Amphenol ANTENNA SOLUTIONS

2-Port Antenna

698-960 MHz

65° | 2497 mm

6820388G

6820388NG

1-Band, 2-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 2497 mm

- Single band antenna, dual polarisation, 2 connectors
- Independent, continuously adjustable tilt on each band 2-12°
- RET version, 3GPP/AISG2.0 with one integrated RCUs

ORDERING OPTIONS	MODEL NUMBER
Antenna with 4.3-10 Connectors	6820388NG
Antenna with 7/16-DIN Connectors	6820388G

ACCESS PORT DESCRIPTION (CONNECTORS)	
The antenna has 2 colour-coded connectors located at the bottom face.	
Frequency Designation	R1
Frequency Range	698-960 MHz
Polarisation	Xpol
Horizontal Beamwidth	65°
Electrical Downtilt Range	2-12°
Connector Type	(2x) 4.3-10 or 7/16-DIN Female

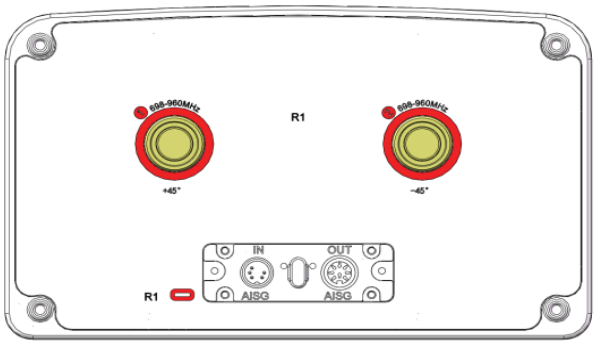
ELECTRICAL CHARACTERISTICS		R1		
Frequency Bands		698-960 MHz		
		698-806 MHz	790-894 MHz	880-960 MHz
Gain	at Mid Tilt	16.3 dBi	16.8 dBi	17.1 dBi
	Over All Tilts	16.3 ± 0.6 dBi	16.8 ± 0.5 dBi	17.1 ± 0.6 dBi
Input Impedance		50Ω		
VSWR		< 1.5		
Polarisation		±45°		
Horizontal Beamwidth (-3 dB)		68° ± 3.9°	66° ± 3.8°	64° ± 3.5°
Vertical Beamwidth (-3 dB)		9.0° ± 0.7°	8.3° ± 0.6°	7.2° ± 0.6°
Electrical Downtilt Range		2-12°		
Interband Isolation		> 28 dB		
Upper Sidelobe Suppresson	First Upper Lobe	> 16 dB	> 16 dB	> 16 dB
	Peak to 20°	> 15 dB	> 15 dB	> 15 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 23 dB	> 25 dB	> 26 dB
Cross Polar Ratio	Main Direction (0°)	> 18 dB	> 18 dB	> 19 dB
	Sector Edges (±60°)	> 10 dB	> 11 dB	> 10 dB
Maximum Power (Per Port)		250 W (at 50° C ambient temperature)		
Intermodulation 3rd Order for 2 x 43 dBm Carrier		< -153 dBc		
Grounding		DC Ground		

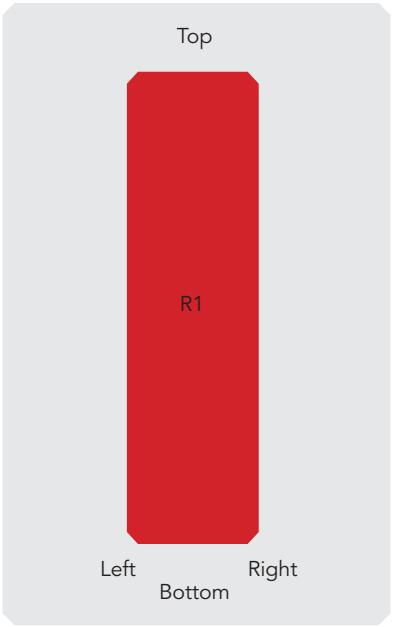
Several patents pending regarding this product. Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our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

6820388G

6820388NG

1-Band, 2-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 2497 mm





ARRAY LAYOUT	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
	R1	698-960	1-2	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.

INTEGRATED RET PROPERTIES	
Power Supply	10-30VDC
Power Consumption	< 1W (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	> 10,000
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

6820388G

6820388NG

1-Band, 2-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 2497 mm

MECHANICAL CHARACTERISTICS		
Dimensions (Height x Width x Depth)		2497 x 277 x 167 mm
Weight (excluding mounting accessory)		21 kg
Radome Material, Colour		Fiberglass
Maximum Wind Speed		200 km/h
Wind Loads (at 150 km/h)	Frontal	1095 N
	Lateral	1215 N

MOUNTING KIT OPTIONS	POLE DIAMETER	MECHANICAL TILT
All mounting bracket kits are ordered separately unless otherwise indicated.		
Mounting Bracket Kit (Included)	Ø50-Ø125 mm	0-10°

PACKAGING
Carton Box 2.697 x 0.372 x 0.287 m