Dual Band ALXC Antenna

65° 1.5 m X-polarized FET Antenna

870-960/1710-1880MHZ

Part Number: | Horizontal Beamwidth: 65° | Electrical Downtilt: 2°

7330.02 | Gain: 15.5/17.5 dBi /13.4/15.4 dBd | Connector Type: 7/16 DIN female

The Powerwave® ALXC is a dual-polarized dualband 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 dualband 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 dualband 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

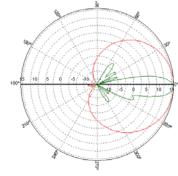
COVERAGE Systems



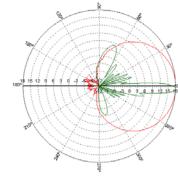
Dual Band ALXC Antenna

Electrical Specifications

870-960 / 1710-1880 Frequency band (MHz) Gain, ± 0.5 (dBi, dBd) 15.5/17.5, 13.4/15.4 Polarization Dual linear slanted Nominal Impedance (Ohm) **VSWR** <1.5:1 Isolation between inputs(dB) >30 <2 Horizontal tracking (dB) Cross-polar discrimination (dB) >11 Horizontal -3 dB beamwidth 65° +/-5 Electrical downtilt 2° Vertical -3dB Beam width 13/7° <0.5° Vertical beam squint Sidelobe suppression, Vertical 1 st upper (dB) >16 First null-fill (dB) >-20/-18 Front-to-back ratio (dB) >26 Front-to-back ratio, total power (dB) >22 IM3, 2Tx@43dBm (dBc) >-150 300 Power Handling, Average per input (W) Power Handling, Average total (W) 600



Typical Horizontal and Vertical 7330.02 Patterns 925 MHz



Typical Horizontal and Vertical 7330.02 Patterns 1805 MHz

Mechanical Specifications

All specifications are subject to change without notice.

Contact your Powerwave representative for complete performance data.

Connector Type 7/16 DIN female

Dimensions, HxWxD 1450x280x125mm (4'9"x11"x5")

Weight with Brackets 10.8kg (24 lbs)

Wind Load, Frontal, 42 m/s Cd=1 (N) 450

Survival Wind Speed 70m/s (156 mph)

Lightning Protection DC Grounded

Radome Material GF

Radome Color Light gray RAL 7035 on all visible plastic parts

Packing Size 1620x355x255mm (5'4"x1'2"x10")

Shipping weight 13.5kg (30 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