

High Broadband Antenna

65° 1.3 m FET Antenna

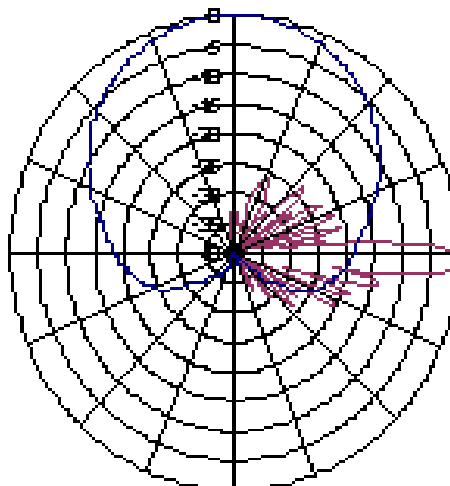
Part Number
7701.02

Horizontal Beamwidth: 65°
Gain: 18 dBi

Electrical Downtilt: 2°
Connector Type: 7/16 DIN

1710-2170 MHz

The Powerwave broadband antenna design is based on a patented stacked aperture-coupled patch technology, which provides high isolation performance and a wide VSWR bandwidth. The antennas have superior radiation patterns due to a unique reflector design that provides a very small variation of the -3dB horizontal beam width over the frequency band as well as a high front-to-back ratio. Powerwave broadband antennas come with manually adjustable electrical tilt (MET) for tuning flexibility of tilt angles. This design ensures the highest possible cross-polar discrimination value.



Typical Horizontal and Vertical 7701.02 Patterns

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technologies

High Broadband Antenna

1710-2170 MHz

Electrical Specifications

Frequency band (MHz)	1710-1880	1850-1990	1900-2025,2110-2170
Gain, ± 0.5 (dBi)	17.5	18	18.3
Polarization		Dual linear $\pm 45^\circ$	
Nominal Impedance (Ohms)		50	
VSWR		1.3:1	
Isolation betw een inputs (dB)		>30	
Horizontal -3 dB beamw idth	$67\pm 3^\circ$	$66\pm 2^\circ$	$64\pm 3^\circ$
Tracking,Horizontal plane, $\pm 60^\circ$ (dB)		<1.0	
Electrical dow ntilt		2°	
Vertical -3dB Beam w idth	$7.2\pm 0.4^\circ$	$6.7\pm 0.3^\circ$	$6.4\pm 0.5^\circ$
Sidelobe suppression, Vertical 1 st upper (dB)		>19	
Vertical beam squint		0.5°	
First null-fill (dB)		>-22 , typical >-18	
Front-to-back ratio (dB)		>30	
Front-to-back ratio, total pow er (dB)		>26	
Cross-polar discrimination (XPD) 0° (dB)	>17	>19	>20
Cross-polar discrimination $\pm 60^\circ$ (dB)	>17	>14	>11
IM3, 2Tx @43dBm (dBc)	<-153	<-150	
IM7, 2Tx @43dBm (dBc)			<-160
Pow er Handling, Average per input (W)		250	
Pow er Handling, Average total (W)		500	

All specifications are subject to change without notice.
Contact your Powerwave representative for complete performance data.

Mechanical Specifications

Connector Type	7/16 DIN female
Dimensions, HxWxD	1309x167x89.5mm (4'4"x7"x4")
Weight with Brackets	10.1 kg (22 lbs)
Wind Load, Frontal, 100 Mph Cd=1	310N (70 lbf)
Survival Wind Speed	70m/s (156 mph)
Lightning Protection	DC Grounded
Radome Material	ASA
Radome Color	Light Gray RAL 7035 on all visible plastic parts
Packing Size	1480x200x200mm (4'10"x8"x8")
Shipping Weight	11kg (24.2 lbs)

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