

2G2J2WD-21E-HE

12 Port Antenna / 2L4H / 2.0m

PROSE
PROTREEM⁺

- 2×(698-960) +2×(1427-2690)+ 2×(1695-2690) MHz
- Integrated RET (AISG 2.0 Compliant), Field Exchangeable
- 4.3-10 Connectors
- Integrated EPU (AISG ES-RAE v2.2.0 Compliant)
- PROTREEM (PROSE Extra Energy Efficiency Mark-up) Platform

Electrical Data (BASTA 12.0)

Frequency(MHz)		2×(698-960)				2 x (1427-2690) / 2 x (1695-2690)					
		698-824	791-894	880-960	1427-1518	1695-1990	1920-2180	2300-2400	2490-2690		
Gain	R1/R2/Y2	Mid Tilt	dBi	15.5	15.7	15.9	16.6	18.1	18.9	19.3	19.4
	/Y3	Over All Tilts		15.4±0.6	15.6±0.6	15.8±0.6	16.5±0.6	18.0±0.6	18.8±0.5	19.3±0.5	19.3±0.5
	Y1/Y4	Mid Tilt					17.7	18.7	19.1	19.2	
		Over All Tilts					17.6±0.6	18.6±0.5	19.0±0.5	19.1±0.5	
Polarization			°	±45°							

Horizontal Pattern

3dB Azimuth Beamwidth	°	76±6	73±5	70±6	75±6	71±7	64±7	61±5	58±5
Front to Back Ratio, Total Power, 180°±30°	dB	> 22	> 22	> 21	> 27	> 24	> 30	> 28	> 23
Cross-Polar Discrimination At Mechanical Boresight 0°		> 19	> 20	> 20	> 22	> 21	> 21	> 21	> 22

Vertical Pattern

3dB Elevation Beamwidth	°	10.9±0.9	10.0±0.9	9.1±0.8	7.6±0.7	6.2±0.5	5.6±0.4	5.0±0.3	4.6±0.4
Electrical Downtilt		2-12			2-12				
1st Upper Sidelobe Suppression	dB	> 16	> 17	> 16	> 16	> 16	> 17	> 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	400	250

— Maximum Effective Power Whole Antenna: 1400 W.

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Mechanical Data (BASTA 12.0)

Connector Type	12 x 4.3-10 Female	
Connector Position	Bottom	
Lightning Protection	DC Ground	
Radome Material	MRPP	
Radome Color	Light Grey	
Antenna Net Weight	34.5 kg	76.1 lb
Shipping Weight	44.2kg	97.4 lb
Antenna Dimensions (H x W x D)	2008 x 466 x 209 mm	79.1 x 18.3 x 8.2 in
Packing Size (H x W x D)	2145 x 570 x 365 mm	84.4 x 22.4 x 14.4 in
Survival Wind Speed	241 km/h	150 mph
Wind Load @150 km/h (Frontal / Lateral / Max)	549 / 378 / 751 N	123 / 85 / 169 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

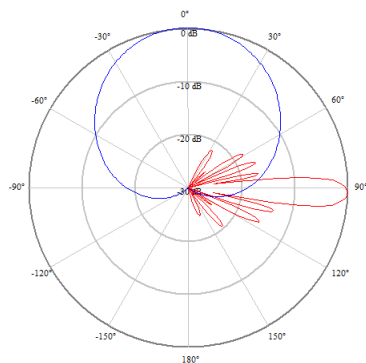
RAE Specification

Longitude/Latitude	<6 m
Altitude	<3 m
Azimuth	±2°
Mechanical Tilt Angle	±0.5°
AISG Device Type	RAE(0x31)
IOT	Support Huawei, ZTE, Nokia, Ericsson

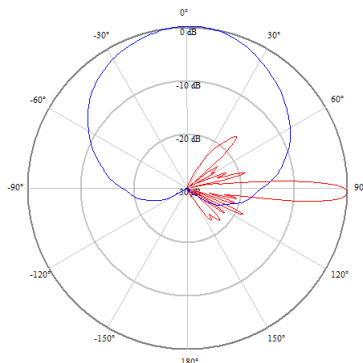
Note: Performance may be affected by GNSS signals' multipath, satellite number and satellite visibility.

Pattern (Sample for reference)

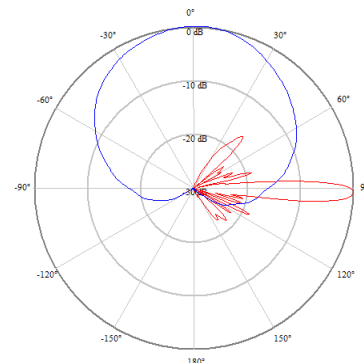
698-960



1427-2690

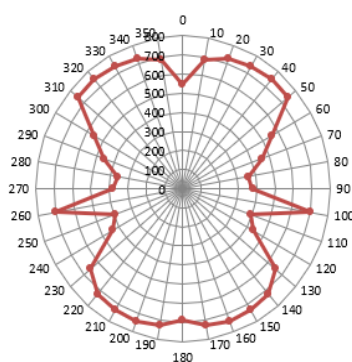


1695-2690

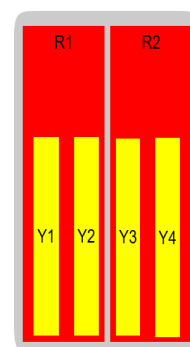
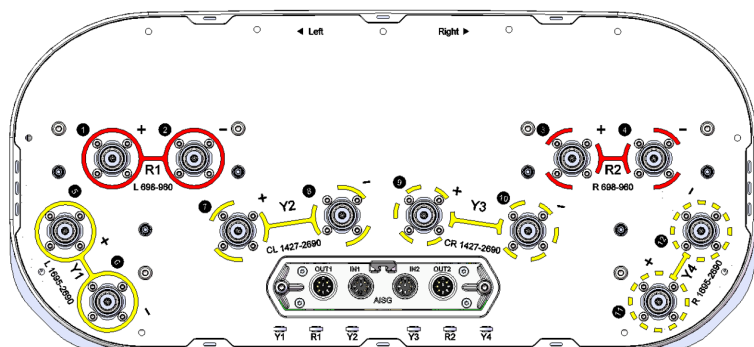


Polar Chart

Wind Load @150 km/h



Layout



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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	1427-2690	/	SRET	RB.....XYYxxxxx-Y2
●Y3	9 - 10	1427-2690	/	SRET	RB.....XYYxxxxx-Y3
●Y4	11 - 12	1695-2690	/	SRET	RB.....XYYxxxxx-Y4

*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 ISO 45001

— 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.