900/1800 MHz - ALXC Dualband Antenna

870-960 / 1710-1880 MHz - ALXC Dualband Antenna

900/1800 MHz

Part Number: 7330.00

Horizontal Beamwidth: 65°
Gain: 15.5 / 17.5 dBi

Electrical Downtilt: 0°
Connector Type: 7/16

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.

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ALXC Dualband Antenna

Key Benefits:

- Market Leading Performance
- Dual Polarization
- Slim Design
- Light Weight
- Reliable Lasting Service

ANTENNA SYSTEMS

BASE STATION SYSTEMS

COVERAGE SYSTEMS

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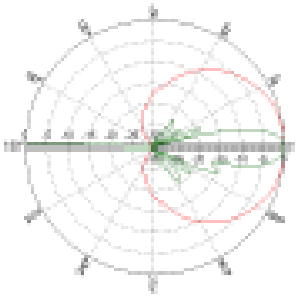
900/1800 MHz

Electrical Specifications

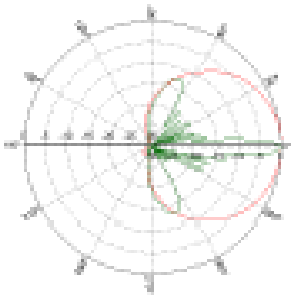
Frequency Range (MHz)	870-960 / 1710-1880
Polarization	Dual linear slanted
Gain, co-polar (dBi)	15.5 / 17.5
Nominal Impedance (Ohm)	50
VSWR, TX	<1.3:1
VSWR, RX	<1.5:1
Isolation between inputs (dB)	>30
Horizontal –3 dB beamwidth	65° +/-5
Horizontal tracking (dB)	<2
Cross-polar discrimination (dB)	>11
Vertical –3 dB beamwidth	13/7°
Electrical downtilt	0°
Vertical beam squint	<0.5°
Front-to-back ratio, total power (dB)	>22
Front-to-back ratio, co-polar (dB)	>26
First upper sidelobe suppression (dB)	>16
First Null below horizon (dB)	>-20/-18
Maximum input power, total (W)	600
Maximum input power, per input (W)	300
IM, 3rd order, 2 Tx@43dBm (dBc)	<-150
IM, 3rd order, 2 Tx@43dBm (dBc)	<-153

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

900 MHz



1800 MHz



Mechanical Specifications

Connector type	7/16
Connector position	Bottom
Dimensions, HxWxD	1450x280x125mm (4’9”x11”x5”)
Weight including bracket	10.8kg (24 lbs)
Wind load, frontal, 42 m/s Cd=1 (N)	450
Survival wind speed (m/s)	70
Lightning protection	DC grounded
Radome material	GRP
Radome color	Light gray*
Packing size	1620x355x255mm (5’4”x1’2”x10”)
Shipping weight	13.5kg (30 lbs)

Comments

Gain is typical within frequency band.
Beamwidths are defined using total power.
Horizontal tracking is defined within +/-60° from boresight.
Cross-polar discrimination is defined within –3dB beamwidth.
Front-to-back ratio is defined within 20° from the backwards direction in any plane.
Sidelobe suppression and null fill is relative to peak of main beam.
Packing size is for antenna only (brackets excluded)
*Radome color is NCS 2502-B (RAL 7035).
Shipping weight including tilt brackets. Antenna is delivered with brackets premounted
Radiation patterns are typical for the antenna.
*Values are representative for 0 degree EDT, variants may differ slightly.

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Powerwave technologies

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PN7330.00