

6177208G

6177208NG

2-Band | 4-Port | XPOL | Panel Antenna | Variable Tilt | 2077 mm

- Dual band antenna, dual polarisation, 4 connectors
- Independent tilt on each band 0-6° / 0-6°
- RET version 3GPP, AISGv2.0
- 2 Integrated RET Units (field replaceable)

ACCESS PORT DESCRIPTION (CONNECTORS)

This antenna has 4 colour-coded connectors located at the bottom face.

Frequency Designation	Y1	Y2
Frequency Range	1710-2690 MHz	1710-2690 MHz
Polarisation	Xpol	Xpol
Horizontal Beamwidth	65°	65°
Electrical Downtilt Range	0-6°	0-6°
Connector Type	(2x) 4.3-10 Female or 7/16 DIN Female	(2x) 4.3-10 Female or 7/16 DIN Female

ORDERING OPTIONS

Select from the different options listed below

SELECT ELECTRICAL DOWNTILT CONTROL & AISG PROTOCOL	SELECT ACTUATOR	SELECT CONNECTOR TYPE	ANTENNA MODEL NUMBER
Manual Electrical Tilt (MET)	---	4.3-10 Female	6177208N
		7/16 DIN Female	6177208
Remote Electrical Tilt (RET) AISG v2.0 / 3GPP	Multi-Device Control Unit (MDCU)	4.3-10 Female	6177208NG
		7/16 DIN Female	6177208G

ELECTRICAL CHARACTERISTICS

Y1, Y2

Frequency Bands		1710-2690 MHz				
		1710-1880	1850-1990	1920-2170	2300-2400	2490-2690
Gain	At Mid Tilt	19 dBi	19.5 dBi	19.8 dBi	20.1 dBi	20.6 dBi
	Over All Tilts	19.0 ± 0.5 dBi	19.3 ± 0.5 dBi	19.6 ± 0.5 dBi	20.0 ± 0.5 dBi	20.5 ± 0.5 dBi
Input Impedance		50Ω				
VSWR		< 1.5				
Return loss		> 14 dB				
Polarisation		±45°				
Horizontal Beamwidth (-3 dB)		66° ± 2.9°	64° ± 2.7°	63° ± 2.8°	61° ± 2.9°	58° ± 2.9°
Vertical Beamwidth (-3 dB)		4.6° ± 0.4°	4.3° ± 0.4°	4.1° ± 0.5°	3.8° ± 0.4°	3.4° ± 0.4°
Electrical Downtilt Range		0-6°				
Cross Polar Isolation		> 28 dB				
Port-to-Port Isolation		> 28 dB				
Upper Sidelobe Suppression	Typical	> 17 dB	> 17 dB	> 17 dB	> 17 dB	> 17 dB
	Peak to 20°	> 16 dB	> 16 dB	> 15 dB	> 15 dB	> 14 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 26 dB	> 26 dB	> 27 dB	> 27 dB	> 27 dB
Cross Polar Discrimination	Main Direction	> 20 dB	> 21 dB	> 22 dB	> 20 dB	> 20 dB
	Sector Edges	> 10 dB	> 10 dB	> 11 dB	> 10 dB	> 10 dB
Maximum Power (Per Port)		250 W				
Intermodulation 3rd Order (2x43 dBm Carrier)		< -153 dBc				
Grounding		DC Ground				

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



A GLOBAL INITIATIVE



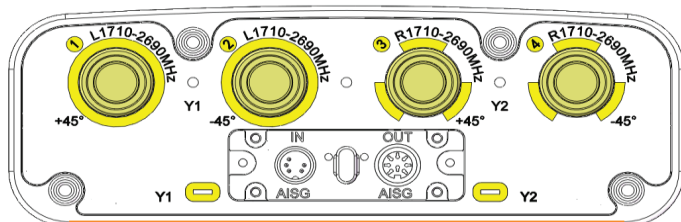
Several patents pending regarding this product. Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our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

6177208G

6177208NG

2-Band | 4-Port | XPOL | Panel Antenna | Variable Tilt | 2077 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	< 2W (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	(2x) 8-Pin Circle Connector According to IEC 60130-9 and AISG Daisy Chain In: Male; Daisy Chain Out: Female





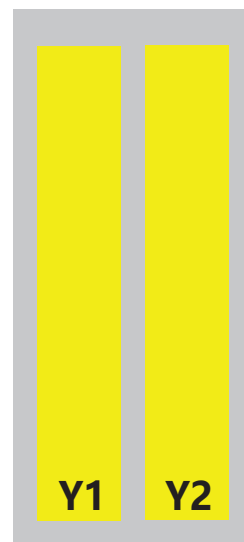
ARRAY LAYOUT	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
	 Y1	1710-2690	1-2	4.3-10 Female or 7/16 DIN Feamle
	 Y2	1710-2690	3-4	4.3-10 Female or 7/16 DIN Feamle

Diagram shown at right depicts the view from the front of the antenna.
The illustration is not shown to scale.



6177208G

6177208NG

2-Band | 4-Port | XPOL | Panel Antenna | Variable Tilt | 2077 mm

MECHANICAL CHARACTERISTICS			PACKAGING
Dimensions (Height x Width x Depth)		2077 x 257 x 87 mm (81.7 x 10.1 x 3.4 in)	Carton Box 2.397 x 0.352 x 0.207 m (94.3 x 13.8 x 8.1 in)
Weight (excluding mounting accessory)		15.5 kg (34.1 lbs)	
Weight with brackets		20 kg (44.0 lbs)	
Radome Material		UPVC	
Maximum Wind Speed		200 km/h (124.3 mph)	
Wind Load at 150 km/h	Front	495 N (111.2 lbf)	
	Rear	550 N (123.6 lbf)	
	Lateral	205 N (46.0 lbf)	
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 in)	0-12°

