

6106408v

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

- Tetra band antenna, Dual polarisation, 8 connectors
- Independent, continuously adjustable tilt on each band 2-10° / 2-10° / 2-10° / 2-10°
- 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	2-10°	2-10°	2-10°	2-10°
Connector Type	(2x) 7/16 DIN Female	(2x) 7/16 DIN Female	(2x) 7/16 DIN Female	(2x) 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	6106408Nv
		7/16 DIN Female	6106408v
Remote Electrical Tilt (RET) AISG v2.0 / 3GPP	Multi-Device Control Unit (MDCU)	4.3-10 Female	6106408NGv
		7/16 DIN Female	6106408Gv

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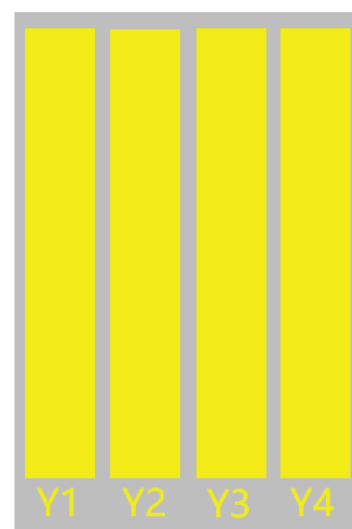
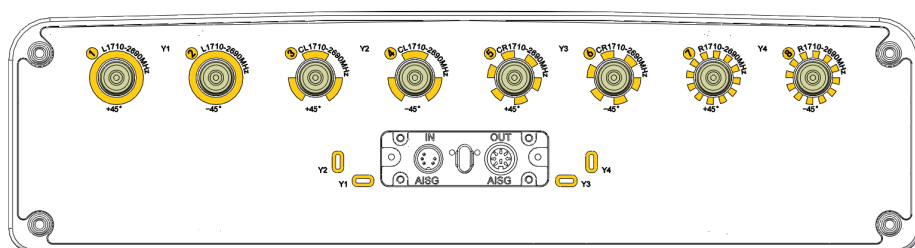
ELECTRICAL CHARACTERISTICS		Y1 , Y2 , Y3 , Y4			
Frequency Bands		1710-2690 MHz			
		1710-1880 MHz	1920-2170 MHz	2300-2490 MHz	2500-2690 MHz
Gain		17.1 dBi	17.5 dBi	17.7 dBi	17.9 dBi
Input Impedance		50Ω			
VSWR		< 1.5			
Return Loss		> 14 dB			
Polarisation		±45°			
Horizontal Beamwidth (-3 dB)		68°	65°	63°	60°
Vertical Beamwidth (-3 dB)		6.8°	6.2°	5.3°	5.0°
Electrical Downtilt Range		2-10°			
Cross-Polar Isolation		> 28 dB			
Port to Port Isolation		> 28 dB			
First Upper Side Lobe Suppression		> 18 dB	> 18 dB	> 17 dB	> 17 dB
Cross Polar Ratio	Main Direction (0°)	> 20 dB	> 20 dB	> 20 dB	> 20 dB
	Sector Edges (±60°)	> 9 dB	> 9 dB	> 6 dB	> 5 dB
Front-to-Back Ratio (@ 180° ± 30°)		> 26 dB	> 26 dB	> 26 dB	> 26 dB
Lightening Protection		DC Ground			
Maximum Power (Per Port)		200 W (at 50° C ambient temperature)			
Intermodulation 3rd (2x43 dBm Carrier)		< -150 dBc			

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

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INTEGRATED RET PROPERTIES	
Protocols	Compliant With AISGV2.0 And 3GPP
Supply Voltage, VDC	10-30DC
Adjustment Time(Full Range)	≤ 90 s (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
Housing Color	Silvery white
Mounting	Directly onto Antenna
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
	■ Y1	1710-2690	1-2	7/16 DIN Female
	■ Y2	1710-2690	3-4	7/16 DIN Female
	■ Y3	1710-2690	5-6	7/16 DIN Female
	■ Y4	1710-2690	7-8	7/16 DIN Female

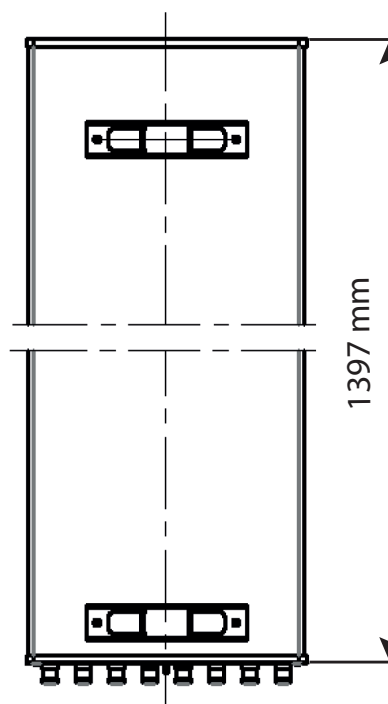
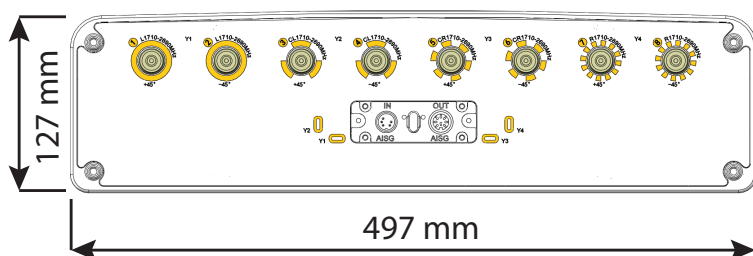
Diagram shown at right depicts the view from the front of the antenna. The illustration is not shown to scale.

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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MECHANICAL CHARACTERISTICS		PACKAGING
Dimensions (Height x Width x Depth)	1397 x 497 x 127 mm (55 x 19.5 x 5 in)	Carton Box 1.597 x 0.592 x 0.247 m (62.8 x 23.3 x 9.72 in)
Weight (excluding mounting accessory)	22.5 kg (49.6 lbs)	
Weight with mounting accessory	28 kg (61.7 lbs)	
Radome Material / Colour	Fiber Glass / Light Grey	
Storage & Operating Temperature	-40°C to +65°C	
Maximum Wind Speed	200 km/h	
Wind Loads (at 150 km/h)	Frontal	640 N (143.8 lbf)
	Rear	715 N (160.7 lbf)
	Lateral	140 N (31.5 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 (Ø1.9-Ø4.9 in)	0-16°



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