

Dual High Broadband Antenna

65° 1.3 m MET Antenna

1710-2170 MHz

Part Number:
7760.00

Horizontal Beamwidth: 65°
Gain: 18 dBi

Electrical Downtilt: Adjustable
Connector Type: 7/16 DIN

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.



Key Benefits

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

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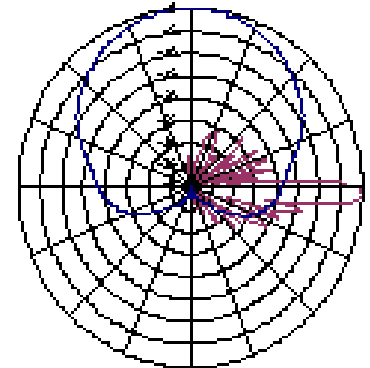
 **Powerwave**
technologies

Dual High Broadband Antenna

Electrical Specifications

Frequency Range (MHz)	2 x 1710 - 2170		
Frequency Band (MHz)	1710 – 1880	1850 – 1990	1900 – 2025, 2110 – 2170
Gain, ±0.5(dBi)	17.5	18	18.5
Polarization	Dual linear ±45°		
Nominal impedance (Ohm)	50		
VSWR, RX	< 1.4:1		
Isolation between inputs (dB)	> 30		
Horizontal -3 dB beamwidth	67° ± 4°	65° ± 4°	63° ± 4°
Horizontal tracking (dB)	< 2.0		
Cross-polar discrimination (XPD) 0° (dB)	> 16	> 18	> 20
Cross-polar discrimination ± 60° (dB)	> 16	> 13	> 10
Vertical -3 dB beamwidth	7.1 ± 0.4°	6.8 ± 0.4°	6.2 ± 0.6°
Electrical downtilt	0° to 8°		
Vertical beam squint	< 0.5°		
Front-to-back ratio, total power (dB)	> 28		
Front-to-back ratio, co-polar (dB)	> 28		
First upper sidelobe suppression (dB)	> 22, 20, 18, 16, 14 @ 0, 2, 4, 6, 8° edt		
First null below horizon (dB)	> -24 (typical >-18)		
Power Handling, Average Per Input (W)	250		
Power Handling, Average Total (W)	1000		
IM, 3rd order, 2Tx@43dBm (dBc)	< -153		
IM, 7th order, 2Tx@43dBm (dBc)	< -160		

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



Typical Horizontal and Vertical
7760.00 Patterns

Mechanical Specifications

Connector Type	4x 7/16 DIN female
Connector Position	Bottom
Dimensions, HxWxD	1320x343x100mm (4'4"x1'2"x4")
Wind load, frontal, 42 m/s Cd=1 (N)	499 N (112 lbf)
Wind Deflection 78 mph	< 1°
Survival Wind Speed	70m/s (156 mph)
Lightning Protection	DC grounded
Radome Material	ASA
Radome Color	Light Gray
Packing Size	1480x400x200mm (4'10"x1'4"x8")
Shipping Weight	20 kg (44 lbs)

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