

## 5829288

5829288N 5829288G 5829288NG

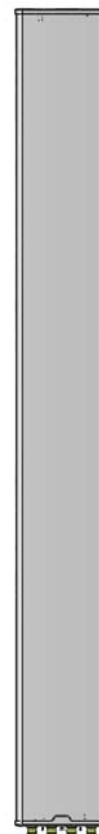
2-Band, 4-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1410 mm

- Dual band antenna, dual polarisation, 4 connectors
- Independent, continuously adjustable tilt on each band 2-12° / 2-12°
- MET or RET version, 3GPP/AISG2.0

ORDERING OPTIONS	MODEL NUMBER	
	4.3-10 Connectors	7/16-DIN Connectors
Manual Electrical Tilt Antenna	<b>5829288N</b>	<b>5829288</b>
Remote Electrical Tilt Antenna 3GPP/AISG2.0 with Internal RET	<b>5829288NG</b>	<b>5829288G</b>

ACCESS PORT DESCRIPTION (CONNECTORS)		
The antenna has 4 colour-coded connectors located at the bottom face.		
Frequency Designation	R1	B1
Frequency Range	690-960 MHz	1710-2180 MHz
Polarisation	Xpol	Xpol
Horizontal Beamwidth	65°	65°
Electrical Downtilt Range	2-12°	2-12°
Connector Type	(2x) 4.3-10 Female or 7/16-DIN Female	(2x) 4.3-10 Female or 7/16-DIN Female

ELECTRICAL CHARACTERISTICS		R1		
Frequency Bands		690-960 MHz		
		690-806 MHz	790-894 MHz	880-960 MHz
Gain	at Mid Tilt	14.2 dBi	14.2 dBi	15.0 dBi
	Over All Tilts	14.2 ± 0.3 dBi	14.2 ± 0.3 dBi	15.0 ± 0.5 dBi
Input Impedance		50Ω		
VSWR		≤ 1.5:1		
Polarisation		±45°		
Horizontal Beamwidth (-3 dB)		72.9° ± 4.4°	72.9° ± 4.4°	67.4° ± 1.5°
Vertical Beamwidth (-3 dB)		15.9° ± 0.4°	15.9° ± 0.4°	14.9° ± 0.5°
Electrical Downtilt Range		2-12°		
Inter Band Isolation		≥ 28 dB	≥ 28 dB	≥ 28 dB
Intra Band Isolation		≥ 25 dB	≥ 25 dB	≥ 28 dB
Sidelobe Suppression	First upper sidelobe	> 15 dB	> 15 dB	> 15 dB
	0 to 30°	> 14 dB	> 13 dB	> 12 dB
Azimuth Beam Squint		≤ 3°		
Front-to-Back Ratio (@ 180° ± 30°)		> 24 dB	> 25 dB	> 25 dB
Cross Polar Ratio	Main Direction (0°)	> 20 dB	> 20 dB	> 20 dB
	Sector Edges (±60°)	> 7 dB	> 7 dB	> 8 dB
Maximum Power (Per Port)		500 W		
Intermodulation, 2 x 20 W		≤ -107 dBm		



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		B1	
Frequency Bands		1710-2180 MHz	
		1710-1920 MHz	1920-2180 MHz
Gain	at Mid Tilt	17.2 dBi	17.8 dBi
	Over All Tilts	17.2 ± 0.4 dBi	17.8 ± 0.2 dBi
Input Impedance		50Ω	
VSWR		≤ 1.5:1	
Polarisation		±45°	
Horizontal Beamwidth (-3 dB)		66.3° ± 1.9°	63.1° ± 0.9°
Vertical Beamwidth (-3 dB)		7.4° ± 0.2°	6.8° ± 0.3°
Electrical Downtilt Range		2-12°	
Inter/Intra Band Isolation		≥ 28 dB	
Sidelobe Suppression	First upper sidelobe	> 15 dB (20 dB typical)	> 15 dB (20 dB typical)
	0 to 30°	> 15 dB	> 15 dB
Azimuth Beam Squint		≥ 3°	
Front-to-Back Ratio (@ 180° ± 30°)		> 26 dB	> 28 dB
Cross Polar Ratio	Main Direction (0°)	> 15 dB	> 15 dB
	Sector Edges (±60°)	> 8 dB	> 8 dB
Maximum Power (Per Port)		300 W	
Intermodulation, 2 x 20 W		≤ -107 dBm	

ENVIRONMENTAL CHARACTERISTICS	
Operating Temperature Range	-40° C to +60° C
Enclosure Protection	IP55 or better
RF Connector Protection	IP67
RET AISG Connector Protection	IP67
Relative Humidity	0-95%
Rain Rate	0-140 mm/h
Lightning Protection	DC Ground

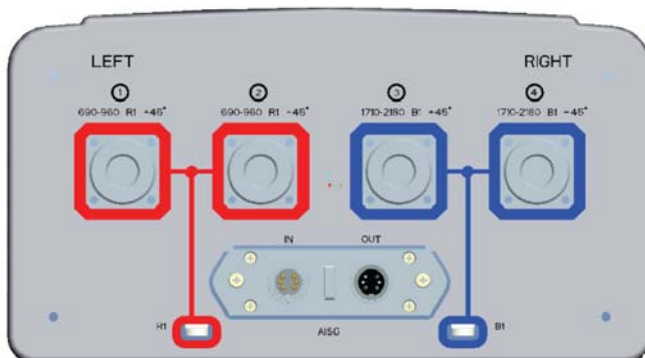
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INTEGRATED RET PROPERTIES	
Power Supply	10-30VDC Compliant with 3GPP/AISGv2.0
Power Consumption	≤ 2W (Idle), ≤ 10W (In Motion)
Hardware Interface	RS485 and Power
Logical Interface	HEX Coded Commands Based on HDLC Protocol
Protocol Supported	AISG v2.0
Adjustment Time (Full Range)	< 4Min
Adjustment Cycles	> 10,000
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



MECHANICAL CHARACTERISTICS		PACKAGING
Dimensions (Height x Width x Depth)	1410 x 280 x 190 mm (55.5 x 11.0 x 7.5 in)	<b>Carton Box</b> 1.600 x 0.370 x 0.245 m (63.0 x 14.6 x 9.6 in)
Weight (excluding mounting accessory)	13.6 kg (29.9 lbs)	
Shroud Material	FRP	
Radiator Material	Die Casted, Tin Coated, Aluminum Alloy	
Reflector Material	Aluminum	
Wind Speed	Operational	150 km/h (93.2 mph)
	Survival	200 km/h (124.3)
Wind Load (150 km/h or 93.2 mph)	Front	635 N (142.8 lbf)
	Lateral	505 N (113.5 lbf)
	Rear	705 N (158.5 lbf)
MOUNTING KIT OPTIONS		MECHANICAL TILT RANGE
All mounting bracket kits are ordered separately unless otherwise indicated.		
Brackets for pole Ø50 to Ø115 mm (included)		0°-12°

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