

# Low Broadband Antenna

65° 1.4 m x-polarized FET Antenna

Part Number: 7476.00	Horizontal Beamwidth: Gain: 15dBi / 12.9dBd	Electrical Downtilt: 0° Connector Type: 7/16 DIN female
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806-960 MHz

The Powerwave broadband dual polarized antenna is designed with a slant  $\pm 45^\circ$  configuration having equal signal strengths on both polarizations. The design ensures the highest possible diversity gain, isolation and cross polarization discrimination. Its slim design and sophisticated electrical performance, typical of Powerwave antennas, ensures maximum efficiency as well as stable pattern over the entire frequency range. This design relies on leading-edge patch technology fed via a micro strip PCB network. Special attention has been paid to ensure antenna pattern peak performance, making this an excellent choice for optimal cell planning. Choose the optional MET function that allows you to field-adjust the electrical tilt for optimum roll-off effect.



## Key Benefits

- Excellent broad- and multi-band capabilities
- Polarization purity maximizes diversity gain
- Excellent pattern performance and high gain over frequency
- Guaranteed passive intermodulation performance
- Light, slim and robust design

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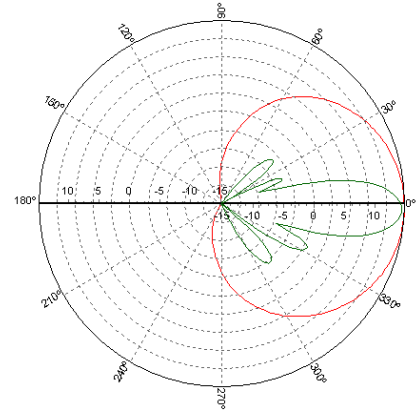
# Low Broadband Antenna

806-960 MHz

## Electrical Specifications

Frequency band (MHz)	806-896	880-960
Gain, $\pm 0.5$ (dBi) / (dBd)	14.7/12.6	15.0/12.9
Polarization	Dual slant $\pm 45^\circ$	
Nominal Impedance (Ohm)	50	
VSWR	1.4:1	
Isolation between inputs, 824-960MHz (dB)	30	
Horizontal -3 dB beamwidth	66 $\pm$ 4 $^\circ$	64 $\pm$ 4 $^\circ$
Tracking, Horizontal plane, $\pm 60^\circ$ (dB)	<1.0	
Electrical downtilt	0 $^\circ$	
Vertical -3 dB beamwidth	14.9 $\pm$ 1 $^\circ$	13.8 $\pm$ 0.8 $^\circ$
Sidelobe suppression, Vertical 1 st upper (dB)	> 19	> 19
Vertical beam squint	1 $^\circ$	
First null-fill (dB)	< -25	< -25
Front-to-back ratio (dB)	>30	>30
Front-to-back ratio, total power (dB)	>25	>25
Cross-polar discrimination (XPD) $\pm 60^\circ$ (dB)	>12	>12
IM3, @2x43dBm (dBc)	<-150	
Power Handling, Average per input (W)	400	300
Power Handling, Average total (W)	800	600

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



Typical Horizontal and Vertical 7476.00 Patterns

## Mechanical Specifications

Connector Type	2 x 7/16 DIN female
Connector Position	Bottom
Dimensions, HxWxD	1300x280x125mm (4'3"x11"x5")
Weight with Brackets	14 kg (31 lbs)
Wind Load, Frontal, 42 m/s Cd=1	401 N (90 lbf)
Survival Wind Speed	70m/s (156 mph)
Lightning Protection	DC grounded
Radome Material	GRP
Radome Color	Light Gray
Mounting	Pre-mounted standard brackets
Packing Size	1490x355x200mm (4'11"x1'2"x8")
Shipping Weight	15 kg (33 lbs)

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