240	207.7	162
684944	207	207.7	162

Design And Manufacture

This Mounting Kits Is Designed, Manufactured, Distributed Under *PROSE*.



General:

Panel Antenna Mechanical Downtilt Mounting Kit For OD:50~115 mm (2.0~4.5 in) Mast.
Mounting Kits Contains One Top Bracket And One Down Bracket.

General Specification:

Package Quantity	1 Set
Kit Includes	rackets & Hardware
Color	Silver White
Bracket Material	Aluminum Alloy 6061 T6
Hardware Material	Carbon Steel (Hot-dip galvanization)
Application	Outdoor
Environment	RoHS Compliant

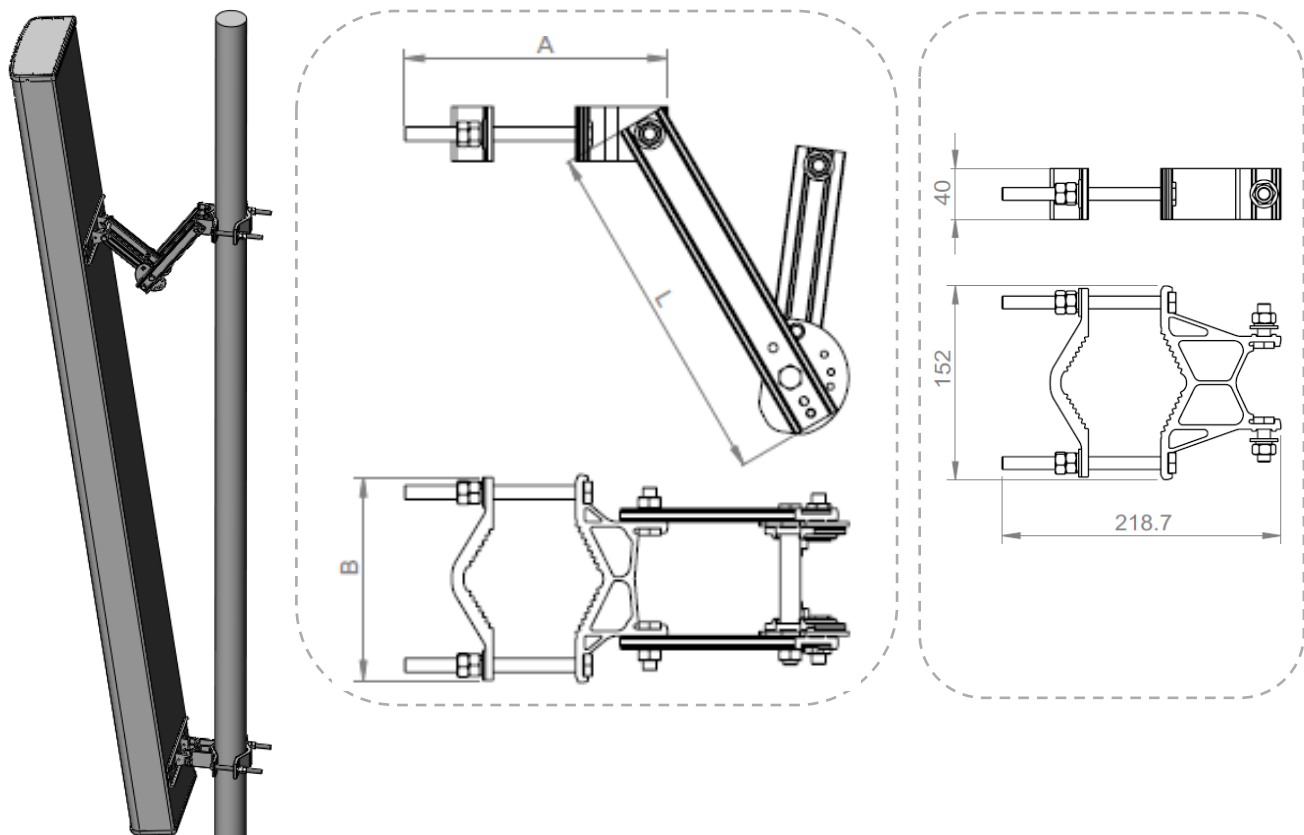
Mechanical Specification

Compatible Mast Diameter Maximum:	115mm / 4.5 in
Compatible Mast Diameter Minimum:	50mm / 2.0 in
Net Weight:	2.3kg / 5.1lb

ITEM No.	L(mm)	A(mm)	B(mm)
685779	267	193	151.4
685780	226	193	151.4
685781	207	193	151.4

Design And Manufacture

This Mounting Kits Is Designed, Manufactured, Distributed Under *PROSE*.



General:

Trisector Mounting Kit, For install trisector antennas (fixed tilt).

Mounting Kits Contains One Top Bracket And One Down Bracket.

General Specification:

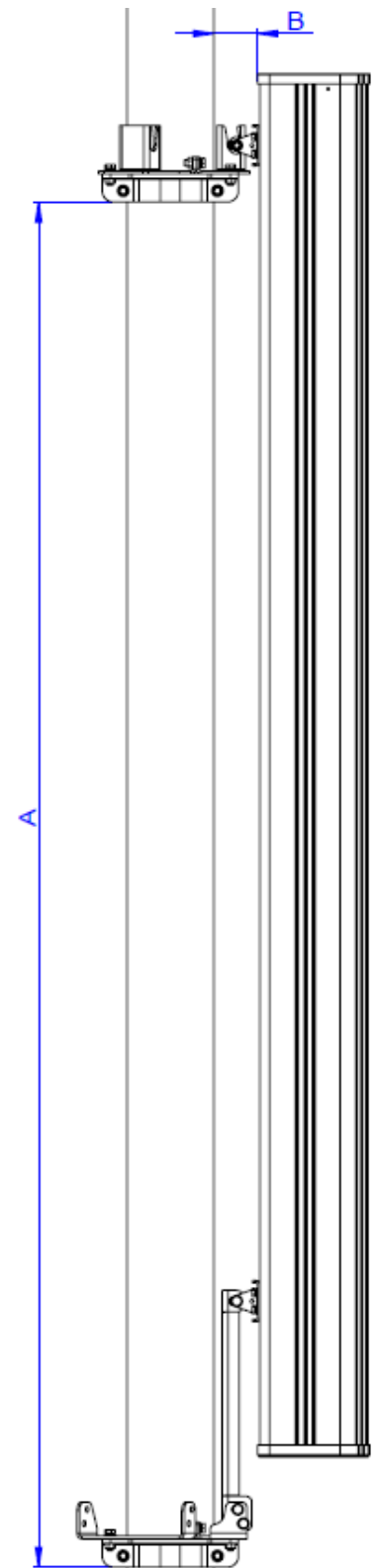
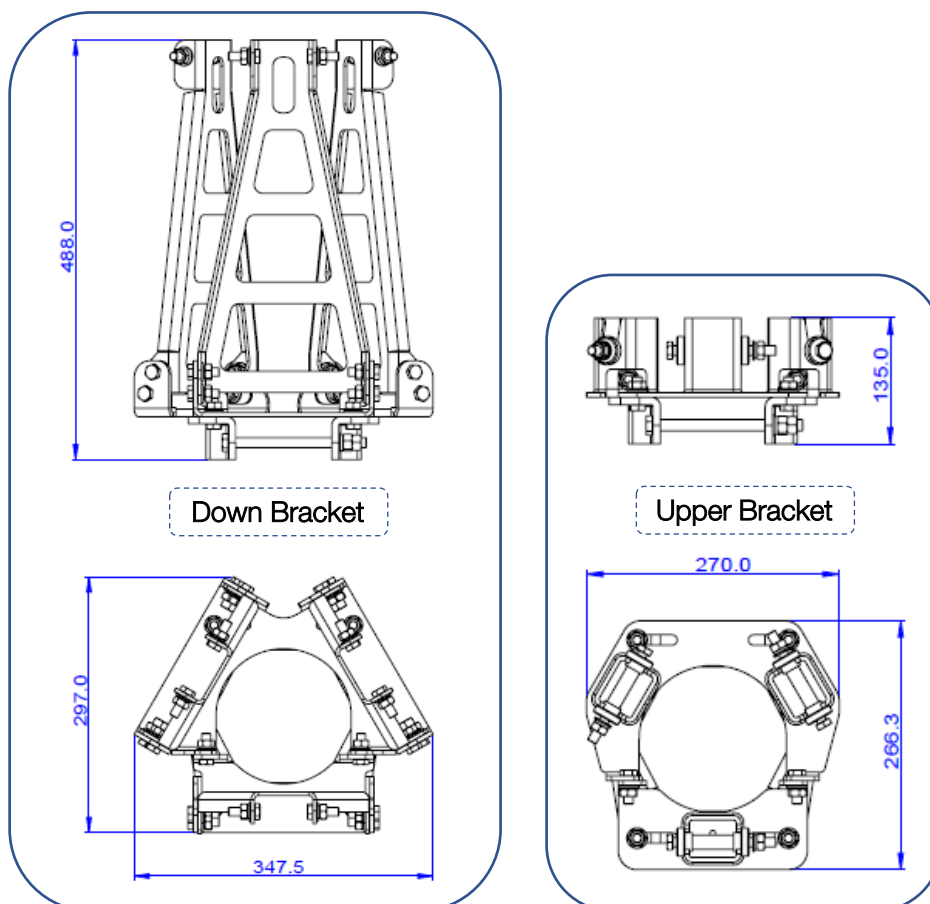
Package Quantity	1 Set
Kit Includes	Brackets & Hardware
Color	Silver
Material Type	Galvanized Carbon Steel
Application	Outdoor
Environment	RoHS Compliant

Mechanical Specification

Compatible Mast Diameter Maximum:	152.4mm / 6.0 in
Compatible Mast Diameter Minimum:	88.9mm / 3.5 in
Net Weight:	17.6 kg / 38.8 lbs
Pack Size:	460*348*263mm
Mass Weight:	18.4 kg/ 40.6lbs
Bracket Distance (A):	2072mm
Antenna to Pipe Distance (B):	73 mm
Mechanical Downtilt:	Min / 2.9 in 0°

Design And Manufacture

This Mounting Kits Is Designed, Manufactured, Distributed Under *PROSE*.



General:

Trisector Mounting Kit, For install trisector antennas (fixed tilt).

Mounting Kits Contains Two Top Bracket And One Down Bracket.

General Specification:

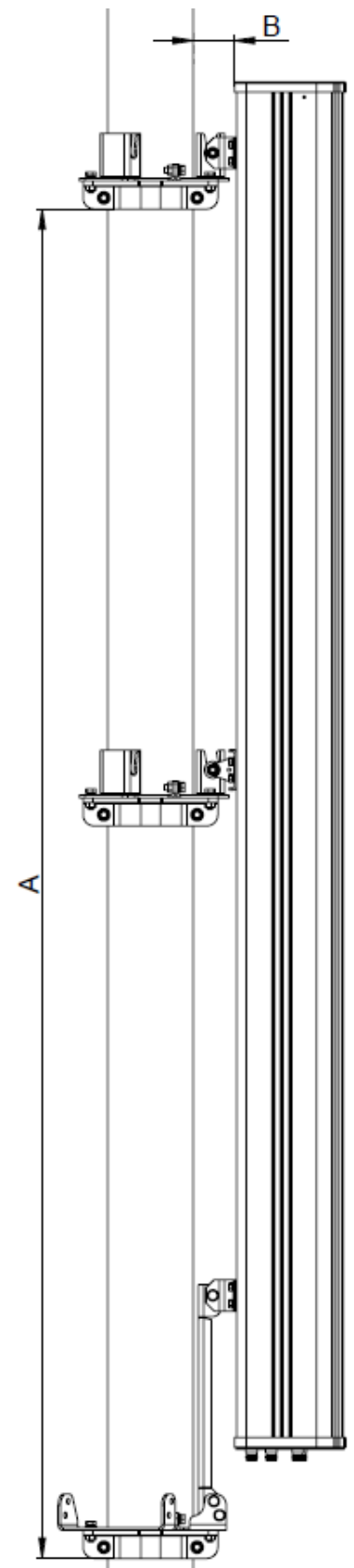
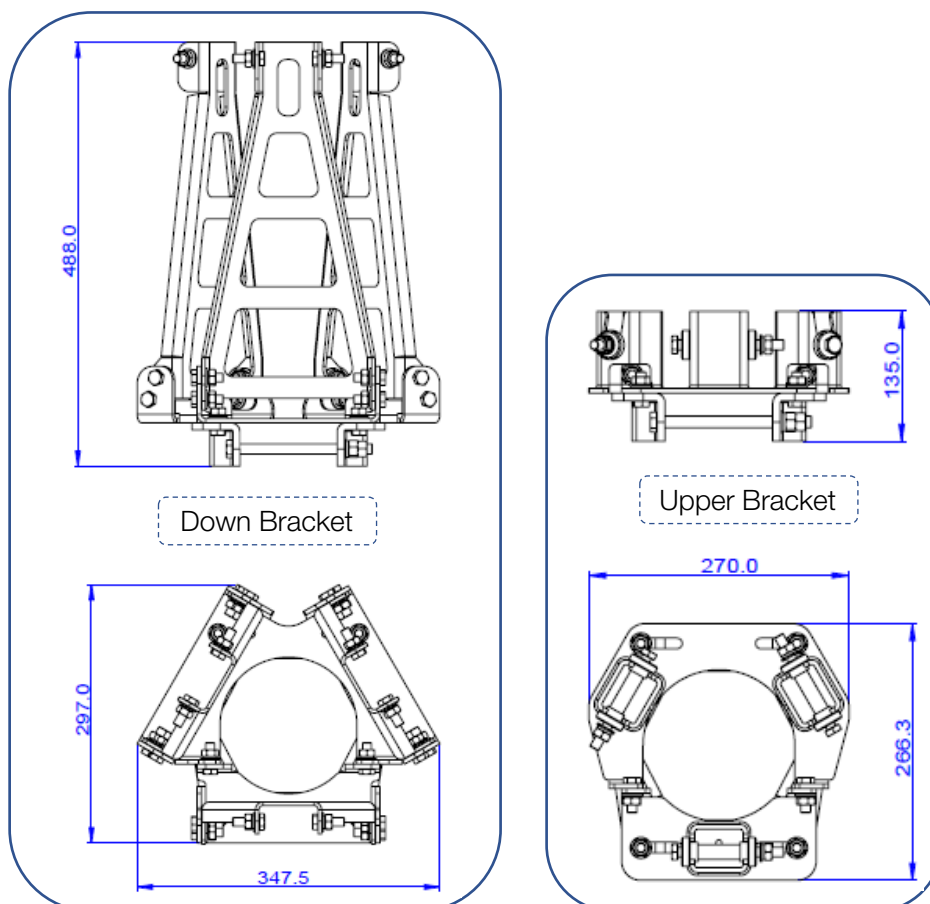
Package Quantity	1 Set
Kit Includes	ackets & Hardware
Color	Silver
Material Type	Galvanized Carbon Steel
Application	Outdoor
Environment	RoHS Compliant

Mechanical Specification

Compatible Mast Diameter Maximum:	152.4mm / 6.0 in
Compatible Mast Diameter Minimum:	88.9mm / 3.5
Net Weight:	in 24.2 kg /
Pack Size:	53.4 lbs
Mass Weight:	460*348*263mm
Bracket Distance (A):	25.0 kg/ 55.1 lbs
Antenna to Pipe Distance (B):	2072mm
Mechanical Downtilt:	Maximum 73
	mm / 2.9 in Min
	0°

Design And Manufacture

This Mounting Kits Is Designed, Manufactured, Distributed Under **PROSE**.



CF09-BV1-XXX

("XXX" Stands for Cable Length in mm)

PROSE

- DB9 to 8-Pin AISG RET Control Cable

Main Features

AISG 2.0/AISG 1.1 Compliant DB9-to-8-Pin RET Control
Cable Feeds Data & DC Power to RET Components
RoHS Compliant



Electrical Data

Protocol	3GPP/AISG 2.0/AISG
Voltage, Rated	1.1 300 V
Insulation DC	≥500MΩ.KM
Resistance Current,	> 4 A
Rated Characteristic	100±20 (Ω)
Impedance Contact	<5m Ω
Resistance	

Environmental Data

Operating Temperature	-40°C to +70°C -40°F to
Range Relative Humidity	+158°F 5% - 95%
Weather Protection	IP67 (connected)
Fire-retardant grade	UL VW-1
Request salt fog	720 H

Mechanical Data

AISG Connector A	8-Pin DIN Female, Straight, IEC
AISG Connector B	601309 DB9 Male, Straight, IEC
Braid Coverage	601309
Data Conductors Type	Coverage Rate ≥85 %
Data Conductors Insulation	Twisted 2 cores 0.32 mm²Bare
material Power Conductors Type	Copper
Power Conductors Insulation	stranded
material Total Conductors, Quantity	HD-PE
Shield Material	Twisted 2 cores 0.75 mm²Bare
Jacket Material	Copper
Color	stranded
Diameter Over Jacket	HD-PE
Minimum bending radius	4
	Aluminum
	PVC(Anti-UV)
	Black
	7.0±1 mm
	80mm (single)

CF09-BV1-XXX

("XXX" Stands for Cable Length in mm)

PROSE

- B9 to 8-Pin AISG RET Control Cable

Part Numbers of Cables

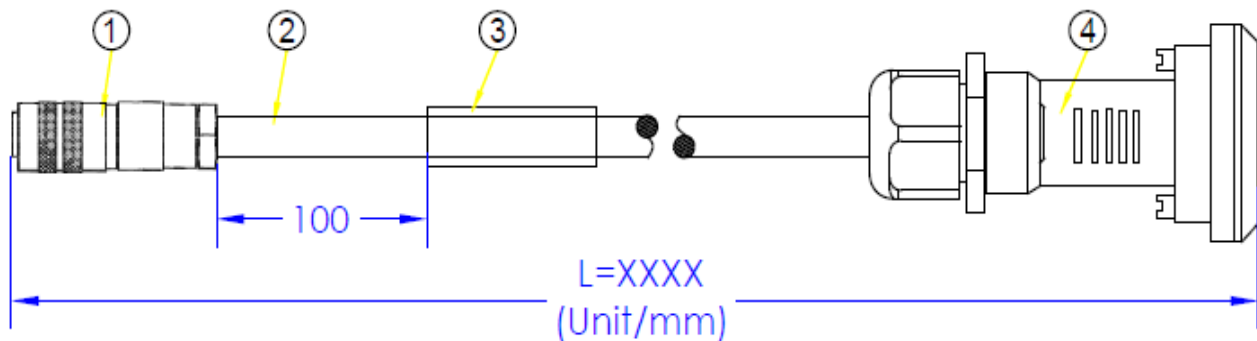
Typical Part Numbers

CF09-BV1-XXXX

Length

XXXX mm

Length (mm)	L < 2000	L > 2000
Tolerance(mm)	+200/0	+300/0



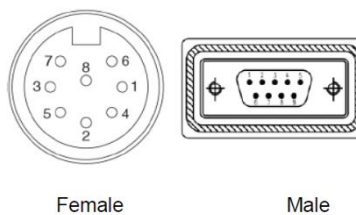
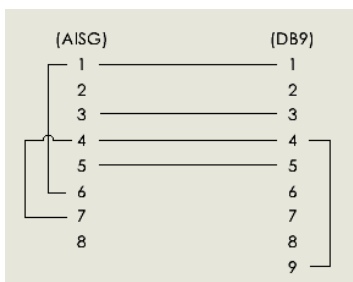
Pin Assignments:

8-Pin AISG Female Connector

1. +12 V DC Nominal
2. Not Connected
3. RS485 B
4. RS485 GND
5. RS485 A
6. +24 V DC Nominal
7. DC Return
8. Not Connected

DB9 Male Connector

1. +12 V DC Nominal
2. Not Connected
3. RS485 B
4. RS485 GND
5. RS485 A
6. Not Connected
7. Not Connected
8. Not Connected
9. DC Return



Compliance

- Our quality assurance system and our environmental management system apply to the entire company and are certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary. For environmental information, please refer to www.ProseTechnologies.com

CF15-BV1-XXX

("XXX" Stands for Cable Length in mm)

PROSE

- DB15 to 8-Pin AISG RET Control Cable

Main Features

AISG 2.0/AISG 1.1 Compliant DB15-to-8-Pin RET Control Cable
Feeds Data & DC Power to RET Components
RoHS Compliant



Electrical Data

Protocol	3GPP/AISG 2.0/AISG 1.1
Voltage, Rated	300 V
Insulation DC Resistance	$\geq 500 \text{ M}\Omega \cdot \text{KM}$
Current, Rated	$> 4 \text{ A}$
Characteristic Impedance Contact Resistance	$100 \pm 20 \text{ } (\Omega)$ $< 5 \text{ m } \Omega$

Environmental Data

Operating Temperature	-40°C to $+70^{\circ}\text{C}$ -40°F to $+158^{\circ}\text{F}$
Range Relative Humidity	5% - 95%
Weather Protection	IP67 (connected)
Fire-retardant grade	UL VW-1
Request salt fog	720 H

Mechanical Data

AISG Connector A	8-Pin DIN Female, Straight, IEC 601309
AISG Connector B	DB15 Male, Straight, IEC 601309
Braid Coverage	Coverage Rate $\geq 85 \%$
Data Conductors Type	Twisted 2 cores 0.32 mm^2 Bare
Data Conductors Insulation	Copper stranded
material Power Conductors Type	HD-PE
Power Conductors Insulation	Twisted 2 cores 0.75 mm^2 Bare
material Total Conductors, Quantity	Copper stranded
Shield Material	HD-PE
Jacket Material	4
Color	Aluminum
Diameter Over Jacket	PVC(Anti-UV)
Minimum bending radius	Black
	$7 \pm 1 \text{ mm}$
	80mm (single)

CF15-BV1-XXX

("XXX" Stands for Cable Length in mm)

PROSE

- DB15 to 8-Pin AISG RET Control Cable

Part Numbers of Cables

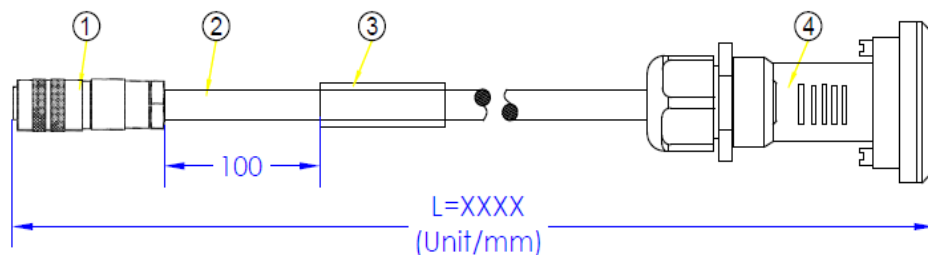
Typical Part Numbers

CF15-BV1-XXXX

Length

XXXX mm

Length (mm)	L < 2000	L > 2000
Tolerance(mm)	+200/0	+300/0



Pin Assignments:

8-Pin AISG Female Connector

1. +12 V DC Nominal
2. Not Connected
3. RS485 B
4. Not Connected
5. RS485 A
6. +24 V DC Nominal
7. DC Return
8. Not Connected

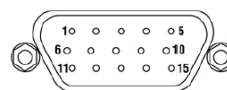
DB15 Male Connector

1. Not Connected
2. Not Connected
3. Not Connected
4. Not Connected
5. Not Connected
6. Not Connected
7. Not Connected
8. Not Connected
9. RS485 A
10. Not Connected
11. Not Connected
12. Not Connected
13. RS485 B
14. DC Return
15. +24V DC

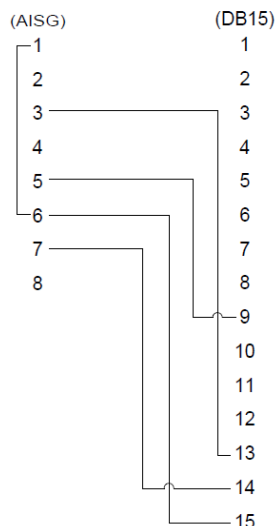
Normal



Female



Male



Compliance

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CFCM-BV1-XXX

("XXX" Stands for Cable Length in mm)

PROSE

- RET Control Cable

Main Features

AISG 2.0/AISG 1.1 Compliant RET Control Cable
Feeds Data & DC Power to RET Components
RoHS Compliant



Electrical Data

Protocol	3GPP/AISG 2.0/AISG 1.1
Voltage, Rated	300 V
Insulation DC	$\geq 500 \text{ M}\Omega \cdot \text{KM}$
Resistance Current,	$> 4 \text{ A}$
Rated Characteristic	$100 \pm 20 \text{ } (\Omega)$
Impedance Contact	$< 5 \text{ m } \Omega$
Resistance	

Environmental Data

Operating Temperature	-40°C to $+70^{\circ}\text{C}$ -40°F to
Range Relative Humidity	$+158^{\circ}\text{F}$ 5% - 95%
Weather Protection	IP67 (connected)
Fire-retardant grade	UL VW-1
Request salt fog	720 H

Mechanical Data

AISG Connector A	8-Pin DIN Female, Straight, IEC 601309
AISG Connector B	8-Pin DIN Male, Straight, IEC 601309
Braid Coverage	Coverage Rate $\geq 85 \%$
Data Conductors Type	Twisted 2 cores 0.32 mm^2 Bare
	Copper stranded
Data Conductors Insulation material	HD-PE
Power Conductors Type	Twisted 3 cores 0.75 mm^2 Bare
	Copper stranded
Power Conductors Insulation material	HD-PE
Total Conductors, Quantity	5
Shield Material	Aluminum
Jacket Material	PVC(Anti-UV)
Color	Black
Diameter Over Jacket	$7.50 \pm 1 \text{ mm}$
Minimum bending radius	60mm (single)

CFCM-BV1-XXX

("XXX" Stands for Cable Length in mm)

PROSE

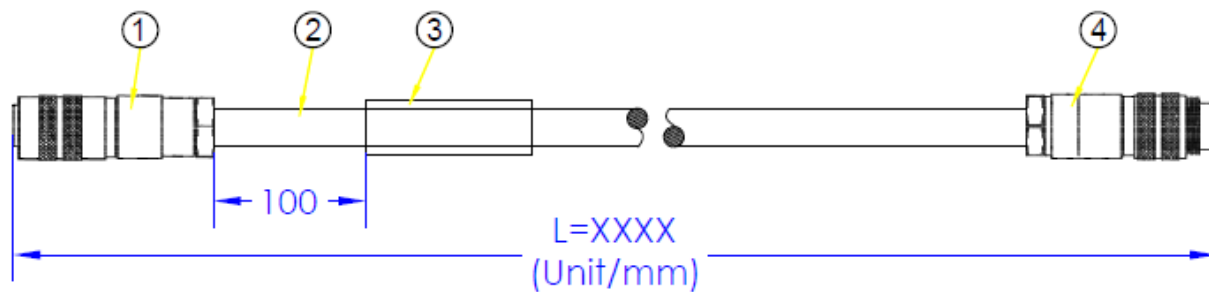
- RET Control Cable

Part Numbers of Cables

Typical Part Numbers
CFCM-BV1-XXXX

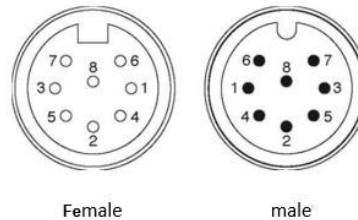
Length
XXXX mm

Length (mm)	L < 2000	L > 2000
Tolerance(mm)	+150/0	+200/0



Pin Assignments:

1. +12 V DC Nominal
2. Not Connected
3. RS485 B
4. Not Connected
5. RS485 A
6. +24 V DC Nominal
7. DC Return
8. Not Connected



Compliance

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PROSE Service

PROSE offers professional services that improve network design, reliability, scalability and efficiency.

Our service core competences include:

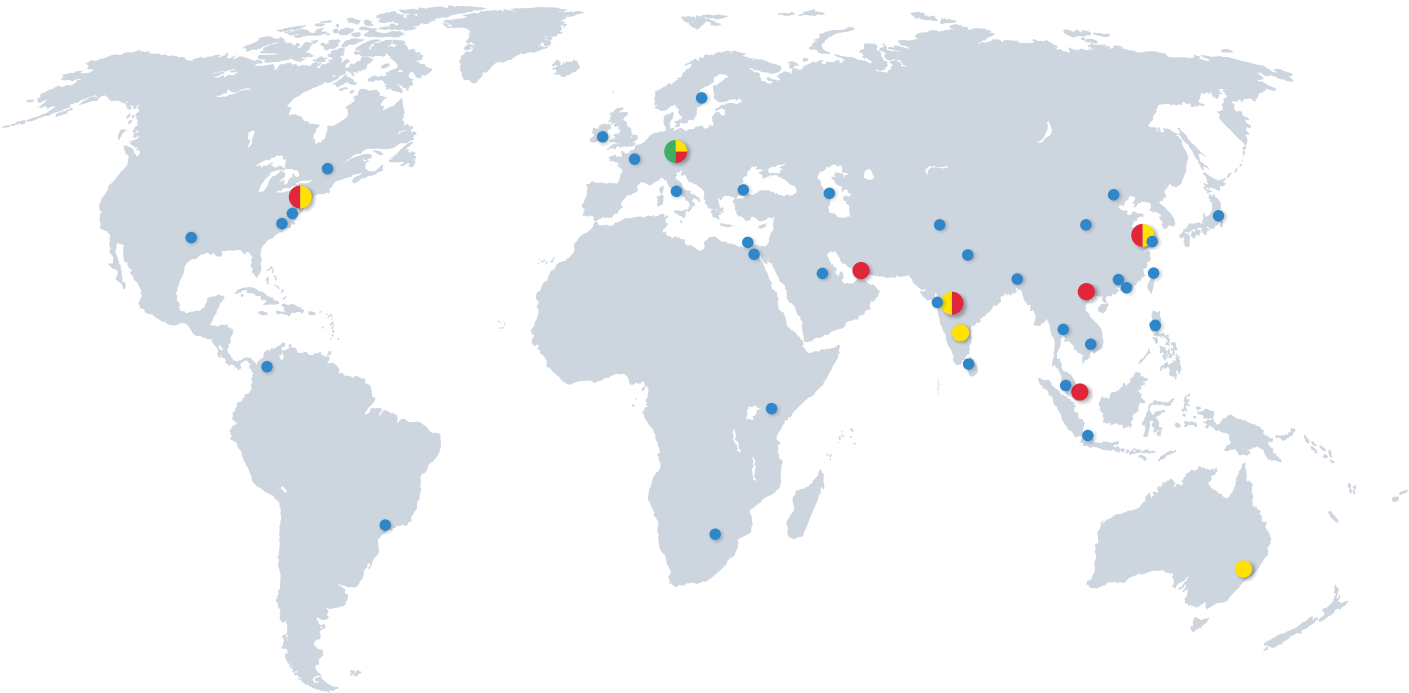
- Network optimization
- Technical consultation
- Customized product design
- Installation & commissioning
- Onsite training & supervision
- System troubleshooting
- After-sales services

In addition, we also offer professional training, technical support and workshops for distributors and agents. We are committed to offering exceptional services for our customers.

PROSE is much more than just a supplier – PROSE is a valued development partner and we will strive to meet new challenges in order to scale to new heights.



GLOBAL FOOTPRINT



- HQ
- PRODUCTION / OPERATIONAL HUB
- R&D CENTER
- SUBSIDIARIES / SALES REPRESENTATIVES



For more information refer to our website:
www.ProseTechnologies.com

PROSE