

6177108G

6177108NG

2-Band, 4-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1377 mm

- Dual band antenna, dual polarisation, 4 connectors
- Independent, continuously adjustable tilt on each band 0-10° / 0-10°
- Available with 4.3-10 or 7/16-DIN connectors
- RET version, 3GPP/AISG2.0 with two integrated RCUs

ORDERING OPTIONS		
Antenna with 4.3-10 Female Connectors		6177108NG
Antenna with 7/16-DIN Female Connectors		6177108G
ACCESS PORT DESCRIPTION (CONNECTORS)		
The antenna has 4 colour-coded connectors located at the bottom face.		
Frequency Designation	Y1	Y2
Frequency Range	1710-2690 MHz	1710-2690 MHz
Polarisation	Xpol	Xpol
Horizontal Beamwidth	65°	65°
Electrical Downtilt Range	0-10°	0-10°
Connector Type	(2x) 4.3-10 or 7/16-DIN Female	(2x) 4.3-10 or 7/16-DIN Female

ELECTRICAL CHARACTERISTICS		Y1				
Frequency Bands		1710-2690 MHz				
		1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain	At Mid Tilt	17.2 dBi	17.8 dBi	18.0 dBi	18.1 dBi	18.1 dBi
	Over All Tilts	17.2 ± 0.6 dBi	17.8 ± 0.5 dBi	18.0 ± 0.5 dBi	18.0 ± 0.4 dBi	18.1 ± 0.5 dBi
Input Impedance		50Ω				
VSWR		< 1.5				
Polarisation		±45°				
Horizontal Beamwidth (-3 dB)		68° ± 3.8°	65° ± 4.9°	64° ± 4.5°	62° ± 5.2°	60° ± 5.1°
Vertical Beamwidth (-3 dB)		6.9° ± 0.6°	6.4° ± 0.5°	5.9° ± 0.5°	5.3° ± 0.2°	4.9° ± 0.3°
Electrical Downtilt Range		0-10°				
Cross Polar Isolation		> 28 dB				
Port-to-Port Isolation		> 28 dB				
Upper Sidelobe Suppression	First Upper Lobe	> 16 dB	> 17 dB	> 16 dB	> 17 dB	> 16 dB
	Peak to 20°	> 15 dB	> 15 dB	> 15 dB	> 15 dB	> 14 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 25 dB	> 26 dB	> 26 dB	> 25 dB	> 26 dB
Cross Polar Discrimination	Main Direction	> 20 dB	> 22 dB	> 22 dB	> 19 dB	> 20 dB
	Sector Edges	> 12 dB	> 12 dB	> 10 dB	> 9 dB	> 9 dB
Maximum Power (Per Port)		250 W (at 50°C ambient temperature)				
Intermodulation 3rd (2x43 dBm Carrier)		< -153 dBc				
Grounding		DC Ground				



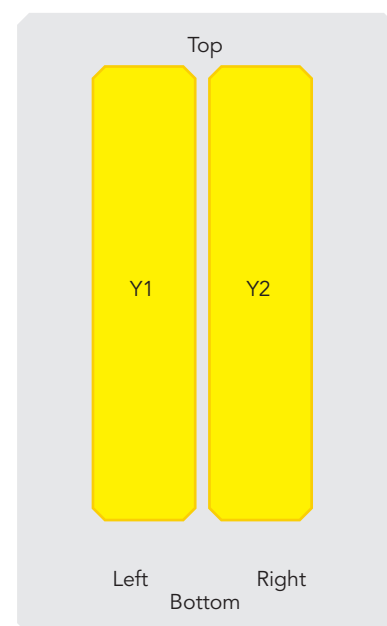
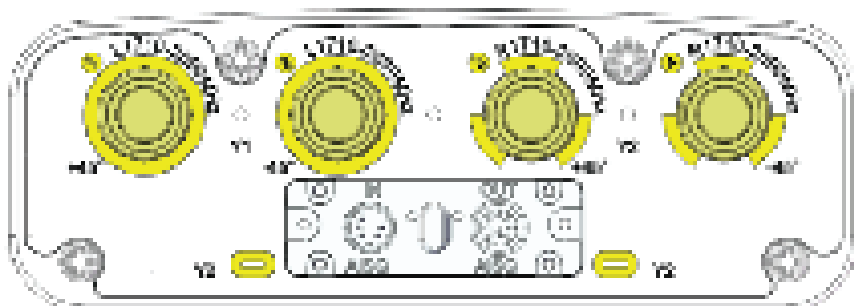
Several patents pending regarding this product. Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our 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	2490-2690
Gain	At Mid Tilt	17.2 dBi	17.8 dBi	18.0 dBi	18.1 dBi	18.1 dBi
	Over All Tilts	17.2 ± 0.6 dBi	17.8 ± 0.5 dBi	18.0 ± 0.5 dBi	18.0 ± 0.4 dBi	18.1 ± 0.5 dBi
Input Impedance		50Ω				
VSWR		< 1.5				
Polarisation		±45°				
Horizontal Beamwidth (-3 dB)		68° ± 3.8°	65° ± 4.9°	64° ± 4.5°	62° ± 5.2°	60° ± 5.1°
Vertical Beamwidth (-3 dB)		6.9° ± 0.6°	6.4° ± 0.5°	5.9° ± 0.5°	5.3° ± 0.2°	4.9° ± 0.3°
Electrical Downtilt Range		0-10°				
Cross Polar Isolation		> 28 dB				
Port-to-Port Isolation		> 28 dB				
Upper Sidelobe Suppression	First Upper Lobe	> 16 dB	> 17 dB	> 16 dB	> 17 dB	> 16 dB
	Peak to 20°	> 15 dB	> 15 dB	> 15 dB	> 15 dB	> 14 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 25 dB	> 26 dB	> 26 dB	> 25 dB	> 26 dB
Cross Polar Discrimination	Main Direction	> 20 dB	> 22 dB	> 22 dB	> 19 dB	> 20 dB
	Sector Edges	> 12 dB	> 12 dB	> 10 dB	> 9 dB	> 9 dB
Maximum Power (Per Port)		250 W (at 50°C ambient temperature)				
Intermodulation 3rd (2x43 dBm Carrier)		< -153 dBc				
Grounding		DC Ground				



ARRAY LAYOUT	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
	Y1	1710-2690	1-2	4.3-10 or 7/16-DIN Female
	Y2	1710-2690	3-4	4.3-10 or 7/16-DIN Female

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

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INTEGRATED RET PROPERTIES		PACKAGING
Protocol	Compliant with 3GPP/AISGv2.0	Carton Box 1.557 x 0.352 x 0.207 m (61.3 x 13.9 x 8.1 in)
Power Supply	10-30VDC	
Adjustment Time (Full Range)	≤ 90 sec (typical, depending on antenna type)	
Power Consumption	< 1 W (Idle); < 10 W (In Motion)	
Accuracy	≤ 0.5°	
Hardware Interface	RS485 and Power	
Safety Standard	Compliant to EN 60950/UL 60950/ RoHS, CE	
Remote Control	Can manage from OMC, BTS/Node B	
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		
Dimensions (Height x Width x Depth)		1377 x 257 x 87 mm (54.2 x 10.1 x 3.4 in)
Weight (excluding mounting accessory)		10.3 kg (22.7 lbs)
Radome Material, Colour		UPVC
Connector Type		(4x) 7/16-DIN Female
Maximum Wind Speed		200 km/h (124.3 mph)
Wind Load at 150 km/h	Frontal	415 N (93.3 lbf)
	Rear	125 N (28.1 lbf)
	Lateral	460 N (103.4 lbf)
MOUNTING KIT OPTIONS		POLE DIAMETER
		MECHANICAL TILT RANGE
All mounting bracket kits are ordered separately unless otherwise indicated.		
Mounting Bracket Kit (Included)		Ø50-Ø125 mm (Ø2.0-Ø4.9 in)
		0-16°

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