

6177188

6177188G

2-Band, 4-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1403 mm

- Dual band antenna, dual polarisation, 4 connectors
- Independent tilt on each band 0-10° / 0-10°
- Manual (MET) and Remote (RET) electrical tilt options
- Mounting and downtilt brackets included

PRODUCT OVERVIEW	Frequency Range (MHz)	1690-2690	1690-2690
	Array	■ Y1	■ Y2
	Connector	1-2	3-4
	Polarization	XPOL	XPOL
	Azimuth Beamwidth (avg)	65°	65°
	Electrical Downtilt	0-10°	0-10°
	Dimensions	1403 x 286 x 95 mm	



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)	---	7/16-DIN Female	6177188
Remote Electrical Tilt (RET) AISG v2.0 / 3GPP	Multi-Device Control Unit (MDCU)	7/16-DIN Female	6177188G



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ELECTRICAL SPECIFICATIONS Ultra Wide Band

Y1

Frequency Range		MHz	1690-2690			
		MHz	1690-1990	1920-2200	2200-2490	2490-2690
Polarization		---	±45°			
Over All Tilts	Over All Tilts	dBi	17.3 ± 0.8	17.5 ± 0.9	17.4 ± 0.8	17.4 ± 0.8
	0° Tilt	dBi	17.3 ± 0.5	17.5 ± 0.5	17.5 ± 0.6	17.4 ± 0.6
	5° Tilt	dBi	17.4 ± 0.6	17.9 ± 0.5	17.6 ± 0.6	17.7 ± 0.5
	10° Tilt	dBi	17.1 ± 0.6	17.2 ± 0.6	17.1 ± 0.6	17.1 ± 0.5
Azimuth Beamwidth		degrees	65.6° ± 5.0°	65.0° ± 4.5°	64.0° ± 5.0°	60.8° ± 5.2°
Elevation Beamwidth		degrees	7.3° ± 0.8°	6.6° ± 0.8°	6.0° ± 0.7°	5.5° ± 0.5°
Electrical Downtilt		degrees	0°-10°			
Impedance		Ohms	50			
VSWR		---	< 1.5			
Passive Intermodulation 3rd Order for 2 x 20W Carriers		dBc	≤ -153			
Front-to-Back Ratio	180°	dB	> 28			
	180° ± 30°	dB	> 25			
Upper Sidelobe Suppression	First USL (min)	dB	16	16	16	16
	Peak to 20°	dB	15	15	15	15
Cross Polar Ratio	Main Direction (0°)	dB	> 18			
	Sector Edges (60°)	dB	> 8			
Maximum Effective Power Per Port (50° C)		Watts	250 W			
Isolation between ports		dB	> 28			

Standard values based on NGMN-P-BASTA version 9.6 recommendation.

ELECTRICAL SPECIFICATIONS Ultra Wide Band

Y2

Frequency Range		MHz	1690-2690			
		MHz	1690-1990	1920-2200	2200-2490	2490-2690
Polarization		---	±45°			
Over All Tilts	Over All Tilts	dBi	17.3 ± 0.8	17.5 ± 0.9	17.4 ± 0.8	17.4 ± 0.8
	0° Tilt	dBi	17.3 ± 0.5	17.5 ± 0.5	17.5 ± 0.6	17.4 ± 0.6
	5° Tilt	dBi	17.4 ± 0.6	17.9 ± 0.5	17.6 ± 0.6	17.7 ± 0.5
	10° Tilt	dBi	17.1 ± 0.6	17.2 ± 0.6	17.1 ± 0.6	17.1 ± 0.5
Azimuth Beamwidth		degrees	65.6° ± 5.0°	65.0° ± 4.5°	64.0° ± 5.0°	60.8° ± 5.2°
Elevation Beamwidth		degrees	7.3° ± 0.8°	6.6° ± 0.8°	6.0° ± 0.7°	5.5° ± 0.5°
Electrical Downtilt		degrees	0°-10°			
Impedance		Ohms	50			
VSWR		---	< 1.5			
Passive Intermodulation 3rd Order for 2 x 20W Carriers		dBc	≤ -153			
Front-to-Back Ratio	180°	dB	> 28			
	180° ± 30°	dB	> 25			
Upper Sidelobe Suppression	First USL (min)	dB	16	16	16	16
	Peak to 20°	dB	15	15	15	15
Cross Polar Ratio	Main Direction (0°)	dB	> 18			
	Sector Edges (60°)	dB	> 8			
Maximum Effective Power Per Port (50° C)		Watts	250 W			
Isolation between ports		dB	> 28			

Standard values based on NGMN-P-BASTA version 9.6 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.

65° | 1403 mm

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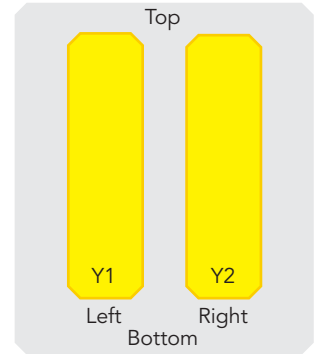
2-Band, 4-Port, 65°, XPOL, Panel Antenna, Variable Tilt, 1403 mm

RET ACTUATOR

Input Voltage	+10 to +36 V DC			
Power Consumption	Idle	< 1 W		
	Operating	< 10 W		
Protocol	3GPP/AISG 2.0			
Precision	±0.1°			
Hardware Interface	Pin 1	DC	Pin 5	RS-485A
	Pin 2	n/c	Pin 6	DC In/Out
	Pin 3	RS-485B	Pin 7	DC Return
	Pin 4	n/c	Pin 8	n/c
RET Interface	1 pair of AISG Male and Female, conforms to AISG 2.0			

ARRAY LAYOUT	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
	Y1	1690-2690	1-2	7/16-DIN Female
	Y2	1690-2690	3-4	7/16-DIN Female

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



MECHANICAL SPECIFICATIONS

Length	mm (in)	1403 (55.2)	
Width	mm (in)	286 (11.3)	
Depth	mm (in)	95 (3.7)	
Net Weight - Antenna Only	kg (lbs)	13.2 (29.1)	
Windload (Wind Tunnel Coefficients)	Calculation	km/h (mph)	150 (93.2)
	Frontal	N (lbf)	555 (124.8)
	Lateral	N (lbf)	185 (41.6)
	Rearside	N (lbf)	640 (143.9)
Operational Wind Speed	km/h (mph)	150 (93.2)	
Survival Wind Speed	km/h (mph)	200 (124)	
Radome Color	---	Light Grey	
Radome Material	---	PVC	
Lightning Protection	---	DC Ground	

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	° C (° F)	-55° to +65° (-67° to +149°)
Product Environmental Compliance	---	Product is RoHs Compliant

ACCESSORIES All accessories are ordered separately unless otherwise indicated

ITEM	MECHANICAL TILT
Brackets for pole Ø50 to Ø115 mm (Ø2.0 to Ø4.5 in) Included - delivered as standard	0-17°

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