

6878300-T

6878300A-T 6878300G-T

XXXpol | 65° Az | 16.4 / 17.7 / 18.3 dBi | 0-10° / 0-10° / 0-10° | 1914 x 305 x 162 mm | with Top Connectors

- 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

• TOP CONNECTORS •

Ordering Options	Model Number
Manual Electrical Tilt Antenna	6878300-T
Remote Electrical Tilt Antenna AISG1.1	6878300A-T
Remote Electrical Tilt Antenna 3GPP/AISG2.0 with an MDCU RET Actuator	6878300G-T

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 Ultra 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°	14.5	15.5	16.4	17.7	17.7	17.7	17.7	18.1	18.3
	Tilt 5°	14.5	15.4	16.3	17.7	17.7	17.7	17.7	17.9	18.1
	Tilt 10°	14.2	15.1	16.0	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°	65°	70°	74°	65°	65°	65°	
Vertical Beamwidth (-3 dB)	12°	10°	9.4°	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)	18 dB Typical			18 dB Typical			18 dB Typical			
Front-to-Back Ratio @ 180° ±30°	> 25 dB			> 25 dB			> 25 dB			
Maximum Power (Per Port)	250 W			200 W			200 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 6878300A-T) MDCU-G0000 for 3GPP/AISG2.0 protocol (one unit included in 6878300G-T)

Environmental

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



6878300-T

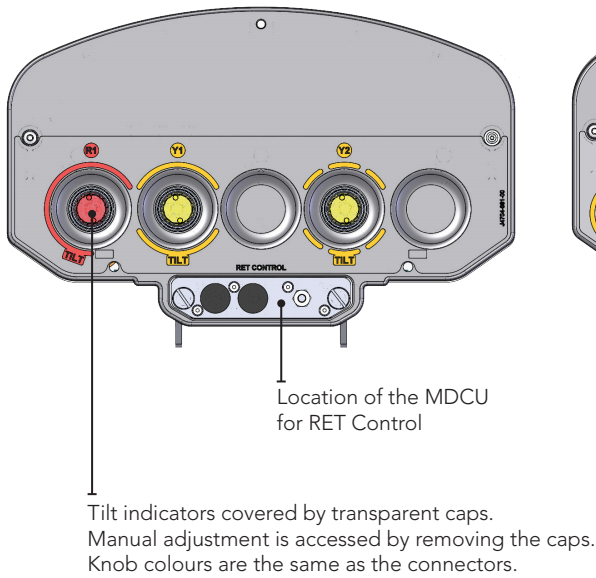
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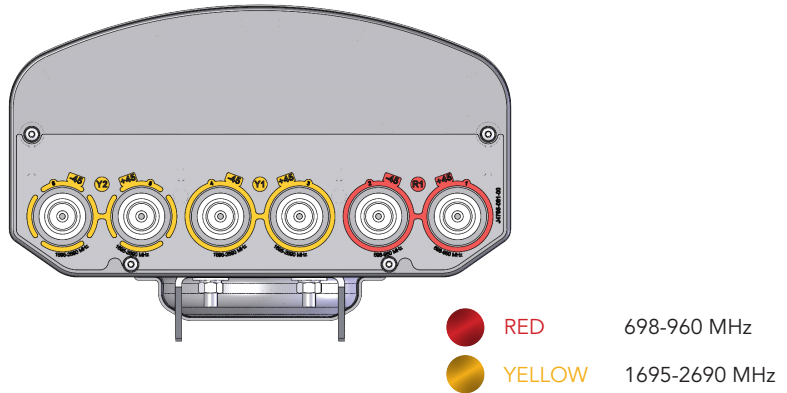
Mechanical Characteristics			
Dimensions (see drawing)	Height: 1914 mm Width: 305 mm Depth: 162 mm		
Weight	23 kg (excluding mounting accessory)		
Shroud	Outdoor Plastic, Grey RAL7035		
Wind Speed	Operational: 160 km/hr Survival: 200 km/h		
Wind load at 150 km/h	Frontal: 764 N	Lateral: 348 N	Rear: 749 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 2.17 x 0.40 x 0.28 m 0.243 m ³ 33 kg

Bottom View of Antenna



Top View of Antenna

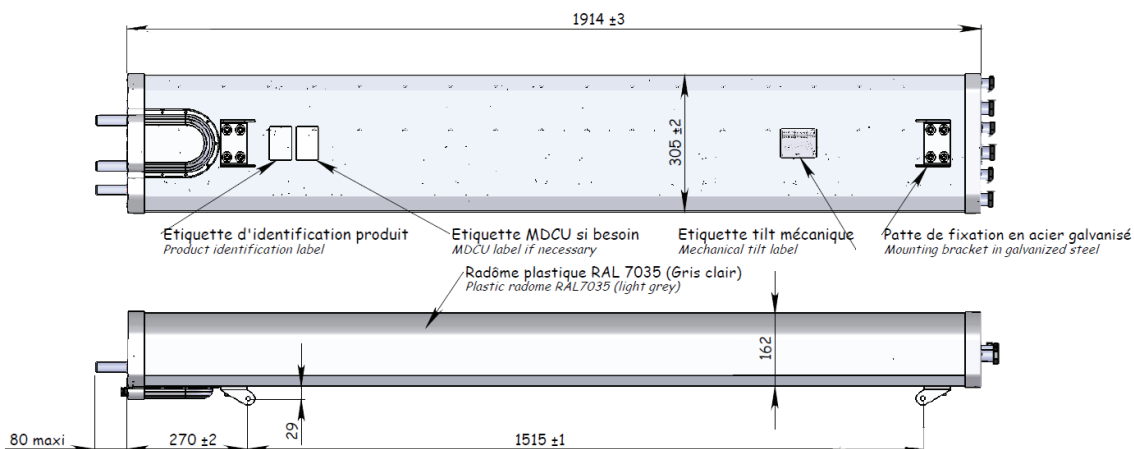


Installation

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 downward.

Dimensions (in mm)



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.