

5863300

5863300A 5863300G

Dual Band | Panel Antenna | XX-Pol | 65° / 65° | 16.5 / 18.5 dBi | Variable Tilt



- Dual band antenna, dual polarisation, 4 connectors
- Independent tilt on each band 0-10° / 0-10°
- SlimLine profile for low wind load
- MET and RET versions, AISG1.1 or 3GPP/AISG2.0
- Single RET module to control all tilt angles, fully inserted inside the antenna (field replaceable)

| Ordering Options | Model Number |
|---|-----------------|
| Manual Electrical Tilt | 5863300 |
| Remote Electrical Tilt AISG1.1 | 5863300A |
| Remote Electrical Tilt 3GPP/AISG2.0 with an MDCU RET Actuator | 5863300G |

Access Ports Description (Connectors)
The antenna has 6 colour-coded connectors located at the bottom face. See image on the following page.

| | | | |
|-----------|-----------------|---------------------|--------------------------------|
| R1 | Ultra Low Band | 698-960 MHz Ports | (2x) 7/16-DIN Female Long Neck |
| Y1 | Ultra Wide Band | 1695-2690 MHz Ports | (2x) 7/16-DIN Female Long Neck |

| Electrical Characteristics | | R1 | | | Y1 | | |
|---|-------------|-------------------------------------|------|------|-------------------------------------|------|------|
| Frequency Bands (MHz) | | 700 | 800 | 900 | 1800 | 2100 | 2600 |
| Gain (dBi) | Tilt 0° | 14.5 | 15.5 | 16.4 | 17.7 | 18.1 | 18.5 |
| | Tilt 5° | 14.5 | 15.4 | 16.3 | 17.7 | 18.1 | 18.5 |
| | Tilt 10° | 14.2 | 15.1 | 16.0 | 17.7 | 18.0 | 18.2 |
| Input Impedance | | 50Ω | | | 50Ω | | |
| VSWR | | < 1.5 | | | < 1.5 | | |
| Polarisation | | ±45° | | | ±45° | | |
| Horizontal Beamwidth (-3 dB) | | 73° | 65° | 65° | 65° | 63° | 61° |
| Vertical Beamwidth (-3 dB) | | 12° | 10° | 9.4° | 6.1° | 5.3° | 4.2° |
| Electrical Downtilt Range | | 0-10° | | | 0-10° | | |
| Inter/Intra Band Isolation | | > 30 dB, > 28 dB from 0° to 2° tilt | | | > 30 dB, > 28 dB from 0° to 2° tilt | | |
| Upper Sidelobe Rejection (20° sector above main beam) | | 18 dB Typical | | | 18 dB Typical | | |
| Front-to-Back Ratio | @ 180° | > 30 dB | | | > 30 dB | | |
| | @ 180° ±30° | > 25 dB | | | > 25 dB | | |
| Maximum Power (Per Port) | | 250 W | | | 200 W | | |
| Intermodulation 3rd Order for 2x20W Carriers | | < -110 dBm | | | < -110 dBm | | |

Electrical Downtilt Control
Electrical downtilt for each band can be controlled separately. Tilt indicator(s) are covered by removable transparent cap(s).

| | |
|--|--|
| Manual Electrical Tilt (MET) Control | A coloured knob at the end of the tilt indicator allows change of the tilt without need of a tool. The knob colour is identical to the corresponding connector ring colour. To access the knob, remove the cap by turning it counter-clockwise. It is re-installed by opposite rotation. Do not remove the transparent cap(s) from the antenna. |
| Remote Electrical Tilt (RET) Control | The remote control of the electrical tilt is managed by a Multi-Device Control Unit (MDCU) inserted in the bottom of the antenna. A single actuator individually controls the tilt of each band (no need for daisy chain cables between the bands). This module does not add any additional length to the antenna. For RET control, the transparent caps must be in place and locked. The tilt angle indicators always remain visible and the antenna still has manual tilt control (manual override). |
| RET Module Part Number (one per antenna) | MDCU-A0000 for AISG1.1 protocol (one unit included in 5863300A) MDCU-G0000 for 3GPP/AISG2.0 protocol (one unit included in 5863300G) |

| Environmental | |
|-----------------------------|------------------|
| Operating Temperature Range | -40° C to +60° C |
| Environmental | ETS 300 019 |
| RoHS Compliant | Yes |



Several patents pending regarding this product. 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.

5863300

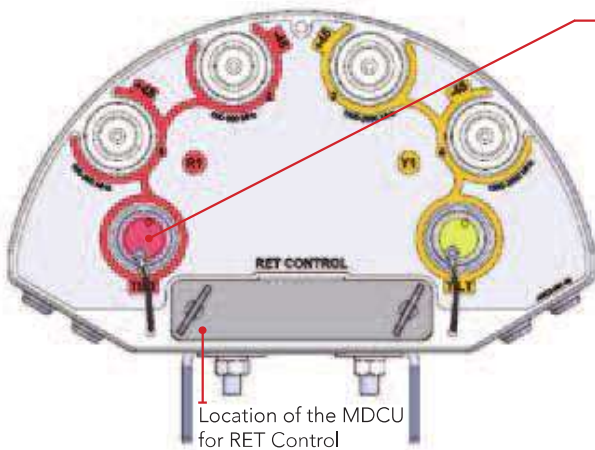
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| Mechanical Characteristics | | |
|--|-------------------------------|----------------------------|
| Dimensions (Height x Width x Depth) | 1914 x 253 x 147 mm | |
| Weight (Excluding Mounting Accessories) | 17 kg | |
| Shroud | Outdoor Plastic, Grey RAL7035 | |
| Wind Speed | Operational: 160 km/hr | Survival: 200 km/h |
| Wind Load at 150 km/h | Frontal: 542 N | Lateral: 248 N Rear: 532 N |
| Mounting Kit Options | Part Number | Weight |
| All mounting bracket kits are ordered separately unless otherwise indicated. Select from the options listed below. | | |
| Brackets for pole 48 to 115 mm | 0900393/00 | 5.1 kg |
| Brackets for pole 70 to 150 mm | 0900501/00 | 5.8 kg |
| Kit to add mechanical tilt (0-10°) to above brackets | 0900394/00 | 3.1 kg |
| Wall mounting brackets with azimuth pan | 0900395/00 | 2.3 kg |
| Wall mounting brackets with mechanical tilt and azimuth pan | 0900533/00 | 4.4 kg |

| Packaging |
|--|
| Carton Box 2.12 x 0.35 x 0.24 m 0.178 m ³ 21.5 kg |

Bottom View of Antenna



Tilt indicators covered by transparent caps. Manual adjustment is accessed by removing the caps. Knob colours are the same as the connectors.

- RED 698-960 MHz
- YELLOW 1695-2690 MHz

Installation

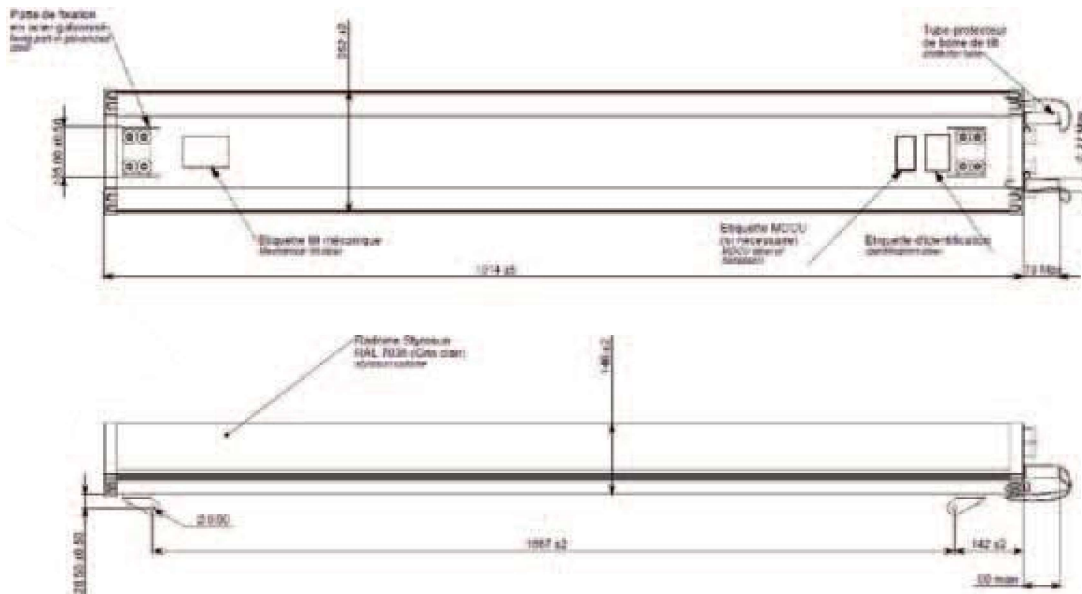


In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.

Always attach the antenna by the two mounting points.

Do not install the antenna with the connectors facing upward.

Dimensions (in mm)



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