

## 6175488G

3-Band, 6-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 900 mm

- Dual band antenna, dual polarisation, 6 connectors
- Independent, continuously adjustable tilt on each band
- RET version, 3GPP/AISG2.0 with three integrated RCUs and two indicators

ACCESS PORT DESCRIPTION (CONNECTORS)			
The antenna has 4 colour-coded connectors located at the bottom face.			
Frequency Designation	Y1	Y2	Y3
Frequency Range	1710-2690 MHz	1710-2690 MHz	1710-2690 MHz
Polarisation	Xpol	Xpol	Xpol
Horizontal Beamwidth	65°	65°	65°
Electrical Downtilt Range	0-10°	0-10°	0-10°
Connector Type	(2x) 7/16-DIN Female	(2x) 7/16-DIN Female	(2x) 7/16-DIN Female

ELECTRICAL CHARACTERISTICS		Y1				
Frequency Bands		1710-2690 MHz				
		1710-1880	1850-1990	1920-2170	2300-2400	2500-2690
Gain	At Mid Tilt (dBi)	16.0	16.0	16.2	16.4	16.6
	Over All Tilts (dBi)	16.0 ± 1.0	16.0 ± 1.0	16.2 ± 1.0	16.4 ± 1.0	16.6 ± 1.0
Input Impedance		50Ω				
VSWR		< 1.33				
Polarisation		±45°				
Horizontal Beamwidth (-3 dB)		65° ± 6°	65° ± 6°	65° ± 6°	65° ± 6°	65° ± 6°
Vertical Beamwidth (-3 dB)		13° ± 1°	13° ± 1°	13° ± 1°	11° ± 1°	9° ± 1°
Electrical Downtilt Range		0-10°				
Cross Polar Isolation		> 25 dB				
Interband Isolation		> 25 dB				
Port-to-Port Isolation		> 25 dB				
First Upper Sidelobe Suppression		> 16 dB	> 16 dB	> 16 dB	> 16 dB	> 16 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 18 dB	> 18 dB	> 18 dB	> 18 dB	> 18 dB
	Sector Edges	> 10.0 dB	> 10.0 dB	> 10.0 dB	> 10.0 dB	> 10.0 dB
Maximum Power (Per Port)		250 W (at 50°C ambient temperature)				
Intermodulation (2x43 dBm Carrier)		< -155 dBc				



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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ELECTRICAL CHARACTERISTICS		Y2				
Frequency Bands		1710-2690 MHz				
		1710-1880	1850-1990	1920-2170	2300-2400	2500-2690
Gain	At Mid Tilt (dBi)	16.0	16.0	16.2	16.4	16.6
	Over All Tilts (dBi)	16.0 ± 1.0	16.0 ± 1.0	16.2 ± 1.0	16.4 ± 1.0	16.6 ± 1.0
Input Impedance		50Ω				
VSWR		< 1.33				
Polarisation		±45°				
Horizontal Beamwidth (-3 dB)		65° ± 6°	65° ± 6°	65° ± 6°	65° ± 6°	65° ± 6°
Vertical Beamwidth (-3 dB)		13° ± 1°	13° ± 1°	13° ± 1°	11° ± 1°	9° ± 1°
Electrical Downtilt Range		0-10°				
Cross Polar Isolation		> 25 dB				
Interband Isolation		> 25 dB				
Port-to-Port Isolation		> 25 dB				
First Upper Sidelobe Suppression		> 16 dB	> 16 dB	> 16 dB	> 16 dB	> 16 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 18 dB	> 18 dB	> 18 dB	> 18 dB	> 18 dB
	Sector Edges	> 10.0 dB	> 10.0 dB	> 10.0 dB	> 10.0 dB	> 10.0 dB
Maximum Power (Per Port)		250 W (at 50°C ambient temperature)				
Intermodulation 3rd Order, (2x43 dBm Carrier)		< -155 dBc				

ELECTRICAL CHARACTERISTICS		Y3				
Frequency Bands		1710-2690 MHz				
		1710-1880	1850-1990	1920-2170	2300-2400	2500-2690
Gain	At Mid Tilt (dBi)	16.0	16.0	16.2	16.4	16.6
	Over All Tilts (dBi)	16.0 ± 1.0	16.0 ± 1.0	16.2 ± 1.0	16.4 ± 1.0	16.6 ± 1.0
Input Impedance		50Ω				
VSWR		< 1.33				
Polarisation		±45°				
Horizontal Beamwidth (-3 dB)		65° ± 6°	65° ± 6°	65° ± 6°	65° ± 6°	65° ± 6°
Vertical Beamwidth (-3 dB)		13° ± 1°	13° ± 1°	13° ± 1°	11° ± 1°	9° ± 1°
Electrical Downtilt Range		0-10°				
Cross Polar Isolation		> 25 dB				
Interband Isolation		> 25 dB				
Port-to-Port Isolation		> 25 dB				
First Upper Sidelobe Suppression		> 16 dB	> 16 dB	> 16 dB	> 16 dB	> 16 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 18 dB	> 18 dB	> 18 dB	> 18 dB	> 18 dB
	Sector Edges	> 10.0 dB	> 10.0 dB	> 10.0 dB	> 10.0 dB	> 10.0 dB
Maximum Power (Per Port)		250 W (at 50°C ambient temperature)				
Intermodulation (2x43 dBm Carrier)		< -155 dBc				

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INTEGRATED RET PROPERTIES	
Power Supply	10-30VDC Compliant with 3GPP/AISGv2.0
Power Consumption	< 1W (Idle), < 10W (In Motion)
Hardware Interface	RS485 and Power
Logical Interface	HEX Coded Commands Based on HDLC Protocol
Protocol Supported	AISG v2.0
Adjustment Time (Full Range)	< 90 sec (typical depending on antenna type)
Adjustment Cycles	> 10000
Torque Max	≥ 160 mN.m
Lightning Protection Rating	IEC 61000-4-5 Current Pulse Profile, 8/20 μs 10 Repetitions Min. @ 8 kA
Connectors	(2x) 8-Pin Circle Connector According to IEC 60130-9 and AISG Daisy Chain In: Male; Daisy Chain Out: Female Pin 3: RS485+; Pin 5: RS485-; Pin 6: 10~30V; Pin 7: GND

ENVIRONMENTAL CHARACTERISTICS	
Operating Temperature Range	-10° C to +60° C
Operating Humidity	95%
Lightning Protection	DC Ground

MECHANICAL CHARACTERISTICS		PACKAGING
Dimensions (Height x Width x Depth)	900 x 377 x 87 mm	Carton Box 1.065 x 0.475 x 0.195 m
Antenna Weight (without mounting brackets)	7.5 kg	
Shroud Material	UPVC	
Survival Wind Speed	200 km/h	
MOUNTING KIT OPTIONS		MECHANICAL TILT RANGE
All mounting bracket kits are ordered separately unless otherwise indicated.		
Brackets for pole Ø50 to Ø125 mm (included)	0°-16°	

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