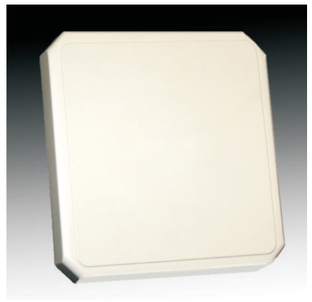
Installing the ExtremeWireless ML-2452-PNL9M3-N36 Antenna Accessory

Overview of the ML-2452-PNL9M3-N36 Antenna

The ML-2452-PNL9M3-N36 is a dual-band, narrow beam width, directional sector antenna for use in 80-2.11n MIMO applications. Enclosed in a compact, low-profile radome, the antenna is mounted to a rugged articulating mount. The mount can be affixed to a mast or anchored directly to a vertical surface. Each of the three MIMO antenna elements are connected to the WLAN Access Point via low loss, plenum-rated, coax pigtails. The radiation patterns are uniform and symmetrical, providing high-level signal density into defined coverage zones. This antenna will greatly enhance the performance of 802.1 1n systems. The dual-band frequency coverage means that single type of antenna can be deployed with any MIMO radio in the 2.4-2.5 GHz and 5.1-5.9 GHz bands.



Note: Please read all instructions carefully before attempting to install and use this product.

Safety

The ML-2452-PNL9M3-N36 and all associated equipment should be installed in accordance with applicable local and national electrical code guidelines to ensure safe operation.

Location

For best results, mount the ML-2452-PNL9M3-N36 facing toward the center of the coverage area. A line-of-sight path between the antenna and active locations floor works best. Avoid mounting next to a column or vertical support that could create a shadow zone and reduce coverage to only one portion of the room.

Installation

The ML-2452-PNL9M3-N36 is shipped with a heavy duty articulating mount* that allows mounting to a mast, or optionally, to a vertical surface utlizing wall anchors/molys.

Lightening Arrester (Optional)

In external applications, it is recommended that you also install three lightning arresters, one for each port of the antenna. Lightning arresters are not included with the antenna and must be purchased separately.

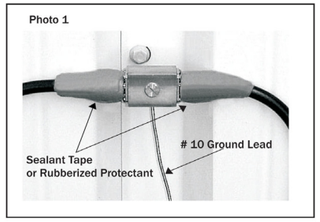
For best results, install the lightning arrester in close proximity to a low-resistance ground at a point where the coaxial cable enters the building (see Photo 1). In most cases, one 8-foot rod driven into moist soil, or multiple rods bonded together, will provide adequate grounding (see National Electrical Code guidelines).

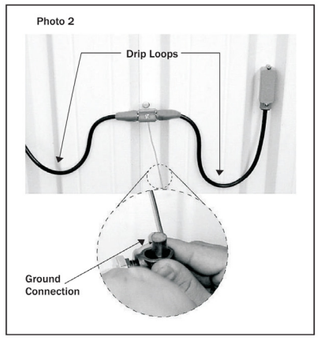
To connect the lightning arrester to ground, use a very short and direct run of #10 solid copper wire (or equivalent).

For exterior installations, use weatherproof coax connectors with a suitable mastic or rubberized tape to prevent water incursion. (see Photo 1).

Be sure to install the lightning arrester in an accessible location that permits periodic inspection and replacement (as needed).

Provide drip loops in cables to prevent water from entering the building (see Photo 2).



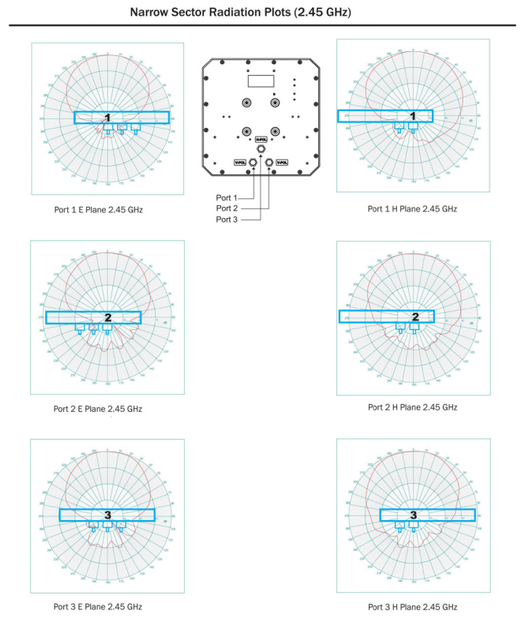


Specifications

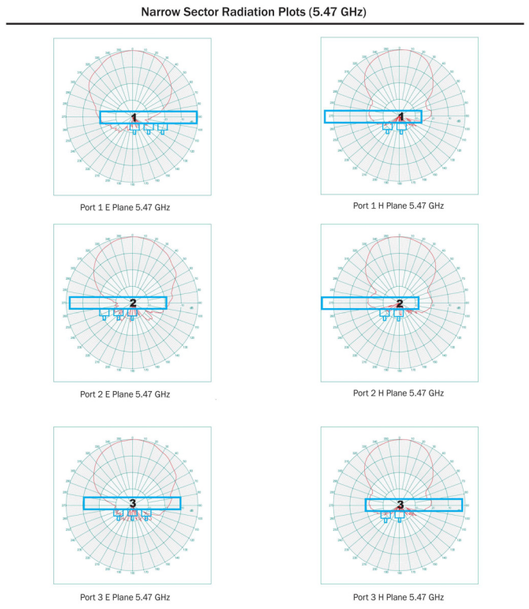
Table 1 ML-2452-PNL9M3-N36 Specifications

Model	ML-2452-PNL9M3-N36
Frequency (MHz)	2400-2500, 4900-5000, and 5150-5875
Gain	8.0 dBi @ 2450 MHz 10.7 dBi @ 5500 MHz
Maximum VSWR:	2.0:1
3 dB Beam Width Azimuth	75° @ 2.45 GHz/55° @ 5.5 GHz
3 dB Beam Width Elevation	70° @ 2.45 GHz/60° @ 5.5 GHz
Polarization	Linear, 2 Vertical, 1 Horizontal
Maximum Input Power	1 Watt
Cable Length in. (mm)	36" (914mm) Plenum rate
Dimensions	10.2 x 10.2 x 1.3 inches (259.1 x 259.1 x 33.5 mm)
Weight	1.8 kg
Radome	Polycarbonate
Mount Style	Articulating for Mast/Wall

Narrow Sector Radiation Plots (2.45 GHz)



Narrow Sector Radiation Plots (5.47 GHz)



ExtremeWireless™ Accessory

Quick Reference

ML-2452-PNL9M3-N36 Antenna

Documentation, Installation Videos, & Support

For product support, including Documentation and Installation Videos, visit:
www.extremenetworks.com/documentation

P/N 9035987

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