

**Project Design Requirement
Issue D 2014-11-24**

UltraLine-LTE Ready

6880300
6880300A 6880300G

- Triple 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)

XXXpol / 65° Az
17.5 / 18.5 / 18.5 dBi
0-10 / 0-10 / 0-10 °
2696 x 305 x 162 mm

Model number options: **6880300** Manual Electrical tilt Antenna
6880300A Remote Electrical Tilt Antenna (AISG1.1)
6880300G Remote Electrical Tilt Antenna (3GPP/AISG2.0)

Access Ports Description (Connectors)										
The Antenna has 6 connectors located at its bottom face and marked with colour rings. See photo next page.										
R1	Ultra Low Band:	698-960 MHz ports					2 x 7-16 DIN female Long Neck			
Y1	Ultra Wide Band:	1695-2690 MHz ports					2 x 7-16 DIN female Ultra Long Neck			
Y2	Ultra Wide Band:	1695-2690 MHz ports					2 x 7-16 DIN female Ultra Long Neck			
Electrical Characteristics		R1			Y1			Y2		
Frequency Bands		700	800	900	1800	2100	2600	1800	2100	2600
Gain (dBi)	tilt 0°	15.5	16.5	17.4	17.7	18.1	18.3	17.7	18.1	18.3
	tilt 5°	15.5	16.4	17.3	17.7	17.9	18.1	17.7	17.9	18.1
	tilt 10°	15.2	16.2	17.0	17.6	17.8	17.7	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°	65°	65°	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° to 10°			0° to 10°			0° to 10°		
Inter/Intra Band Isolation		>25dB			>25dB			>28dB		
Upper Sidelobe Rejection (20° sector above main beam)		18 dB typ.			18 dB typ.			18 dB typ.		
Front to back @180°+/-30°		>25 dB			>25 dB			>25 dB		
Maximum Power (per port)		250 W			200 W			200 W		
Intermodulation 3rd order for 2 x 20 W carriers		<-110 dBm			<-110 dBm			<-110 dBm		



Electrical Downtilt Control		
Electrical downtilt can be controlled separately for R1, Y1 and Y2 arrays. The three tilt indicators are covered by a removable transparent cap.		
Manual control: A coloured knob at the end of the tilt indicator allows change of the tilt without need for a tool. Knob colour is identical to connector colours as defined above. To access the knob, the cap is removed by turning it counter clockwise. It is re-installed by opposite rotation.		
Remote control: The remote control of the electrical tilt is managed by a module (MDCU) totally inserted at the bottom of the antenna. One single module controls individually the tilt of each band (no need of daisy chain cables between the bands). For RET control, the transparent cap must be in place and locked. This module does not add any additional length at the bottom of the antenna. The tilt angle indicator stays always visible and the antenna still has manual tilt control (manual override).		
RET module part number (one only needed per antenna)	MDCU-A0000 MDCU-G0000	for AISG1.1 protocol (one unit included in 6880300A) 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



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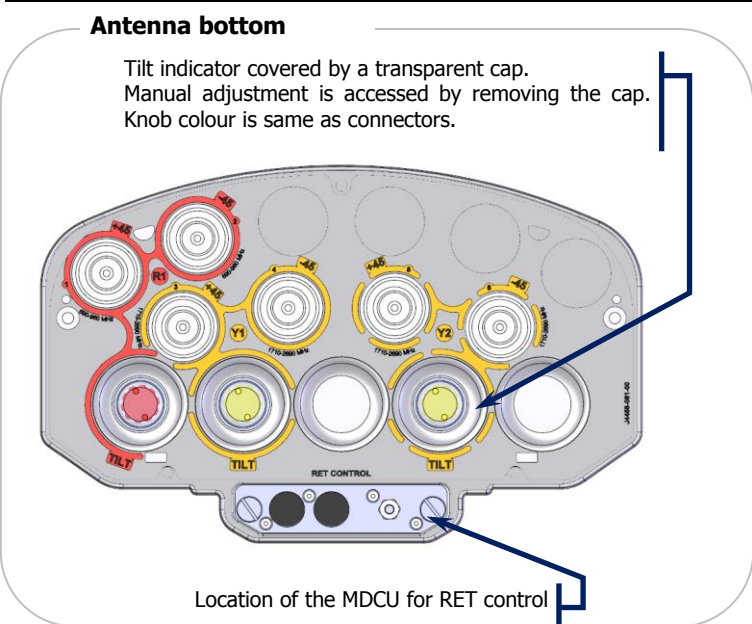
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Mechanical Characteristics	
Dimensions (see drawing)	Height: 2696 mm Width: 305 mm Depth: 162 mm
Weight	29 kg (excluding mounting accessory)
Shroud	Outdoor plastic, Grey RAL7035
Wind Speed	Operational: 160 km/h Survival: 200 km/h
Wind load at 150 km/h	Frontal: 1032 N Lateral: 469 N Rear: 1011 N

Packaging
Carton box
2.95 x 0.40 x 0.28 m
0.243 m ³ 33.5 kg

Mounting Kit Options (These installation accessories must be ordered separately)		
Description	Part number	Weight
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° to 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



Installation

Always attach the antenna by its 2 mounting points. Do not install the antenna with the connectors facing upward.

Dimensions (in mm)

