

6880300

6880300A 6880300G

XXXpol | 65° Az | 17.4 / 17.7 / 18.3 dBi | 0-10° / 0-10° / 0-10° | 2696 x 305 x 162 mm

- Tri band antenna, dual polarisation, 6 connectors
- Independent tilt on each band 0-10° / 0-10° / 0-10°
- UltraLine platform with multi-array capability
- 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)

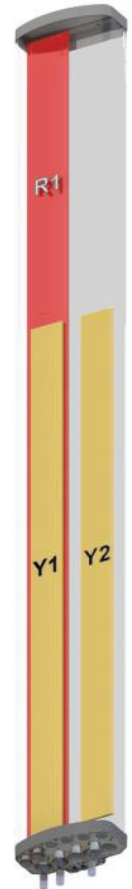
UltraLine
LTE Ready

Ordering Options	Model Number
Manual Electrical Tilt Antenna	6880300
Remote Electrical Tilt Antenna AISG1.1	6880300A
Remote Electrical Tilt Antenna 3GPP/AISG2.0 with an MDCU RET Actuator	6880300G

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 Ultra Long Neck
Y2	Ultra Wide Band	1695-2690 MHz Ports	(2x) 7/16-DIN Female Ultra Long Neck

Electrical Characteristics	R1			Y1			Y2			
Frequency Bands (MHz)	700	800	900	1800	2100	2600	1800	2100	2600	
Gain (dBi)	Tilt 0°	15.9	16.5	17.4	17.7	17.7	17.7	17.7	18.1	18.3
	Tilt 5°	15.9	16.4	17.3	17.7	17.7	17.7	17.7	17.9	18.1
	Tilt 10°	15.6	16.2	17.0	17.7	17.5	17.4	17.6	17.8	17.7
Input Impedance	50 ohms			50 ohms			50 ohms			
VSWR	< 1.5			< 1.5			< 1.5			
Polarisation	±45°			±45°			±45°			
Horizontal Beamwidth (-3 dB)	73°	67°	67°	68°	70°	74°	65°	65°	65°	
Vertical Beamwidth (-3 dB)	8.6°	7.5°	6.7°	6.1°	5.3°	4.2°	6.1°	5.3°	4.2°	
Electrical Downtilt Range	0-10°			0-10°			0-10°			
Inter/Intra Band Isolation	> 25 dB			> 25 dB			> 28 dB			
Upper Sidelobe Rejection (20° sector above main beam)	15 dB Typical			18 dB Typical			18 dB Typical			
Front-to-Back Ratio @ 180° ±30°	> 25 dB			> 25 dB			> 25 dB			
Power Handling Per Input (CW)	250 W			200 W			200 W			
Maximum Power Per Input (Peak)	400 W			250 W			250 W			
Intermodulation 3rd Order for 2x20W Carriers	< -110 dBm			< -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 6880300A)
	MDCU-G0000 for 3GPP/AISG2.0 protocol (one unit included in 6880300G)



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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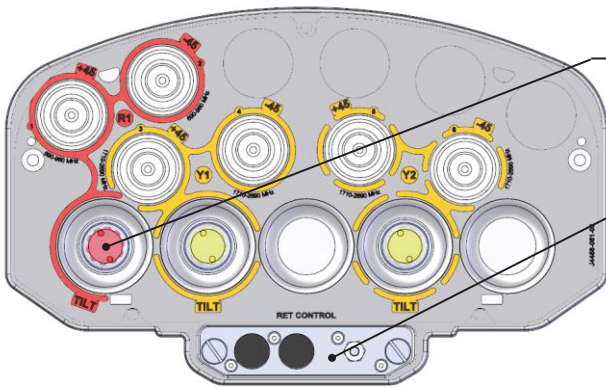
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Mechanical Characteristics	
Dimensions (see drawing)	Height: 2696 mm Width: 305 mm Depth: 162 mm
Weight	28 kg (excluding mounting accessory)
Shroud	Outdoor Plastic, Grey RAL7035
Wind Speed	Operational: 160 km/hr Survival: 200 km/h
Wind load at 150 km/h	Frontal: 1032 N Lateral: 469 N Rear: 1011 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 Ø48 to Ø115 mm (delivered as standard)	0900181/00 3.4 kg
Brackets for pole Ø70 to Ø150 mm (optional)	0900182/00 3.9 kg
Kit to add mechanical tilt (0°-10°) to above brackets (optional)	0900397/00 3.0 kg
Wall mounting brackets are available upon request	

Packaging
Carton Box
2.95 x 0.40 x 0.28 m
0.243 m³ 39 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.

Location of the MDCU for RET Control

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

Installation

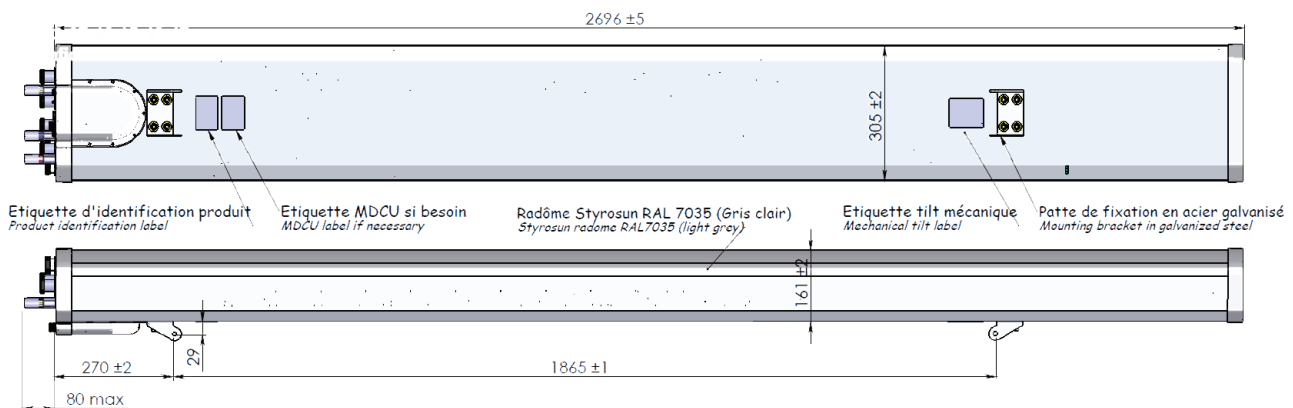


In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.

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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