

# 4R90TC-06UE

8 Port Antenna / 2.6G TDD / 1.5m

**PROSE**

- 4 x (2300-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- Cluster Connectors

## Electrical Data (BASTA)

| Frequency(MHz)                                     |     | 4 x (2300-2690) |           |
|----------------------------------------------------|-----|-----------------|-----------|
|                                                    |     | 2300-2400       | 2490-2690 |
| Polarization                                       | °   | ±45°            |           |
| Electrical Downtilt                                |     | 2-12            |           |
| Single column beam                                 |     |                 |           |
| Gain over All Tilts                                | dBi | 15.8±0.8        | 16.2±0.8  |
| 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  | > 16            | > 16      |
| 1st Upper Sidelobe Suppression                     |     | > 15            | > 15      |
| Front to Back Ratio, 180°±30°                      |     | > 23            | > 23      |
| Broadcast 65° beam                                 |     |                 |           |
| Gain over All Tilts                                | dBi | 17.2            | 17.6      |
| Horizontal 3dB Beamwidth                           | °   | 65              | 65        |
| Cross-Polar Discrimination at Mechanical Boresight | dB  | > 18            | > 18      |
| Front to Back Ratio, 180°±30°                      |     | > 26            | > 26      |
| Service beam                                       |     |                 |           |
| 0° direction Gain over All Tilts                   | dBi | 21.5            | 21.7      |
| 0° direction Horizontal 3dB Beamwidth              | °   | 27              | 25        |
| 30° direction Gain over All Tilts                  | dBi | 20.8            | 20.7      |
| 30° direction Horizontal 3dB Beamwidth             | °   | 29              | 27        |
| Soft split beam                                    |     |                 |           |
| Gain over All Tilts                                | dBi | 19.0            | 18.8      |
| Horizontal 3dB Beamwidth                           | °   | 32              | 31        |
| 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)         | °   | < 9             |           |
| 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: 600 W.

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## Mechanical Data (BASTA)

|                                               |                     |                       |
|-----------------------------------------------|---------------------|-----------------------|
| Connector Type                                | 2 x Cluster         |                       |
| 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                               | 24.1 kg             | 53.1 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 380 x 312 mm | 67.7 x 15.0 x 12.3 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%            |                       |
| Operating Temperature Range                   | -40 ~ +70 °C        | -40 ~ +158 °F         |

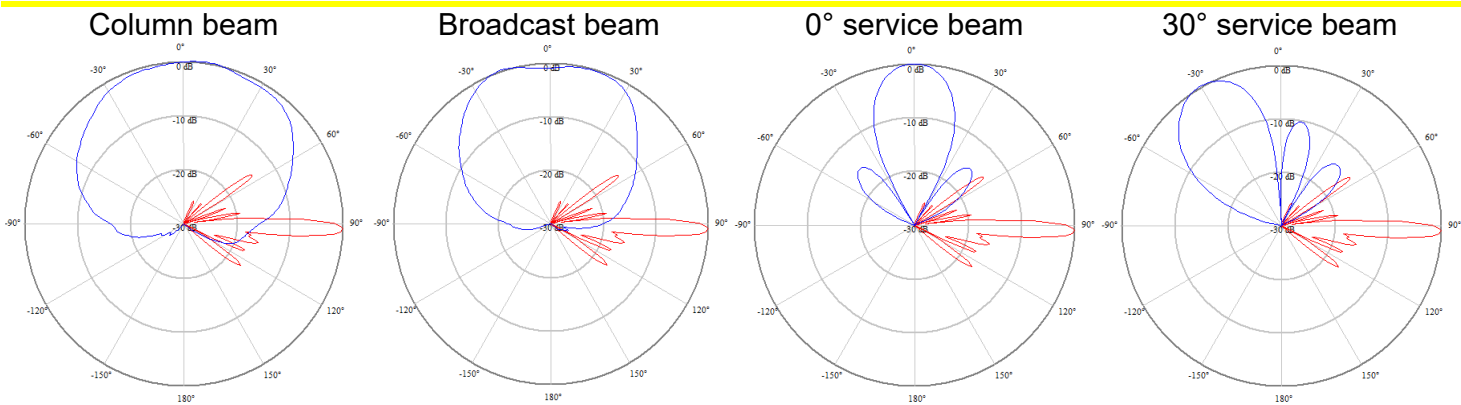


## RET Specification (BASTA)

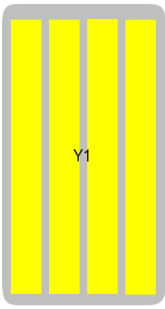
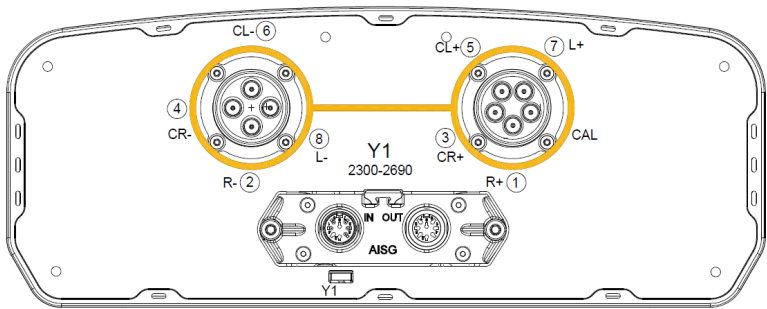
|                          |                                |
|--------------------------|--------------------------------|
| Compatible Standards     | AISG2.0/ 3GPP                  |
| Power Consumption        | ≤2(stand by); ≤13(operating)   |
| Configuration Management | Integrated RET, pre-configured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

Pattern (Sample for reference)

2300-2690



Layout



| Array | Connector | Frequency (MHz) | Sub Unit # | RET Type | RET Serial*       |
|-------|-----------|-----------------|------------|----------|-------------------|
| Y1    | 1 - 8     | 2300-2690       | /          | SRET     | RB.....XYYxxxxx-Y |

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

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## 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 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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