

Triple Band Antenna

65° 2.0 m MET Antenna

824-960/2x1710-2170 MHz

Part Number: 7782.00	Horizontal Beamwidth: 65° Gain: 16.5 / 16.8 dBi	Electrical Downtilt: Adjustable Connector Type: 7/16 DIN female
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The triple band solution from Powerwave offers a flexible antenna option for operators seeking excellent RF-performance as well as fast and successful roll-out of their next-generation networks. Designed to overcome UMTS deployment challenges, such as space and installation issues as well as those of co-siting in demanding radio environments, these antennas include the Powerwave patented Manually-adjustable Electrical Tilt (MET) function, which offers operators flexibility in tuning antenna systems as well as logistical advantages. The Powerwave Triband antenna design is based on a patented stacked aperture-coupled patch technology for cellular 800, GSM 900-, GSM1800, PCS 1900 and UMTS 2100 MHz-bands. Finally, the advanced reflector and element structure in combination with a superior feeding network minimizes the weight and maximizes the overall performance of the antenna.

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Mechanical Specifications

Connector Type (6 Pcs)	7/16 DIN female
Connector Position	Bottom
Dimensions, HxWxD	2033 x 280 x 125mm (7' 1"x 11"x 5")
Weight, Excluding Brackets	18kg (40lbs)
Brackets	3.5kg
Weight including Brackets	21.5kg (47 lbs with brackets)
Wind Load, Frontal, 150 km/h, Cd=1, (N)	628
Operating Wind Speed (M/s)	55 (123 mph)
Survival Wind Speed (M/s)	70 (156 mph)
Lightning Protection	DC-grounded
Weatherproofing	According to T1102
Radome Material	GRP
Radome Color	RAL 7035 on all visible plastic parts
Packing Size Hxwx d (Mm)	2175x355x255
Shipping Weight Including Bracket Kit Mounting	23.5kg (51 lbs)
	Pre-mounted standard brackets

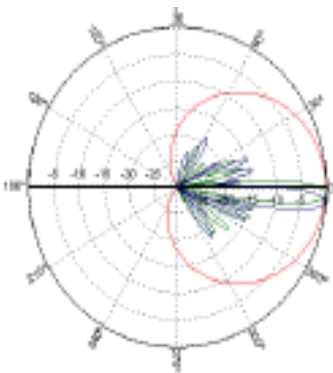
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Electrical Specifications

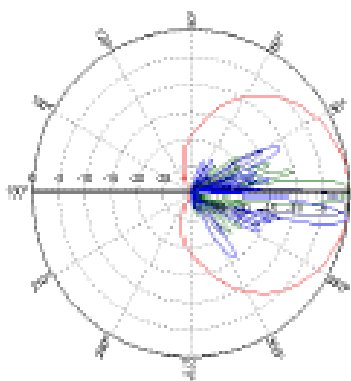
Frequency Band, MHz	824-960	1710-1880;1850-1990	1990-2025, 2110-2170
Gain ± 0.5dBi	16.5	16.5	16.8
Polarization	dual linear ±45°	dual linear ±45°	dual linear ±45°
Nominal impedance (Ohm)	50	50	50
VSWR, 824-960 MHz	1.5:1		
VSWR, 1710-1880 MHz		1.5:1	
VSWR, 1900-2025MHz			1.5:1
VSWR, 2110-2170MHz			1.5:1
Isolation between inputs (dB), 824-960 MHz	> 30		
Isolation between inputs (dB), 1710-1880 MHz		> 30	
Isolation between inputs (dB), 1900-2025 MHz			> 30
Isolation between inputs (dB), 2110-2170 MHz			> 30
Inter band isolation, all bands (dB)		> 34	
Horizontal -3dB beam width	67°	65°	64°
Tracking, Horizontal plane, 824-896 MHz, ±60°	< 1.0dB		
Tracking, Horizontal plane, 880-960 MHz, ±60°	< 1.0dB		
Tracking, Horizontal plane, 1710-1880 MHz, ±60°		< 1.5dB	
Tracking, Horizontal plane, 1900-2025 MHz, ±60°			< 1.5dB
Tracking, Horizontal plane, 2110-2170 MHz, ±60°			< 2.0dB
Electrical down tilt range (adjustable)	2° to 9°	0° to 10°	0° to 10°
Vertical Beam width -3dB MHz	9° ± 1°	10° ± 1°	9° ± 1°
Side lobe suppression, Vertical 1 st upper (dB)	>17, 13 @ 2,9° MET	>15, 13 @ 0,10° MET	> 18, 15 @ 0, 10° MET
Side lobe suppression, Vertical Upper (dB)	> 11	> 12	> 10
Vertical beam squint	< 0.8°	< 0.8°	< 0.8°
Front-to-back Ratio (dB)	> 30	> 30	> 30
Front-to-back Ratio, Total Power (dB)	> 27	> 27	> 27
Cross-polar discrimination (XPD) ±60° (dB)	> 11	> 10	> 10
IM3, 2Tx@43dBm (dBc)	< -153		
IM3, 2Tx@43dBm (dBc)		< -153	
IM7, 2Tx@43dBm (dBc)			< -160
Power Handling, Average per input (W)	300	250	250
Power Handling, Average total (W)	600	500	500

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

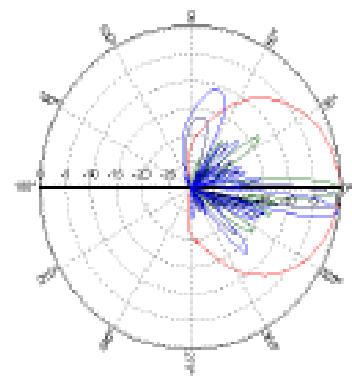
850MHz & 900MHz



1800MHz & 1900MHz



2100MHz



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