

5980388NGv

6-Band, 12-Port, 65°,33°, XPOL, Hybrid SplitBeam Panel Sector Antenna, Variable Tilt, 2597 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°	33°	33°	33°	33°
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		
		698-806 MHz	790-894 MHz	880-960 MHz
Gain	at Mid Tilt	15.8 dBi	16.3 dBi	16.6 dBi
	Over All Tilts	15.7 ± 0.6 dBi	16.2 ± 0.6 dBi	16.5 ± 0.6 dBi
Input Impedance		50 Ω		
VSWR		< 1.5		
Return Loss		> 14 dB		
Polarisation		± 45°		
Horizontal Beamwidth		69° ± 6°	65° ± 6°	61° ± 6°
Vertical Beamwidth		8.6° ± 1.0°	7.6° ± 1.0°	7.0° ± 1.0°
Electrical Downtilt Range		2-12°		
Intraband Isolation		≥ 25 dB		
Interband Isolation		≥ 25 dB		
First Upper Sidelobe Suppression		≥ 15 dB	≥ 15 dB	≥ 15 dB
Front-to-Back Ratio Co-Pol, ± 30°		> 23 dB	> 24 dB	> 25 dB
Cross Polar Ratio	Main Direction (0°)	> 16 dB	> 16 dB	> 16 dB
	Sector Edges (±60°)	> 7.0 dB	> 7.0 dB	> 7.0 dB
Maximum Power (Per Port)		300 W (at 50° C ambient temperature)		
Grounding		DC Ground		
Intermodulation		< -150 dBc		



Standard values based on NGMN-P-BASTA version 11.1 recommendation.

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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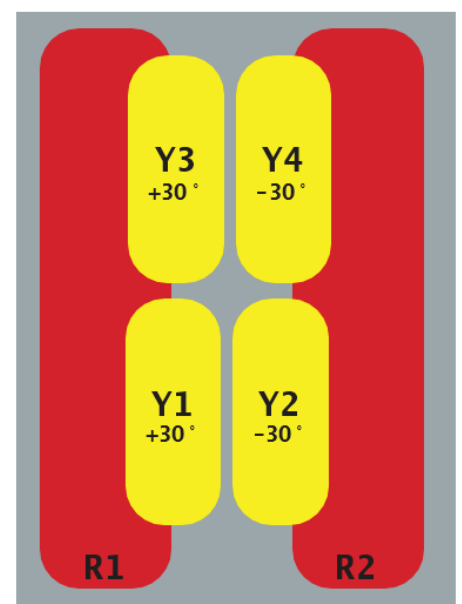
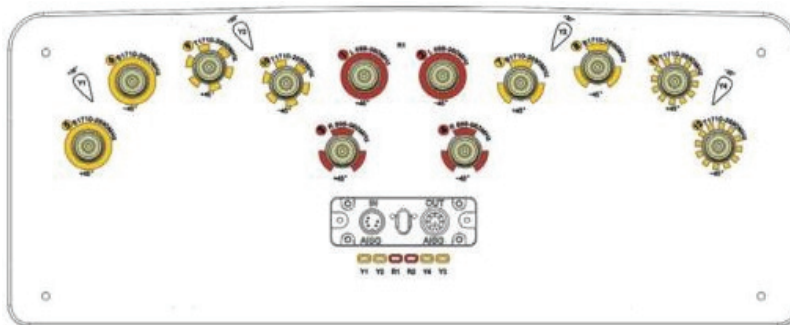
ELECTRICAL CHARACTERISTICS		Y1 / Y2 / Y3 / Y4				
Frequency Bands		1710-2690 MHz				
		1710-1880 MHz	1850-1990 MHz	1920-2170 MHz	2300-2500 MHz	2500-2690 MHz
Gain	At Mid Tilt	17.5 dBi	17.8 dBi	18.1 dBi	18.8 dBi	18.7 dBi
	Over All Tilts	17.6 ± 0.6 dBi	17.7 ± 0.6 dBi	18.0 ± 0.6 dBi	18.7 ± 0.6 dBi	18.6 ± 0.6 dBi
Input Impedance		50 Ω				
VSWR		< 1.5				
Return Loss		> 14 dB				
Polarisation		± 45°				
Horizontal Beamwidth (-3 dB)		36° ± 3°	34° ± 3°	32° ± 3°	27° ± 3°	25° ± 3°
Vertical Beamwidth (-3 dB)		10.0° ± 1.0°	9.3° ± 0.9°	8.8° ± 0.9°	7.2° ± 0.7°	6.9° ± 0.7°
Azimuth Beam Pointing		Y1 & Y3: +30°; Y2 & Y4: -30°				
Electrical Downtilt Range		2-12°				
Intraband (same beam) Isolation		≥ 25 dB				
Beam-to-Beam Isolation		≥ 15 dB				
Interband Isolation		> 25 dB				
First Upper Sidelobe Suppression		> 15 dB	> 15 dB	> 15 dB	> 15 dB	> 15 dB
Front-to-Back Ratio Co-Pol, ± 30°		> 24 dB	> 24 dB	> 25 dB	> 25 dB	> 25 dB
Cross Polar Discrimination at Boresight		> 15 dB	> 15 dB	> 15 dB	> 15 dB	> 15 dB
Maximum Power (Per Port)		200 W (at 50°C ambient temperature)				
Intermodulation 3rd (2x43 dBm Carrier)		< -150 dBc				
Grounding		DC Ground				

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INTEGRATED RET PROPERTIES	
Protocols	Compliant With AISGV2.0 And 3GPP
Supply Voltage, VDC	10-30 DC
Adjustment Time(Full Range)	≤ 90 sec (typical, depending on antenna type)
Power Consumption	< 2W (standby); < 10W (motor activated)
Angular Accuracy for shaft turn	Angular Accuracy ≤ 0.5 deg
Hardware Interface	RS485 And Power
Safety Standard	Compliant to EN 60950/UL 60950/ RoHs (Restriction of Hazardous Substances), CE
Remote control	Can management from OMC, BTS/NodeB
Lifetime/Adjustment Cycles	> 20000
Torque Max.	≥ 160mN.m
Lightning Protection Rating	IEC 61000-4-5 Current Pulse Profile, 8/20 μs 10 Repetitions Min. @ 8kA
Daisy chaining method	Ready for daisy-chaining
Housing Material	Aluminum
Humidity	Up to 95%
IP Rating	IP65
Housing Color	Aluminum Silver
Connectors	2 x 8 Pin Circle Connector According To IEC 60130-9 And AISG. Daisy Chain In : Male, Daisy Chain Out : Female Pin3:RS485+; Pin5:RS485-; Pin6:10~30V; Pin7:GND Female connector: 8 PINS ,Male connector: 5 PINS.
Operating Temperature range	-40°C to +70°C



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		PACKAGING
Dimensions (Height x Width x Depth)	2597 x 497 x 197 mm (102.2 x 19.6 x 7.8 in)	Carton Box 2.797 x 0.592 x 0.317 m (110.1 x 23.3 x 12.5 in)
Weight (excluding mounting accessory)	37 kg (81.6 lbs)	
Weight with mounting accessory	46 kg (101.5 lbs)	
Radome Material/ Radiator Material/Reflector Material	Fiberglass (UV resistant) Light grey Aluminum /Low loss circuit board /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	1195 N (268.6 lbf)
	Rear	1335 N (300.1 lbf)
	Lateral	500 N (112.4 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°

