

5861300

5861300A 5861300G

Dual Band | Panel Antenna | XX-Pol | 65° / 65° | 17.5 / 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	5861300
Remote Electrical Tilt AISG1.1	5861300A
Remote Electrical Tilt 3GPP/AISG2.0 with an MDCU RET Actuator	5861300G

Access Ports Description (Connectors)
The antenna has 4 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°	15.5	16.5	17.4	17.7	18.1	18.5
	Tilt 5°	15.5	16.4	17.3	17.7	18.1	18.5
	Tilt 10°	15.2	16.2	17.0	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)		8.6°	7.5°	6.7°	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 5861300A) MDCU-G0000 for 3GPP/AISG2.0 protocol (one unit included in 5861300G)

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.

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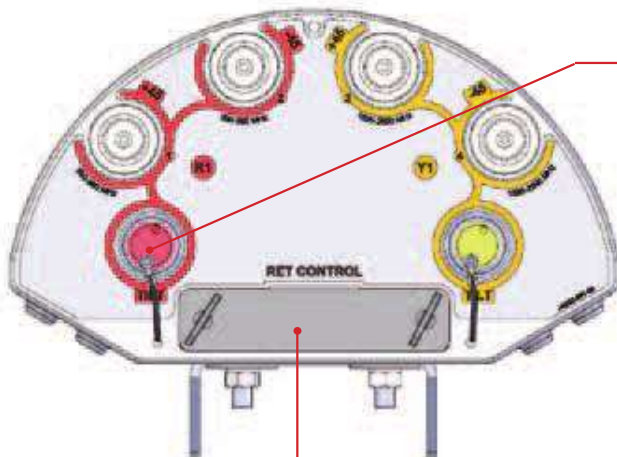
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Mechanical Characteristics		
Dimensions (Height x Width x Depth)	2688 x 253 x 147 mm	
Weight (Excluding Mounting Accessories)	24 kg	
Shroud	Outdoor Plastic, Grey RAL7035	
Wind Speed	Operational: 160 km/hr Survival: 200 km/h	
Wind Load at 150 km/h	Frontal: 761 N	Lateral: 348 N Rear: 747 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 2.93 x 0.35 x 0.24 m 0.246 m ³ 28.5 kg

Bottom View of Antenna



Location of the MDCU for RET Control

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

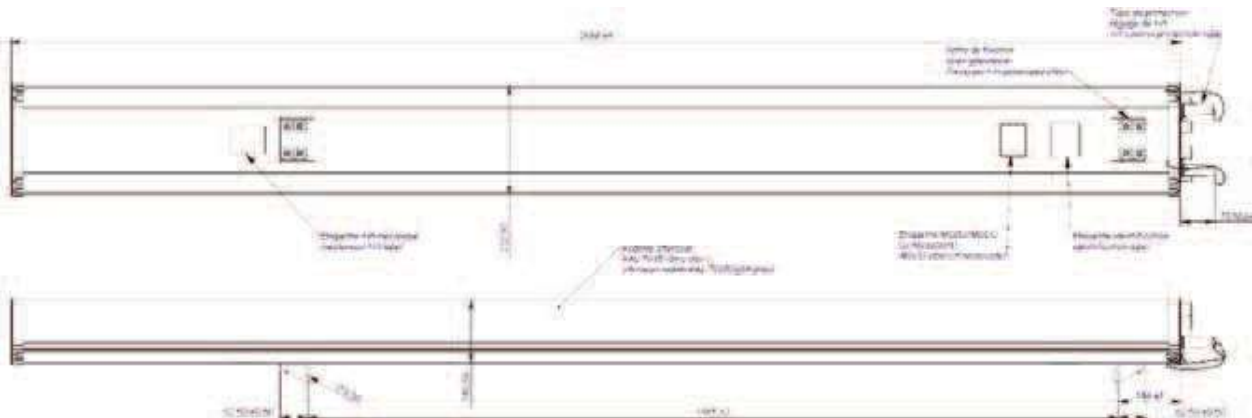


In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.

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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