

5863388G

2-Band | 4-Port | XPOL | Panel Antenna | Variable Tilt | 1997 mm

- Dual band antenna, dual polarisation, 4 connectors
- Independent, continuously adjustable tilt on each band 0-10° / 0-10°
- RET version, 3GPP/AISG2.0 with two integrated RCUs

ORDERING OPTIONS	MODEL NUMBER
Antenna with 7/16-DIN Connectors	5863308G

ACCESS PORT DESCRIPTION (CONNECTORS)		
This antenna has 4 colour-coded connectors located at the bottom face.		
Frequency Designation	R1	B1
Frequency Range	790-960 MHz	1710-2180 MHz
Polarisation	Xpol	Xpol
Horizontal Beamwidth	65°	65°
Electrical Downtilt Range	0-10°	0-10°
Connector Type	(2x) 7/16-DIN Female	(2x) 7/16-DIN Female

ELECTRICAL CHARACTERISTICS		R1	
Frequency Bands		790-960 MHz	
		790-894	880-960
Gain	At Mid Tilt	15.7 dBi	16.3 dBi
	Over All Tilts	15.6 ± 0.6 dBi	16.3 ± 0.5 dBi
Input Impedance		50Ω	
VSWR		< 1.5	
Polarisation		±45°	
Horizontal Beamwidth (-3 dB)		65° ± 4.5°	64° ± 4.5°
Vertical Beamwidth (-3 dB)		10.0° ± 0.8°	9.3° ± 0.8°
Electrical Downtilt Range		0-10°	
Tilt Accuracy		< 0.7°	< 0.7°
Cross-Polar Isolation		> 28 dB	
Port-to-Port Isolation		> 28 dB	
Upper Sidelobe Suppression	First Upper Lobe	> 17 dB	> 17 dB
	Peak to 20°	> 15 dB	> 15 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 25 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 18 dB	> 17 dB
	Sector Edges	> 8 dB	> 8 dB
Horizontal Beam Port-to-Port Tracking		< 2.1 dB	< 2.3 dB
Maximum Power (Per Port)		350 W (at 50°C ambient temperature)	
Intermodulation 3rd (2x43 dBm Carrier)		< -150 dBc	
Grounding		DC Ground	



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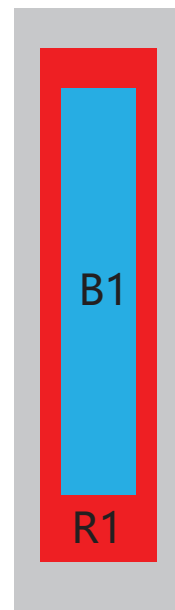
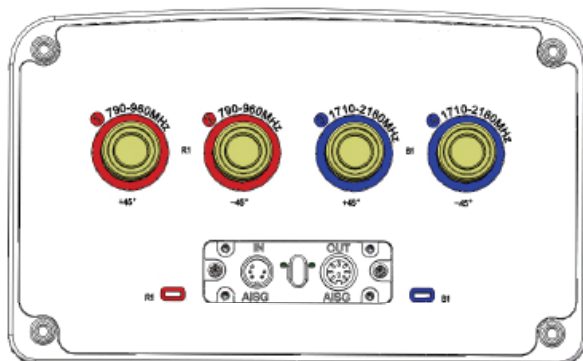
ELECTRICAL CHARACTERISTICS		B1		
Frequency Bands		1710-2180 MHz		
		1710-1880	1850-1990	1920-2180
Gain	At Mid Tilt	17.1 dBi	17.6 dBi	17.9 dBi
	Over All Tilts	17.1 ± 0.6 dBi	17.6 ± 0.6 dBi	17.9 ± 0.6 dBi
Input Impedance		50Ω		
VSWR		< 1.5		
Polarisation		±45°		
Horizontal Beamwidth (-3 dB)		66° ± 4.8°	63° ± 4.6°	61° ± 4.5°
Vertical Beamwidth (-3 dB)		6.8° ± 0.7°	6.3° ± 0.6°	5.8° ± 0.6°
Electrical Downtilt Range		0-10°		
Tilt Accuracy		< 0.6°	< 0.6°	< 0.6°
Cross Polar Isolation		> 28 dB		
Port-to-Port Isolation		> 28 dB		
Upper Sidelobe Suppression	First Upper Lobe	> 17 dB	> 17 dB	> 17 dB
	Peak to 20°	> 15 dB	> 15 dB	> 15 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 25 dB	> 25 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 22 dB	> 20 dB	> 19 dB
	Sector Edges	> 9 dB	> 9 dB	> 8 dB
Horizontal Beam Port-to-Port Tracking		< 2.0 dB	< 2.0 dB	< 2.0 dB
Maximum Power (Per Port)		250 W (at 50°C ambient temperature)		
Intermodulation 3rd (2x43 dBm Carrier)		< -150 dBc		
Grounding		DC Ground		

INTEGRATED RET PROPERTIES	
Power Supply	10-30VDC
Power Consumption	< 2W (Idle), < 10W (In Motion)
Hardware Interface	Pin3: RS485B; Pin5: RS485A; Pin6: 10-30V; Pin7: DC Return According to AISG/3GPP
Protocol Supported	Compliant with 3GPP/AISGv2.0
Adjustment Time (Full Range)	≤ 90 s (typical, depending on Antenna type)
Adjustment Cycles	> 20,000
Torque Max	≥ 160 mN.m
Safety Standard	Compliant to EN 60950/UL 60950/RoHS, CE
Protection Class	IP65
Lightning Protection Rating	IEC 61000-4-5 Current Pulse Profile, 8/20 μs 10 Repetitions Min. @ 8 kA IEC61312-1 B Protection against lightning electromagnetic impulse 10/350 μs, 200 @ 0.6 kA
Connectors	(2x) 8-Pin Circle Connector According to IEC 60130-9 and AISG.C-485 Daisy Chain In: Male; Daisy Chain Out: Female

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ARRAY LAYOUT	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
	■ R1	698-960	1-2	7/16-DIN Female
	■ Y1	1695-2690	3-4	7/16-DIN Female

Diagram shown at right depicts the view from the front of the antenna. The illustration is not shown to scale.

MECHANICAL CHARACTERISTICS

Dimensions (Height x Width x Depth)	1997 x 277 x 167 mm (78.6 x 10.9 x 6.6 in)	
Weight (excluding mounting accessory)	18.5 kg (41.9 lbs)	
Shipping Weight	23 kg (50.7 lbs)	
Radome Material	UPVC	
Maximum Wind Speed	200 km/h	
Wind Loads (at 150 km/h)	Frontal	510 N (114.6 lbf)
	Lateral	570 N (128.1 lbf)

PACKAGING

Carton Box
2.197 x 0.372 x 0.287 m
(86.5 x 14.6 x 11.3 in)

MOUNTING KIT OPTIONS	POLE DIAMETER	MECHANICAL TILT
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All mounting bracket kits are ordered separately unless otherwise indicated.		
Mounting Bracket Kit (Included)	Ø50-Ø125 mm	0-12°

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