

5679308NG

6-Band, 12-Port, 65°, XPOL, Panel Sector Antenna, Variable Tilt, 2497 mm

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

ACCESS PORT DESCRIPTION (CONNECTORS)						
The antenna has 12 colour-coded connectors located at the bottom face.						
Frequency Designation	R1	R2	Y1	Y2	Y3	Y4
Frequency Range	698-960 MHz	698-960 MHz	1710-2690 MHz	1710-2690 MHz	1710-2690 MHz	1710-2690 MHz
Polarisation	Xpol	Xpol	Xpol	Xpol	Xpol	Xpol
Horizontal Beamwidth	65°	65°	65°	65°	65°	65°
Electrical Downtilt Range	2-12°	2-12°	2-12°	2-12°	2-12°	2-12°
Connector Type	(2x) 4.3-10 Female	(2x) 4.3-10 Female	(2x) 4.3-10 Female	(2x) 4.3-10 Female	(2x) 4.3-10 Female	(2x) 4.3-10 Female

ELECTRICAL CHARACTERISTICS		R1, R2		
Frequency Bands		698-960 MHz		
		698-803 MHz	824-894 MHz	880-960 MHz
Gain	at Mid Tilt	16.0 dBi	16.3 dBi	16.6 dBi
	Over All Tilts	15.8 ± 0.6 dBi	16.4 ± 0.4 dBi	16.6 ± 0.5 dBi
Input Impedance		50 Ω		
VSWR		< 1.5		
Return Loss		> 14 dB		
Polarisation		± 45°		
Horizontal Beamwidth		64° ± 6.0°	61° ± 5.5°	60° ± 4.5°
Vertical Beamwidth		8.6° ± 0.6°	7.8° ± 0.7°	7.2° ± 0.8°
Electrical Downtilt Range		2-12°		
Cross-Polar Isolation (Typical)		> 28 dB		
Port-To-Port Isolation (Typical)		> 28 dB (R1/R2), > 28 dB (R1/Y1,Y2,Y3,Y4)		
First Upper Sidelobe Suppression		> 12 dB	> 15 dB	> 16 dB
Front-to-Back Ratio ± 30°		> 21 dB	> 21 dB	> 21 dB
Cross Polar Discrimination at Boresight		> 17 dB	> 18 dB	> 18 dB
Maximum Power (Per Port)		300 W (at 50° C ambient temperature)		
Grounding		DC Ground		
Intermodulation 3rd Order for 2 x 43 dBm Carrier		≤ -150 dBc		

Standard values based on NGMN-P-BASTA version 12.0 recommendation.



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ELECTRICAL CHARACTERISTICS		Y1 , Y2, Y3, Y4			
Frequency Bands		1710-2690 MHz			
		1710-1880 MHz	1920-2170 MHz	2300-2400 MHz	2490-2690 MHz
Gain	At Mid Tilt	16.6 dBi	17.2 dBi	17.4 dBi	17.4 dBi
	Over All Tilts	16.5 ± 0.5 dBi	17.0 ± 0.5 dBi	17.3 ± 0.3 dBi	17.3 ± 0.3 dBi
Input Impedance		50 Ω			
VSWR		< 1.5			
Return Loss		> 14 dB			
Polarisation		± 45°			
Horizontal Beamwidth		67° ± 4.5°	63° ± 6.5°	62° ± 6.5°	58° ± 6.5°
Vertical Beamwidth		7.4° ± 0.5°	6.4° ± 0.5°	5.8° ± 0.5°	5.4° ± 0.6°
Electrical Downtilt Range		2-12°			
Cross-Polar Isolation (Typical)		> 28 dB			
Port-To-Port Isolation (Typical)		> 28 dB			
First Upper Side Lobe Suppression		> 15 dB	> 15 dB	> 15 dB	> 15 dB
Front-To-Back Ratio ±30°		> 24 dB	> 24 dB	> 24 dB	> 24 dB
Cross Polar Discrimination at Boresight		> 15 dB	> 16 dB	> 17 dB	> 17 dB
Maximum Power (Per Port)		250 W (at 50°C ambient temperature)			
Intermodulation 3rd (2x43 dBm Carrier)		≤ -150 dBc			
Grounding		DC Ground			

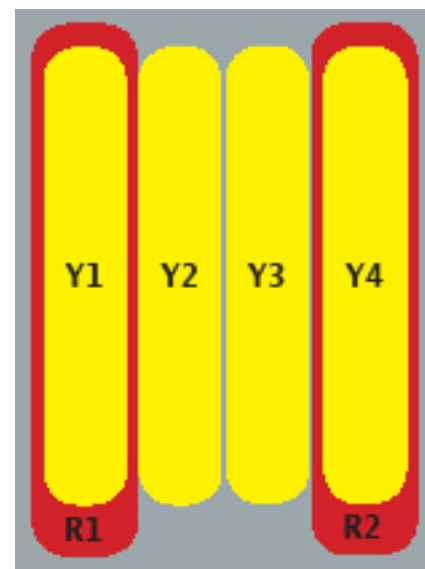
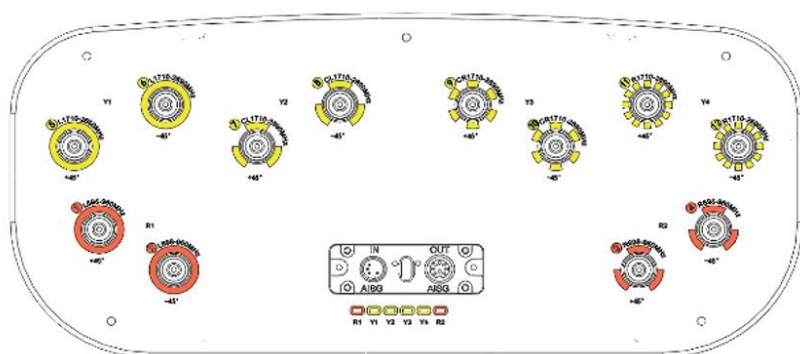
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INTEGRATED RET PROPERTIES

Supply Voltage Range		10-30 V DC
Power Consumption	Standby	< 2 W
	In Motion	< 10 W
Connectors		2 x 8 Pin Circle Connector According to IEC 60130-9 and AISG Daisy Chain In: Male; Daisy Chain Out: Female Pin3: RS485B; Pin5: RS485A; Pin6: 10-30 V; Pin7: DC Return Female Connector: 8 PINs; Male Connector: 4 PINs
Lightning Protection Rating		IEC 61000-4-5 Current Pulse Profile Line to Ground 8/20 μ s @ 8kA $\geq \pm 5$ Repetitions Line to line , 8/20 μ s @ 3kA $\geq \pm 5$ Repetitions
Safety Standard		Compliant to EN 60950/UL 60950/RoHS, CE



ARRAY LAYOUT	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
	R1	698-960	1-2	4.3-10 Female
	R2	698-960	3-4	4.3-10 Female
	Y1	1710-2690	5-6	4.3-10 Female
	Y2	1710-2690	7-8	4.3-10 Female
	Y3	1710-2690	9-10	4.3-10 Female
	Y4	1710-2690	11-12	4.3-10 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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MECHANICAL CHARACTERISTICS		
Dimensions (Height x Width x Depth)		2497 x 469 x 205 mm (98.3 x 18.3 x 8.0 in)
Weight (excluding mounting accessory)		34.5 kg (76.0 lbs)
Weight with mounting accessory		40 kg (88.1 lbs)
Radome Material		Fiberglass (UV Resistant, Light Grey)
Radiator Material		Low loss circuit board
Reflector Material		Aluminum
Maximum Wind Speed		200 km/h (124.3 mph)
Operating Temperature		-40° to +60° C (-40° to +140° F)
Wind Load at 150 km/h (93.2 mph)	Frontal	745 N (88.1 lbf)
	Rear	700 N (157.3 lbf)
	Lateral	310 N (69.6 lbf)
MOUNTING KIT OPTIONS		POLE DIAMETER
		MECHANICAL TILT
All mounting bracket kits are ordered separately unless otherwise indicated.		
Mounting Bracket Kit (Included)		Ø50-Ø125 mm (Ø2.0-Ø4.9 mm)
		0-10°

PACKAGING

Carton Box
2.737 x 0.544 x 0.280 m
(107.7 x 21.4 x 11.0 in)

