

5961338G

5961338NG

4-Band | 8-Port | XPOL | Panel Antenna | Variable Tilt | 2497 mm

- Quad band antenna, dual polarisation, 8 connectors
- Independent tilt on each band 2-12° / 2-12° / 2-12° / 2-12°
- RET version, 3GPP/AISGv2.0
- 4 Integrated RET Units (field replaceable)

ORDERING OPTIONS	MODEL NUMBER
Antenna with 4.3-10 Connectors	5961338NG
Antenna with 7/16-DIN Connectors	5961338G

ACCESS PORT DESCRIPTION (CONNECTORS)				
This antenna has 8 colour-coded connectors located at the bottom face.				
Frequency Designation	R1	R2	Y1	Y2
Frequency Range	690-960 MHz	690-960 MHz	1690-2690 MHz	1690-2690 MHz
Polarisation	Xpol	Xpol	Xpol	Xpol
Horizontal Beamwidth	65°	65°	65°	65°
Electrical Downtilt Range	2-12°	2-12°	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	(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	790-894	880-960
Gain	At Mid Tilt	15.5 dBi	16.1 dBi	16.6 dBi
	Over All Tilts	15.5 ± 0.5 dBi	16.0 ± 0.5 dBi	16.6 ± 0.4 dBi
Input Impedance		50Ω		
VSWR		< 1.5		
Polarisation		±45°		
Horizontal Beamwidth (-3 dB)		68° ± 4.4°	65° ± 3.6°	60° ± 4.6°
Vertical Beamwidth (-3 dB)		9.4° ± 0.5°	8.5° ± 0.6°	7.5° ± 0.6°
Electrical Downtilt Range		2-12°		
Cross Polar Isolation		> 26 dB		
Port-to-Port Isolation		> 28 dB		
Interband Isolation		> 26 dB		
Upper Sidelobe Suppression	First Upper Lobe	> 16 dB	> 16 dB	> 17dB
	Peak to 20°	> 15 dB	> 15 dB	> 15 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 22 dB	> 24 dB	> 24 dB
Front-to-Back Ratio (@ 180°)		> 25 dB	> 25 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 18 dB	> 18 dB	> 18 dB
	Sector Edges	> 10.0 dB	> 7.5 dB	> 6.5 dB
Maximum Power (Per Port)		300 W (at 50°C ambient temperature)		
Intermodulation 3rd (2x43 dBm Carrier)		< -153 dBc		
Grounding		DC Ground		



A GLOBAL INITIATIVE



Antenna Interlock Standards Group

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.

5961338G

5961338NG

4-Band | 8-Port | XPOL | Panel Antenna | Variable Tilt | 2497 mm

ELECTRICAL CHARACTERISTICS		R2		
Frequency Bands		690-960 MHz		
		690-806	790-894	880-960
Gain	At Mid Tilt	15.5 dBi	16.1 dBi	16.6 dBi
	Over All Tilts	15.5 ± 0.5 dBi	16.0 ± 0.5 dBi	16.6 ± 0.4 dBi
Input Impedance		50Ω		
VSWR		< 1.5		
Polarisation		±45°		
Horizontal Beamwidth (-3 dB)		68° ± 4.4°	65° ± 3.6°	60° ± 4.6°
Vertical Beamwidth (-3 dB)		9.4° ± 0.5°	8.5° ± 0.6°	7.5° ± 0.6°
Electrical Downtilt Range		2-12°		
Cross Polar Isolation		> 26 dB		
Port-to-Port Isolation		> 28 dB		
Interband Isolation		> 26 dB		
Upper Sidelobe Suppression	First Upper Lobe	> 16 dB	> 16 dB	> 17 dB
	Peak to 20°	> 15 dB	> 15 dB	> 15 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 22 dB	> 24 dB	> 24 dB
Front-to-Back Ratio (@ 180°)		> 25 dB	> 25 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 18 dB	> 18 dB	> 18 dB
	Sector Edges	> 10.0 dB	> 7.5 dB	> 6.5 dB
Maximum Power (Per Port)		300 W (at 50°C ambient temperature)		
Intermodulation 3rd (2x43 dBm Carrier)		< -153 dBc		
Grounding		DC Ground		

ELECTRICAL CHARACTERISTICS		Y1				
Frequency Bands		1690-2690 MHz				
		1690-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain	At Mid Tilt	17.4 dBi	17.7 dBi	17.9 dBi	17.9 dBi	18.1 dBi
	Over All Tilts	17.3 ± 0.6 dBi	17.7 ± 0.6 dBi	17.9 ± 0.6 dBi	17.9 ± 0.5 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°	62° ± 4.2°	62° ± 4.6°
Vertical Beamwidth (-3 dB)		6.5° ± 0.5°	6.0° ± 0.5°	5.5° ± 0.5°	4.9° ± 0.5°	4.4° ± 0.5°
Electrical Downtilt Range		2-12°				
Cross Polar Isolation		> 26 dB				
Port-to-Port Isolation		>28 dB				
Interband Isolation		> 26 dB				
Upper Sidelobe Suppression	First Upper Lobe	> 17 dB	> 17 dB	> 17 dB	> 17 dB	> 17 dB
	Peak to 20°	> 15 dB	> 15 dB	> 15 dB	> 15 dB	> 15 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 24 dB	> 24 dB	> 24 dB	> 24 dB	> 25 dB
Front-to-Back Ratio (@ 180°)		> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 22 dB	> 20 dB	> 19 dB	> 18 dB	> 17 dB
	Sector Edges	> 9.0 dB	> 9.0 dB	> 8.0 dB	> 8.0 dB	> 5.0 dB
Maximum Power (Per Port)		250 W (at 50°C ambient temperature)				
Intermodulation 3rd (2x43 dBm Carrier)		< -153 dBc				
Grounding		DC Ground				

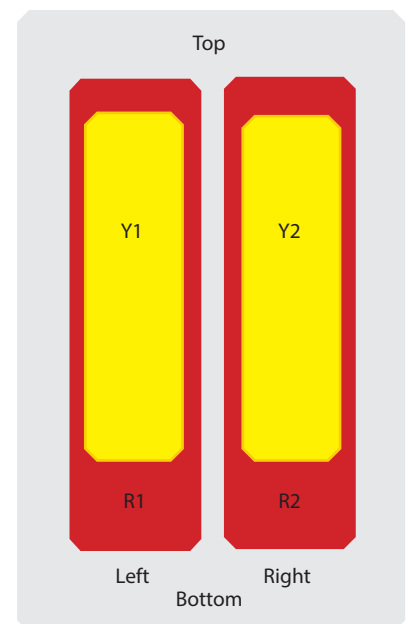
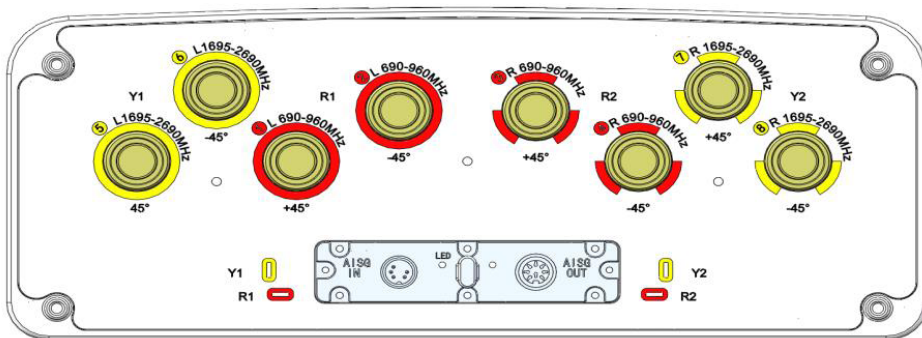
Several patents pending regarding this product. Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

5961338G

5961338NG

4-Band | 8-Port | XPOL | Panel Antenna | Variable Tilt | 2497 mm

ELECTRICAL CHARACTERISTICS		Y2				
Frequency Bands		1690-2690 MHz				
		1690-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain	At Mid Tilt	17.4 dBi	17.7 dBi	17.9 dBi	17.9 dBi	18.1 dBi
	Over All Tilts	17.3 ± 0.6 dBi	17.7 ± 0.6 dBi	17.9 ± 0.6 dBi	17.9 ± 0.5 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°	62° ± 4.2°	62° ± 4.6°
Vertical Beamwidth (-3 dB)		6.5° ± 0.5°	6.0° ± 0.5°	5.5° ± 0.5°	4.9° ± 0.5°	4.4° ± 0.5°
Electrical Downtilt Range		2-12°				
Cross Polar Isolation		> 26 dB				
Port-to-Port Isolation		>28 dB				
Interband Isolation		> 26 dB				
Upper Sidelobe Suppression	First Upper Lobe	> 17 dB	> 17 dB	> 17 dB	> 17 dB	> 17 dB
	Peak to 20°	> 15 dB	> 15 dB	> 15 dB	> 15 dB	> 15 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 24 dB	> 24 dB	> 24 dB	> 24 dB	> 25 dB
Front-to-Back Ratio (@ 180°)		> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 22 dB	> 20 dB	> 19 dB	> 18 dB	> 17 dB
	Sector Edges	> 9.0 dB	> 9.0 dB	> 8.0 dB	> 8.0 dB	> 5.0 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
	■ R1	690-960	1-2	4.3-10 Female or 7/16-DIN Female
	■ R2	690-960	3-4	4.3-10 Female or 7/16-DIN Female
	■ Y1	1690-2690	5-6	4.3-10 Female or 7/16-DIN Female
	■ Y2	1690-2690	7-8	4.3-10 Female 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.

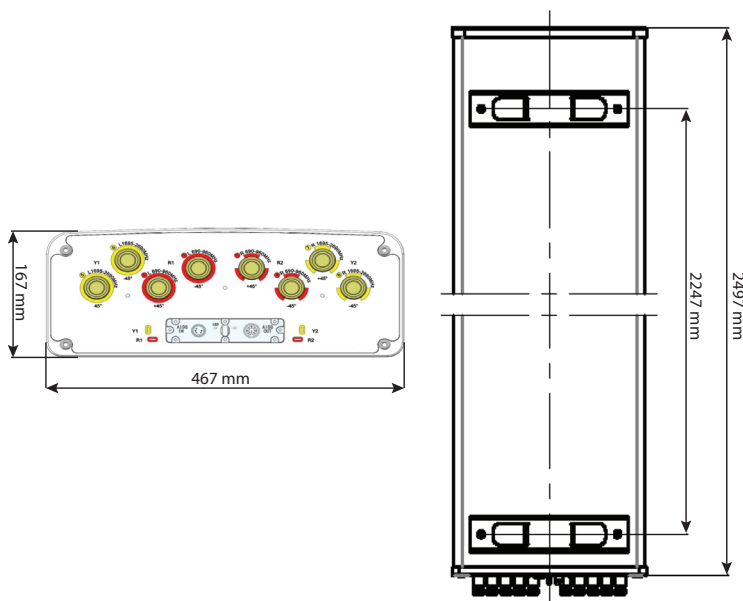
Several patents pending regarding this product. Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

5961338G

5961338NG

4-Band | 8-Port | XPOL | Panel Antenna | Variable Tilt | 2497 mm

INTEGRATED RET PROPERTIES		PACKAGING
Protocol	Compliant with 3GPP/AISGv2.0	Carton Box 2.697 x 0.562 x 0.287 m (106.2 x 22.1 x 11.3 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)	
Hardware Interface	RS485 and Power	
Safety Standard	Compliant to EN 60950/UL 60950/ RoHS, CE	
Adjustment Cycles	> 10,000	
Torque Max	≥ 160 mN.m	
Protection Class	IP65	
Operating/Storage Temperature	-40° to +60°C (-40° to +140°F)	
Lightning Protection Rating	IEC 61000-4-5 Current Pulse Profile, 8/20 μs 10 Repetitions Min. @ 8 kA IEC 61312-1 B Protection against lightning electromagnetic impulse 10/350 μs,200@0.6kA	
Connectors	(2x) 8-Pin Circle Connector According to IEC 60130-9 and AISG.C-485 Daisy Chain In: Male; Daisy Chain Out: Female Pin 3: RS485B; Pin 5: RS485A; Pin 6: 10~30V; Pin 7: DC Return	
MECHANICAL CHARACTERISTICS		
Dimensions (Height x Width x Depth)	2497 x 467 x 167 mm (98.3 x 18.4 x 6.6 in)	
Weight (excluding mounting accessory)	38.5 kg (84.9 lbs)	
Radome Material, Colour	Fiberglass	
Radiator/Reflector Material	Aluminium	
Connector Type	(8x) 4.3-10 Female or 7/16-DIN Female	
Maximum Wind Speed	200 km/h (124.3 mph)	
Wind Load at 150 km/h (93.2 mph)	Front	1650 N (370.9 lbf)
	Lateral	1850 N (415.9 lbf)
	Rear	1204 N (270.6 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°



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.