

4-Port Antenna

698-960 | 1695-2690 MHz

65° 590<u>mm</u>

68273F0E

2-Band, 4-Port, 65°, XPOL, Panel Antenna, Fixed Tilt, 590 mm

- Dual band antenna, dual polarisation, 4 connectors
- Fixed tilt on each band 0° / 0°

	Frequency Range (MHz)	698-960	1695-2690		
>	Array	R 1	Y 1		
OVERVIEW	Connector	1-2	3-4		
	Polarization	XPOL	XPOL		
PRODUCT	Azimuth Beamwidth (avg)	65°	65°		
	Fixed Electrical Downtilt	0°	0°		
	Dimensions	590 x 360 x 160 mm			



ELECTRICAL SPECIFICATIONS Low Band

Frequency Range		MHz	698-960				
		MHz	698-806	880-960			
Polarization			698-806 790-862 824-894 880-960 ±45°				
Gain	Over all Tilts	dBi	10.0 ± 0.5	10.4 ± 0.3	10.5 ± 0.3	10.5 ± 0.4	
Azimuth Beamwidth		degrees	71.9° ± 1.7°	70.8° ± 2.1°	70.9° ± 2.3°	70.4° ± 2.8°	
Elevation Beamwidth		degrees	$40.7^{\circ} \pm 4.2^{\circ}$	36.7° ± 3.5	35.7° ± 3.4°	34.1° ± 3.1°	
Electrical Downtilt		degrees	0°				
Impedance		Ohms	50				
VSWR			< 1.5				
Passive Intermodulation 3rd Order for 2 x 20W Carriers		dBm	< -107				
Front-to-Back	Ratio, Total Power, ±30°	dB	> 23.9	> 23.0	> 24.0	> 22.4	
Upper Sidelobe Suppression, Peak to 20°		dB	> 30.0	> 30.0	> 30.0	> 20.2	
Cross Polar	Main Direction (0°)	dB	> 18.1	> 18.3	> 15.3	> 17.3	
Ratio	Sector Edges (±60°)	dB	> 10.7	> 10.6	> 10.9	> 12.7	
Maximum Effective Power Per Port		Watts	500 W				
Inter/Intra Band Isolation		dB	> 25				

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

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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<u>65</u>° _ 590 mm

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	L SPECIFICATIONS Ultra				<mark>_</mark> Y1			
Frequency Range		MHz	1695-2690					
		MHz	1695-1880	1850-1990	1920-2180	2300-2500	2490-2690	
Polarization			±45°					
Gain	Over all Tilts	dBi	12.7 ± 0.4	13.2 ± 0.6	13.7 ± 0.5	14.0 ± 0.3	13.8 ± 0.4	
Azimuth Beamwidth		degrees	65.1° ± 5.4°	58° ± 6.6°	57.0° ± 3.8°	$66.4^{\circ} \pm 4.0^{\circ}$	70.8° ± 4.4°	
Elevation Beamwidth		degrees	16.7° ± 0.7°	15.5° ± 1.6°	14.8° ± 0.8°	13.3° ± 0.1°	12.3° ± 0.4°	
Electrical Downtilt		degrees	0°					
Impedance		Ohms	50					
VSWR			< 1.5					
Passive Intermodulation 3rd Order for 2 x 20W Carriers		dBm	< -107					
Front-to-Back Ratio, Total Power, ±30°		dB	> 27.6	> 28.2	> 29.1	> 31.2	> 30.1	
Upper Sidelobe Suppression, Peak to 20°		dB	> 21.1	> 14.7	> 15.9	> 14.6	> 11.6	
Cross Polar	Main Direction (0°)	dB	> 11.6	> 12.6	> 12.8	> 13.8	> 15.1	
Ratio	Sector Edges (±60°)	dB	> 5.1	> 5.2	> 6.5	> 10.2	> 7.2	
Maximum Effective Power Per Port		Watts	300 W					
Inter/Intra Band Isolation		dB	> 25					

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4-Port Antenna

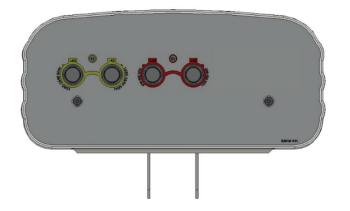
698-960 | 1695-2690 MHz

65

5°	590 mm

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2-Band, 4-Port, 65°, XPOL, Panel Antenna, Fixed Tilt, 590 mm



ARRAY LAYOUT	ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE	
	R 1	698-960	1-2	7/16-DIN Female Long Neck	
	<mark>_</mark> Y1	1695-2690	3-4	7/16-DIN Female Long Neck	

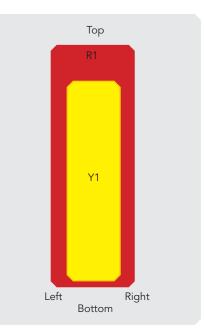


Diagram shown at right depicts the view from the front of the antenna. The illustration is not shown to scale.

MECHANICAL SPECIFICATIONS

	mm (in)	
Length		590 (23.2)
	mm (in)	360 (14.1)
Depth		160 (6.3)
	kg (lbs)	6.8 (15.0)
Mechanical Distance Between Mounting Points		Refer to Diagram
Calculation	km/h (mph)	150 (93.2)
Frontal	N (lbf)	239 (53.7)
Lateral	N (lbf)	109 (24.5)
Rearside	N (lbf)	234 (52.6)
Operational Wind Speed		160 (99.4)
Survival Wind Speed		200 (124)
Radome Color		Gray RAL7035
Radome Material		Outdoor Plastic
Lightning Protection		Direct Ground
Shipping Dimensions (Length x Width x Depth)		780 x 415 x 282 (30.7 x 16.3 x 11.1)
	Calculation Frontal Lateral Rearside	Image: market of the second

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ENVIRONMENTAL SPECIFICATIONS

Environmental Standard		ETS 300 019	
Operating Temperature	° C (° F)	-40° to +60° (-40° to 140°)	
Product Environmental Compliance		Product is RoHs Compliant	

ACCESSORIES All accessories are ordered separately unless otherwise indicated

ITEM	MODEL NUMBER	WEIGHT
Brackets for pole Ø48 to Ø115 mm (Ø1.9 to Ø4.5 in) <i>delivered as standard</i>	0900181/00	3.4 kg (7.5 lbs)
Kit to add mechanical tilt (0° to 10°) to above brackets optional	0900397/00	3.0 kg (6.6 lbs)

INSTALLATION Please read all installation notes before installing this product.



Always attach the antenna by all mounting points.

Do not install the antenna with the connectors facing upwards.

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