

6177788NGv

4-Band, 8-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1397 mm

- Quad band antenna, dual polarisation, 8 connectors
- Independent, continuously adjustable tilt on each band 0-10° / 0-10° / 0-10° / 0-10°
- RET version, 3GPP/AISG2.0 with four integrated RCUs

ACCESS PORT DESCRIPTION (CONNECTORS)

The antenna has 8 colour-coded connectors located at the bottom face.

Frequency Designation	Y1	Y2	Y3	Y4
Frequency Range	1710-2690 MHz	1710-2690 MHz	1710-2690 MHz	1710-2690 MHz
Polarisation	Xpol	Xpol	Xpol	Xpol
Horizontal Beamwidth	65°	65°	65°	65°
Electrical Downtilt Range	0-10°	0-10°	0-10°	0-10°
Connector Type	(2x) 4.3-10Female	(2x) 4.3-10Female	(2x) 4.3-10Female	(2x) 4.3-10Female

ELECTRICAL CHARACTERISTICS

Y1, Y4

Frequency Bands		1710-2690 MHz				
		1710-1880	1850-1990	1920-2170	2300-2400	2500-2690
Gain	At Mid Tilt	17.1 dBi	17.3 dBi	17.6 dBi	17.9 dBi	17.9 dBi
	Over All Tilts	17.0 ± 0.6 dBi	17.2 ± 0.5 dBi	17.5 ± 0.5 dBi	17.8 ± 0.6 dBi	17.8 ± 0.6 dBi
Input Impedance		50Ω				
VSWR		< 1.5				
Polarisation		±45°				
Horizontal Beamwidth (-3 dB)		65° ± 5.0°	64° ± 5.1°	65° ± 5.0°	61° ± 5.2°	58° ± 5.0°
Vertical Beamwidth (-3 dB)		7.0° ± 0.5°	6.7° ± 0.5°	6.3° ± 0.5°	5.4° ± 0.5°	5.0° ± 0.5°
Electrical Downtilt Range		0-10°				
Cross Polar Isolation		> 28 dB				
Port-to-Port Isolation		> 28 dB				
Upper Sidelobe Suppression	First Upper Lobe	> 16 dB	> 16 dB	> 16 dB	> 16 dB	> 16 dB
	Peak to 20°	> 14 dB	> 14 dB	> 14 dB	> 14 dB	> 14 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 25 dB	> 25 dB	> 26 dB	> 26 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 18 dB	> 19 dB	> 20 dB	> 20 dB	> 18 dB
	Sector Edges	> 9 dB	> 9 dB	> 9 dB	> 7 dB	> 5 dB
Maximum Power (Per Port)		250 W				
Intermodulation 3rd Order (2x43 dBm Carrier)		< -150 dBc				

Standard values based on NGMN-P-BASTA version 10.0 recommendation.



A GLOBAL INITIATIVE

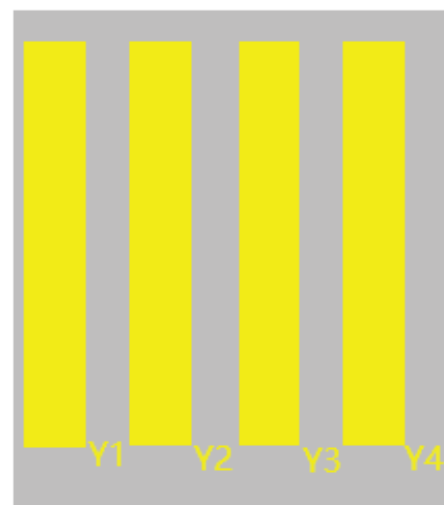
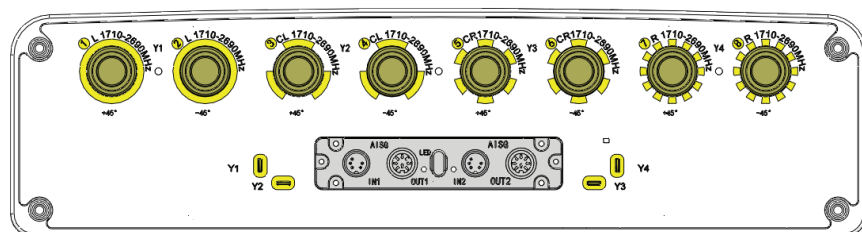


6177788NGv

4-Band, 8-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1397 mm

ELECTRICAL CHARACTERISTICS		Y2, Y3				
Frequency Bands		1710-2690 MHz				
		1710-1880	1850-1990	1920-2170	2300-2400	2500-2690
Gain	At Mid Tilt	17.1 dBi	17.3 dBi	17.6 dBi	17.9 dBi	17.9 dBi
	Over All Tilts	17.0 ± 0.6 dBi	17.2 ± 0.5 dBi	17.5 ± 0.5 dBi	17.8 ± 0.6 dBi	17.8 ± 0.6 dBi
Input Impedance		50Ω				
VSWR		< 1.5				
Polarisation		±45°				
Horizontal Beamwidth (-3 dB)		65° ± 5.0°	64° ± 5.1°	65° ± 5.0°	61° ± 5.2°	58° ± 5.0°
Vertical Beamwidth (-3 dB)		7.0° ± 0.5°	6.7° ± 0.5°	6.3° ± 0.5°	5.4° ± 0.5°	5.0° ± 0.5°
Electrical Downtilt Range		0-10°				
Cross Polar Isolation		> 28 dB				
Port-to-Port Isolation		> 28 dB				
Upper Sidelobe Suppression	First Upper Lobe	> 16 dB	> 16 dB	> 16 dB	> 16 dB	> 16 dB
	Peak to 20°	> 14 dB	> 14 dB	> 14 dB	> 14 dB	> 14 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 25 dB	> 25 dB	> 26 dB	> 26 dB	> 25 dB
Cross Polar Discrimination	Main Direction	> 18 dB	> 19 dB	> 20 dB	> 20 dB	> 18 dB
	Sector Edges	> 9 dB	> 9 dB	> 9 dB	> 6 dB	> 5 dB
Maximum Power (Per Port)		250 W				
Intermodulation 3rd Order (2x43 dBm Carrier)		< -150 dBc				

Standard values based on NGMN-P-BASTA version 10.0 recommendation.



6177788NGv

4-Band, 8-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1397 mm

INTEGRATED RET PROPERTIES	
Protocol	Compliant with 3GPP/AISGv2.0
Power Supply	10-30VDC
Adjustment Time (Full Range)	≤ 90 sec (typical, depending on antenna type)
Power Consumption	< 2 W (Idle); < 10 W (In Motion)
Accuracy	≤ 0.5°
Hardware Interface	Pin3: RS485B; Pin5: RS485A; Pin6: 10-30V; Pin7: DC Return
Safety Standard	Compliant to EN 60950/UL 60950/ RoHS, CE
Adjustment Cycles	> 20,000
Torque Max	≥ 160 mN.m
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 @ 0.6kA
Connectors	4 x 8 Pins Connector According To IEC60130-9 AND AISG 2x Daisy Chain In: Male 2x Daisy Chain Out: Female Pin3:RS485B; Pin5:RS485A; Pin6:10~30V; Pin7: DC return Female connector: 8 PINs, Male connector: 4 PINs

ENVIRONMENTAL CHARACTERISTICS	
Operating Temperature	-40° to +55° C (-40° to 131° F)
Environmental Standard	RoHS 2011/65/EU and ISO Certification 901/2015 & 14001/2015
Lightning Protection	DC Ground

MECHANICAL CHARACTERISTICS		
Dimensions (Height x Width x Depth)		1397 x 497 x 127 mm (54.9 x 19.5 x 4.9 in)
Weight (excluding mounting accessory)		22.5 kg (49.6 lbs)
Weight with brackets		27 kg (59.5 lbs)
Radome Material		Fiberglass
Maximum Wind Speed		200 km/h (124.3 mph)
Wind Load at 150 km/h	Front	640 N (143.8 lbf)
	Lateral	240 N (53.9 lbf)
	Rear	720 N (161.8 lbf)

PACKAGING

Carton Box
1.597 x 0.592 x 0.247 m
(62.8 x 23.3 x 9.7 in)

MOUNTING KIT OPTIONS	POLE DIAMETER	MECHANICAL TILT
All mounting bracket kits are ordered separately unless otherwise indicated.		
Mounting and Downtilt Bracket Kit (Included)	Ø50-Ø125 mm (Ø2.0-Ø4.9 mm)	0-16°

6177788NGv

4-Band, 8-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1397 mm

