

2G4W4XBD-27UE

20 Port Antenna / 2L4H + 2.3-3.8 TDD / 2.1m

PROSE

- 2×(698-960) + 4×(1695-2690) + 4×(2300-3800) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors

Electrical Data (FDD) (BASTA)

Frequency(MHz)		2 x (698-960)				4 x (1695-2690)				
		698-824	791-894	880-960	1695-1990	1920-2180	2300-2400	2490-2690		
Gain	R1/R2/Y1	Mid Tilt	dBi	14.8	15.2	14.9	14.6	15.6	16.3	16.6
	/Y3	Over All Tilts		14.8±0.6	15.1±0.6	14.8±0.6	14.5±0.6	15.5±0.6	16.2±0.6	16.6±0.6
	Y2/Y4	Mid Tilt					15.1	15.7	15.7	16.0
		Over All Tilts					15.0±0.6	15.7±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, 180°±30°	dB	> 25	> 25	> 25	> 26	> 27	> 27	> 26
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	> 15			> 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) (BASTA)

Frequency(MHz)		4×(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	°	96±15	61±15
Vertical 3dB Beamwidth		7.0±0.6	5.3±0.5
1st Upper Sidelobe Suppression	dB	> 15	> 15
Broadcast 65° beam			
Gain over All Tilts	dBi	16.2	15.6
Horizontal 3dB Beamwidth	°	65	65
Cross-Polar Discrimination at Mechanical Boresight	dB	> 15	> 15
Front to Back Ratio, 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	150	75

— Maximum Effective Power Whole Antenna: 1500 W.

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Mechanical Data (BASTA)

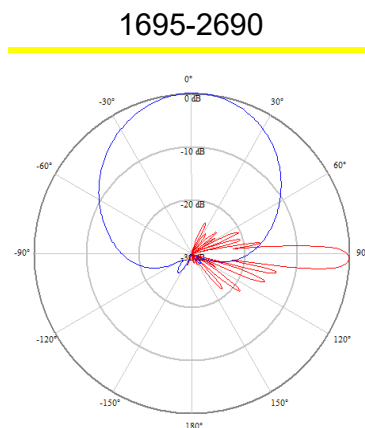
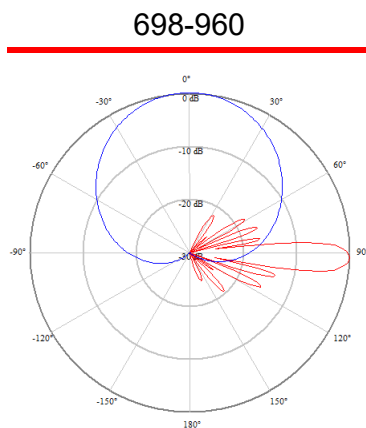
Connector Type	12 x 4.3-10 Female 2 x Cluster	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	Fiberglass	
Radome Color	Light Grey	
Antenna Net Weight	37.2 kg	82.0 lb
Shipping Weight	49.8 kg	109.8 lb
Antenna Dimensions (H x W x D)	2100 x 498 x 197 mm	82.7 x 19.6 x 7.8 in
Packing 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 (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)

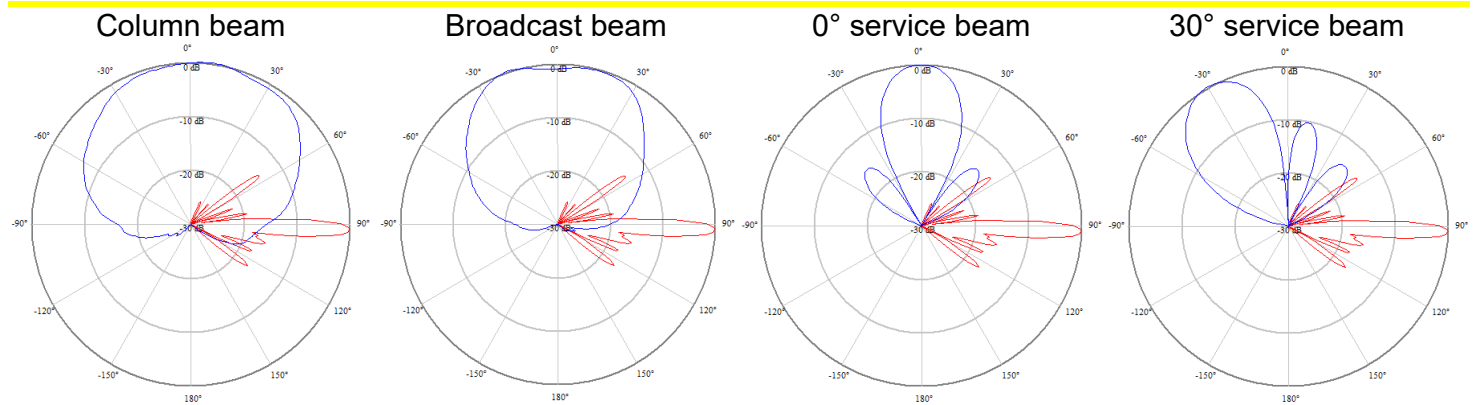


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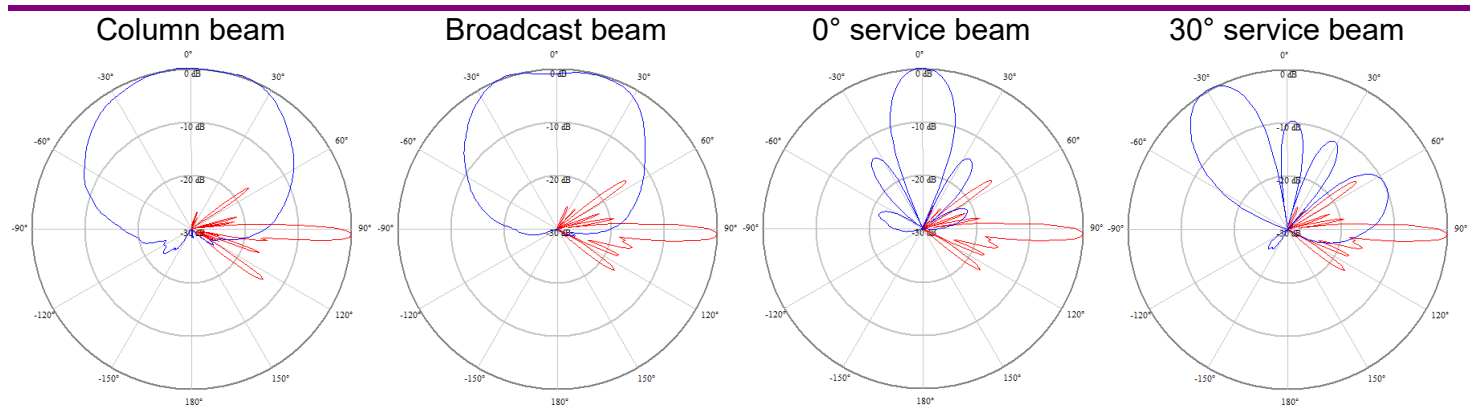
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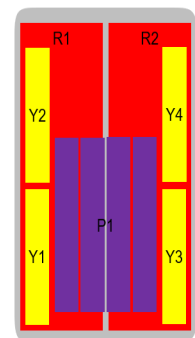
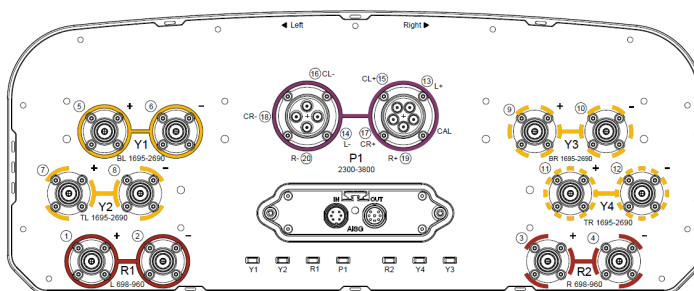
2300-2690



3300-3800



Layout



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Array	Connector	Frequency (MHz)	Sub Unit #	RET Type	RET Serial*
●R1	1 - 2	698-960	3	MRET	RB.....XYYxxxxx-MM
●R2	3 - 4	698-960	5	MRET	RB.....XYYxxxxx-MM
●Y1	5 - 6	1695-2690	1	MRET	RB.....XYYxxxxx-MM
●Y2	7 - 8	1695-2690	2	MRET	RB.....XYYxxxxx-MM
●Y3	9 - 10	1695-2690	7	MRET	RB.....XYYxxxxx-MM
●Y4	11 - 12	1695-2690	6	MRET	RB.....XYYxxxxx-MM
●P1	13 - 20	2300-3800	4	MRET	RB.....XYYxxxxx-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 ISO45001
- Our products are compliant to the EU Directive RoHS as well as to other environmentally relevant regulations (e.g. REACH)



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