

- Double Dual-Band Antenna, dual polarisation, 8 connectors
- Independent tilt on each band 0°-10°
- Lightweight TwinLine platform and low windload
- MET and RET versions, AISG1.1 or 3GPP/AISG2.0
- Fully internal RET control based on our patented technologies (field replaceable)

XXXpol / 65° Az
17.5 / 18.0 / 17.5 / 18.0 dBi
0-10 / 0-10 / 0-10 / 0-10°

Optimal profile - Low windload

Model number options:	5961300	Manual Electrical tilt Antenna
	5961300A	Remote Electrical Tilt Antenna (AISG1.1)
	5961300G	Remote Electrical Tilt Antenna (3GPP/AISG2.0)
	5961300DG	Remote Electrical Tilt Antenna with MDDU (3GPP/AISG2.0)

Access Ports Description (Connectors)

This antenna is built as two identical Dual-Band Antennas, housed side by side in the same shroud. The Antenna has 8 colour coded connectors located at its bottom. See picture next page.

R1 R2	Ultra Low Band:	698-960 MHz ports	4 x 7-16 DIN female Long Neck
Y1 Y2	Ultra Wide Band:	1695-2690 MHz ports	4 x 7-16 DIN female Long Neck

Electrical Characteristics	R1-R2			Y1-Y2		
Frequency Bands	700	800	900	1800	2100	2600
Gain (dBi)						
tilt 0°	15.5	16.5	17.4	17.5	17.7	17.9
tilt 5°	15.5	16.4	17.3	17.5	17.7	17.8
tilt 10°	15.2	16.2	17.0	17.4	17.6	17.5
Input Impedance	50 ohms			50 ohms		
VSWR	<1.5			<1.5		
Polarisation	±45°					
Horizontal Beamwidth (-3 dB)	75°	72°	70°	65°	63°	61°
Vertical Beamwidth (-3 dB)	8.6°	7.5°	6.7°	6.1°	5.3°	4.2°
Electrical Downtilt range	0° to 10°			0° to 10°		
Inter/Intra Band Isolation	>25dB			>25dB		
Upper Sidelobe Rejection (20° sector above main beam)	18 dB typ.			18 dB typ.		
Front to back @180°+/-30°	>25 dB			>25 dB		
Maximum Power (per port)	250 W			200 W		
Intermodulation 3rd order for 2 x 20 W carriers	<-110 dBm			<-110 dBm		

Electrical Downtilt Control

Electrical downtilt can be controlled separately for each Low or High Band array. The 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 for AISG1.1 protocol (one unit included in 5961300A) MDCU-G0000 for 3GPP/AISG2.0 protocol (one unit included in 5961300G)
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Environmental

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



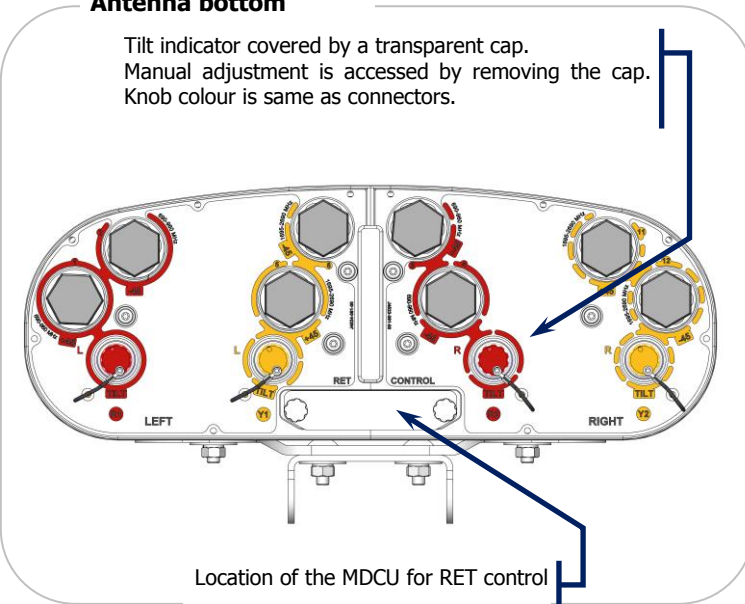
Mechanical Characteristics	
Dimensions (see drawing)	Height: 2683 mm Width: 432 mm Depth: 153 mm
Weight	42 kg (excluding mounting accessory)
Shroud	Outdoor glass fibre, Grey RAL7035
Wind Speed	Operational: 160 km/h Survival: 200 km/h
Wind load at 150 km/h	Frontal: 790 N Lateral: 555 N Rear: 920 N

Packaging
Carton box
2.93 x 0.55x 0.28 m
0.45 m ³
55 kg (including 0900181/00)

Mounting Kit Options (These installation accessories must be ordered separately)		
Description	Part number	Weight
Brackets for pole 48 to 115 mm	0900181/00	3.4 kg
Brackets for pole 70 to 150 mm	0900182/00	3.9 kg
Kit to add mechanical tilt to above brackets	0900396/00	2.3 kg

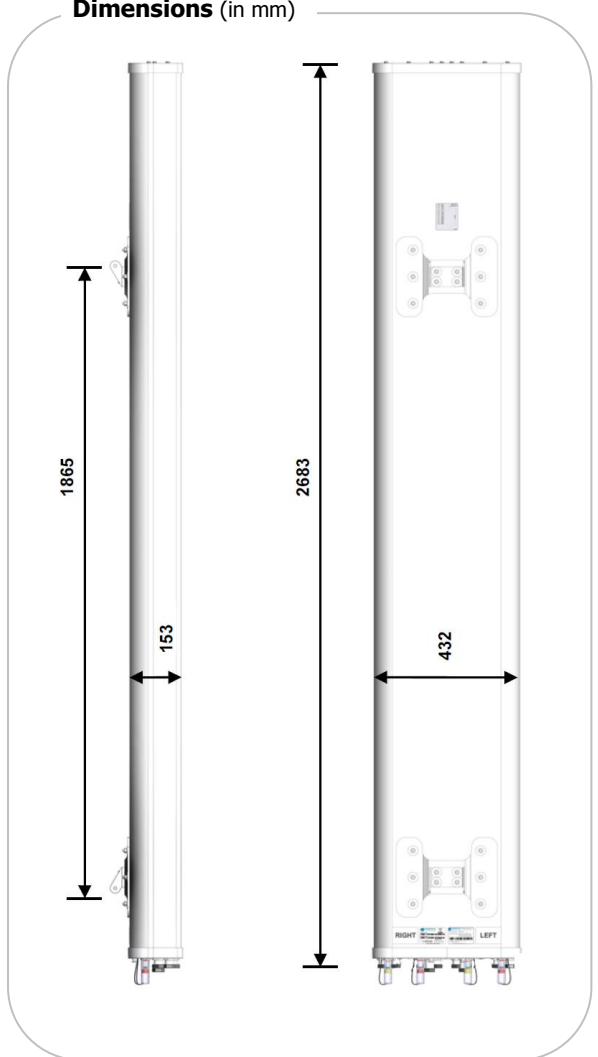
Antenna bottom

Tilt indicator covered by a transparent cap.
Manual adjustment is accessed by removing the cap.
Knob colour is same as connectors.



Location of the MDCU for RET control

Dimensions (in mm)



Installation

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



In order to operate RET control, the transparent cap covering the tilt adjustment indicator must be engaged and locked. Do not cut it from the antenna.