

# Dual Band ALXC Antenna

65° 2.0 m X-polarized FET Antenna

870-960/1710-1880 MHz

Part Number: 7331.06	Horizontal Beamwidth: 65° Gain: 16.5/16 dBi/14.4/13.9 dBd	Electrical Downtilt: 6° Connector Type: 7/16 DIN female
-------------------------	--	--

The Powerwave® ALXC is a dual-polarized dual band 900/1800 MHz antenna with outstanding performance characteristics. Its outer radome is made of glass-fiber reinforced polyester (GRP), while the inner RF-module utilizes sophisticated patch technology for covering the two frequencies. ALXC radiating elements are based on a patented dual band function that allowed designing an antenna matched for two or several frequency bands, with no need for diplex filters. This technique minimizes intermodular distortion, while generating less loss and ensuring higher gain, maximum efficiency, for each set of beamwidths. The ALXC is available in a number of variants, to provide the widest range of solutions for specific individual cell-planning strategies implemented by Powerwave clients. Research and field studies conducted in cooperation with system suppliers and operators establish the Powerwave dual band concept as an outstanding technique for enhancing system performance and cutting costs.



## Key Benefits

- High gain performance
- Light and slim design
- Robust and reliable
- Pre-mounted brackets
- Guaranteed passive intermodulation performance

ANTENNA  
SYSTEMS

BASE STATION  
SYSTEMS

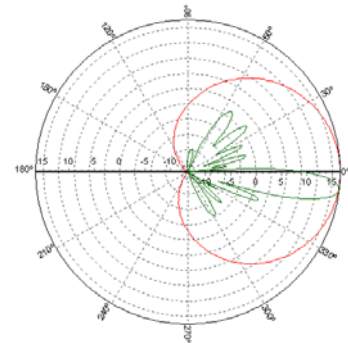
COVERAGE  
SYSTEMS

## Dual Band ALXC Antenna

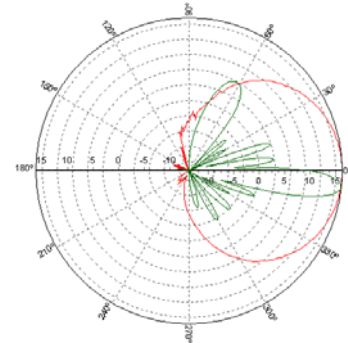
### Electrical Specifications

Frequency band (MHz)	870-960 / 1710-1880
Gain, ± 0.5 (dBi, dBd)	16.5/16 14.4/13.9
Polarization	Dual linear slanted
Nominal Impedance (Ohm)	50
VSWR	<1.5:1
Isolation between inputs(dB)	>30
Horizontal tracking (dB)	<2
Cross-polar discrimination (dB)	>11
Horizontal -3 dB beamwidth	65° +/-5
Electrical downtilt	6°
Vertical -3dB Beam width	9°/9°
Vertical beam squint	<0.5°
Sidelobe suppression, Vertical 1 st upper (dB)	>16
First null-fill (dB)	>-22/-22
Front-to-back ratio (dB)	>25
Front-to-back ratio, total power (dB)	>21
IM3, 2Tx@43dBm (dBc)	>-150
Power Handling, Average per input (W)	300
Power Handling, Average total (W)	600

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



Typical Horizontal and Vertical 7331.06 Patterns  
925 MHz



Typical Horizontal and Vertical 7331.06 Patterns  
1805 MHz

### Mechanical Specifications

Connector Type	7/16 DIN female
Dimensions, HxWxD	1990x280x125mm (6'6"x11"x5")
Weight with Brackets	13.5kg (30 lbs)
Wind Load, Frontal, 42 m/s Cd=1 (N)	610
Survival Wind Speed	70m/s (156 mph)
Lightning Protection	DC Grounded
Radome Material	GRP
Radome Color	Light gray RAL 7035 on all visible plastic parts
Packing Size	2160x355x255mm (7'1"x1'2"x10")
Shipping weight	16.5kg (36.4 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



©Copyright September 2003, Powerwave Technologies, Inc. All Rights reserved. Powerwave, Powerwave Technologies, The Power in Wireless and the Powerwave logo are registered trademarks of Powerwave Technologies, Inc.

COVERAGE AND CAPACITY

TECHNOLOGY LEADERSHIP

GLOBAL PARTNER

INTEGRATED SOLUTIONS

QUALITY AND RELIABILITY