

Dual High Broadband Antenna

65° 2.0 m MET Antenna

1710-2170 MHz

Part Number:
7765.00

Horizontal Beamwidth: 65°
Gain: 19.5 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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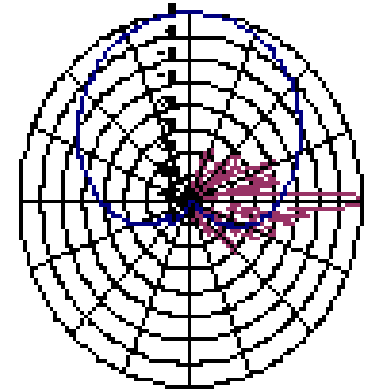
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Dual High Broadband Antenna

Electrical Specifications

Frequency Range (MHz)	2 x 1710 - 2170		
Frequency Band (MHz)	1710 – 1880	1850 – 1990	1900 – 2025, 2110 – 2170
Gain, ± 0.5 (dBi)	18.8	19.2	19.7
Polarization	Dual linear $\pm 45^\circ$		
Nominal impedance (Ohm)	50		
VSWR, RX	< 1.4:1		
Isolation between inputs (dB)	> 30		
Horizontal -3 dB beamwidth	$67^\circ \pm 4^\circ$	$65^\circ \pm 4^\circ$	$63^\circ \pm 4^\circ$
Horizontal tracking (dB)	< 2.0		
Cross-polar discrimination (XPD) 0° (dB)	> 18		
Cross-polar discrimination $\pm 60^\circ$ (dB)	> 10		
Vertical -3 dB beamwidth	$4.7 \pm 0.4^\circ$	$4.4 \pm 0.4^\circ$	$4.2 \pm 0.6^\circ$
Electrical downtilt	0° to 5.5°		
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, 15, 14 @ 0, 1, 2, 3, 4, 5° edt		
First null below horizon (dB)	> -22 (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
7765.00 Patterns

Mechanical Specifications

Connector Type	4x 7/16 DIN female
Connector Position	Bottom
Dimensions, HxWxD	1934x343x100mm (6'4"x1'2"x4")
Wind load, frontal, 42 m/s Cd=1 (N)	868 N (195 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	2105x400x200mm (6'11"x1'4"x8")
Shipping Weight	24 kg (55 lbs)

Corporate Headquarters
Powerwave Technologies, Inc.
1801 East St. Andrew Place
Santa Ana, CA 92705 USA
Tel: 714-466-1000
Fax: 714-466-5800
www.powerwave.com

Main European Office
Antennvägen 6
SE-187 80 Täby
Sweden
Tel: +46 8 540 822 00
Fax: +46 8 540 823 40

Main Asia Pacific Office
23 F Tai Yau Building
181 Johnston Road
Wanchai, Hong Kong
Tel: +852 2512 6123
Fax: +852 2575 4860



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