# 6820308G

6820308NG

1-Band, 2-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 2487 mm

- Single band antenna, dual polarisation, 2 connectors
- Continuously adjustable tilt 1-10°
- RET version, 3GPP/AISG2.0 with one integrated RCUs
- Available with 4.3-10 or 7/16-DIN connectors

| PRODUCT OVERVIEW | |
|---|---|
| Frequency Range (MHz) | 690-960 |
| Array | R1 |
| Connector | 1-2 |
| Polarization | XPOL |
| Azimuth Beamwidth (avg) | 65° |
| Electrical Downtilt | 1-10° |
| Dimensions | 2487 x 277 x 167 mm |

## ORDERING OPTIONS Select from the different options listed below

| SELECT ELECTRICAL DOWNTILT CONTROL & AISG PROTOCOL | SELECT CONNECTOR TYPE | ANTENNA MODEL NUMBER |
|---|---|---|
| Remote Electrical Tilt (RET) AISG v2.0 / 3GPP | 4.3-10 Female | 6820308NG |
| | 7/16-DIN Female | 6820308G |

## ELECTRICAL SPECIFICATIONS Low Band — R1

| | | | | | |
|---|---|---|---|---|---|
| Frequency Range | | MHz | 690-960 | | |
| | | MHz | 690-806 | 790-894 | 880-960 |
| Polarization | | --- | ±45° | | |
| Gain | Mid Tilt | dBi | 16.3 | 16.8 | 17.1 |
| | Over all Tilts | dBi | 16.3 ± 0.6 | 16.8 ± 0.5 | 17.1 ± 0.6 |
| Azimuth Beamwidth | | degrees | 68° ± 3.9° | 66° ± 3.8° | 64° ± 3.5° |
| Elevation Beamwidth | | degrees | 9.0° ± 0.7° | 8.3° ± 0.6° | 7.2° ± 0.6° |
| Electrical Downtilt | | degrees | 1°-10° | | |
| Impedance | | Ohms | 50 | | |
| VSWR | | --- | < 1.5 | | |
| Passive Intermodulation 3rd Order for2 x 43 dBm Carrier | | dBc | < -153 | | |
| Front-to-Back Ratio, Total Power, ±30° | | dB | > 23 | > 25 | > 26 |
| Upper Sidelobe Suppression (typical) | | dB | > 17 | > 17 | > 16 |
| Upper Sidelobe Suppression, Peak to 20° | | dB | > 15 | > 15 | > 15 |
| Cross Polar Ratio | Main Direction (0°) | dB | > 23 | > 25 | > 26 |
| | Sector Edges (±60°) | dB | > 18 | > 19 | > 19 |
| Maximum Average Input Power (50° C ambient temperature) | | Watts | 250 W | | |
| InterBand Isolation | | dB | > 28 | | |

*Standard values based on NGMN-P-BASTA version 10.0 recommendation.*

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

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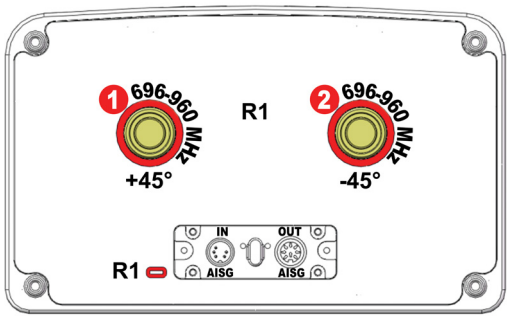
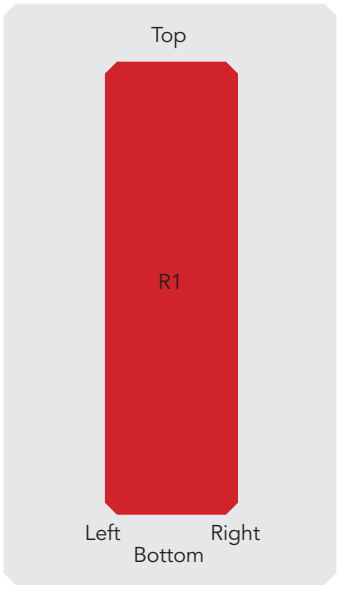
## INTEGRATED RET PROPERTIES

| | |
|---|---|
| Power Supply | 10-30VDC Compliant with 3GPP/AISGv2.0 |
| Power Consumption | < 1W (Idle), < 10W (In Motion) |
| Hardware Interface | RS485 and Power |
| Protocol Supported | AISG v2.0 and 3GPP |
| Adjustment Time (Full Range) | ≤ 90 s (typical, dependent on antenna type) |
| Adjustment Cycles | > 10,000 |
| Torque Max | ≥ 160 mN.m |
| Lightning Protection Rating | IEC 61000-4-5 Current Pulse Profile, 8/20 µs 10 Repetitions Min. @ 8 kA |
| Connectors | (2x) 8-Pin Circle Connector<br>According to IEC 60130-9 and AISG<br>Daisy Chain In: Male; Daisy Chain Out: Female<br>Pin 3: RS485+; Pin 5: RS485-; Pin 6: 10~30V; Pin 7: GND<br>Female Connector: 8 PINs, Male Connector 5-PINs |




| ARRAY LAYOUT | ARRAY | FREQUENCY | CONNECTOR | CONNECTOR TYPE |
|---|---|---|---|---|
| | R1 | 690-960 | 1-2 | 4.3-10 Female or 7/16-DIN Female |

*Diagram shown at right depicts the view from the front of the antenna.*
*The illustration is not shown to scale.*



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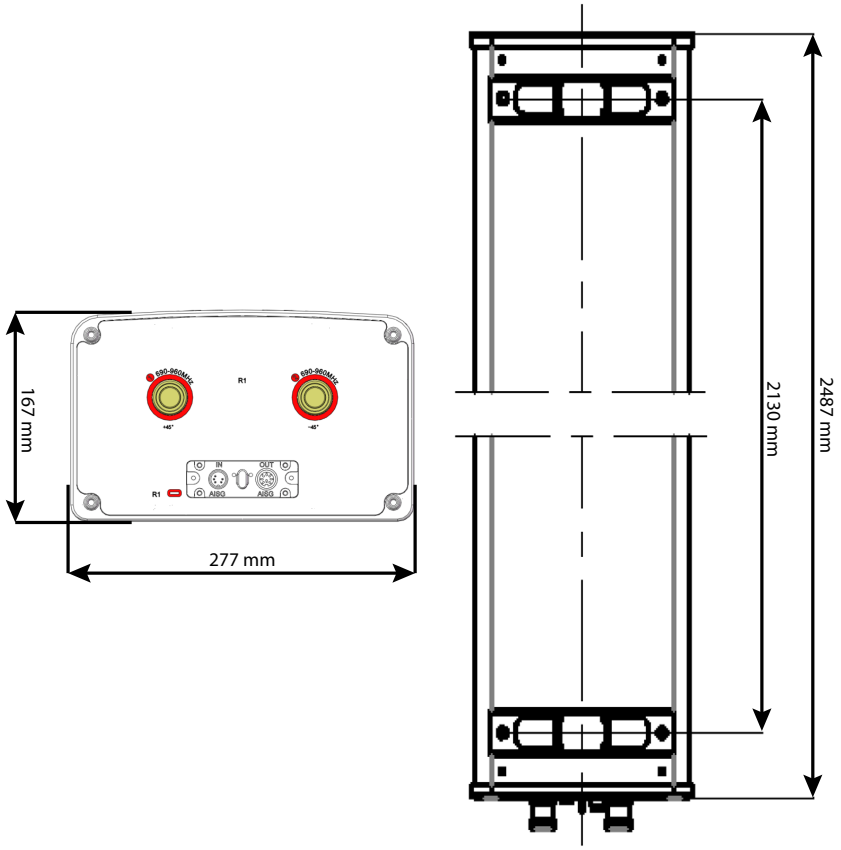
## MECHANICAL SPECIFICATIONS

| | | | |
|---|---|---|---|
| Length | | mm (in) | 2487 (97.9) |
| Width | | mm (in) | 277 (10.9) |
| Depth | | mm (in) | 167 (6.6) |
| Net Weight - Antenna Only | | kg (lbs) | 21.5 (47.4) |
| Survival Wind Speed | | km/h (mph) | 200 (124.3) |
| Wind Load at 150 km/h | Front | N (lbf) | 690 (155.1) |
| | Lateral | N (lbf) | 770 (173.1) |
| Radome Material | | --- | UPVC |
| Lightning Protection | | --- | Direct Ground |
| SHIPPING | Dimensions | mm (in) | 2687 x 372 x 287 (105.8 x 14.6 x 11.3) |

## ACCESSORIES All accessories are ordered separately unless otherwise indicated

| ITEM | MECHANICAL TILT |
|---|---|
| Brackets for pole Ø50 to Ø125 mm (Ø2.0 to Ø4.9 in) ***Included - delivered as standard*** | 0-10° |

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