

Wireless Antenna and Access Point Mounting

Options Overview

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Abstract

This paper details different antenna mounting options which are available for Directional and Omni directional antennas. The paper describes common installation options for antennas and wireless access points.

NEMA Enclosure Mounting:

For mounting an antenna to a NEMA enclosure, a typical configuration includes running a pigtail cable from the access point or radio to a bulkhead N-female adapter or coax lightning protector. Outside of the enclosure directly attach the antenna to the adapter or lightning protector. (This mounting scenario utilizes HGV series or outdoor rated rubber duck style antennas)



For remote mounting of antennas, cables can be connected to the bulkhead adapters on the NEMA enclosure then directly to the antenna or to a surge protector attached to the antenna.

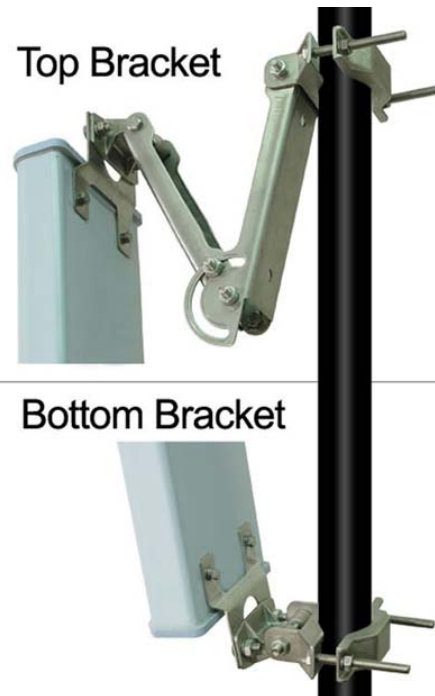


Pole Mounting:

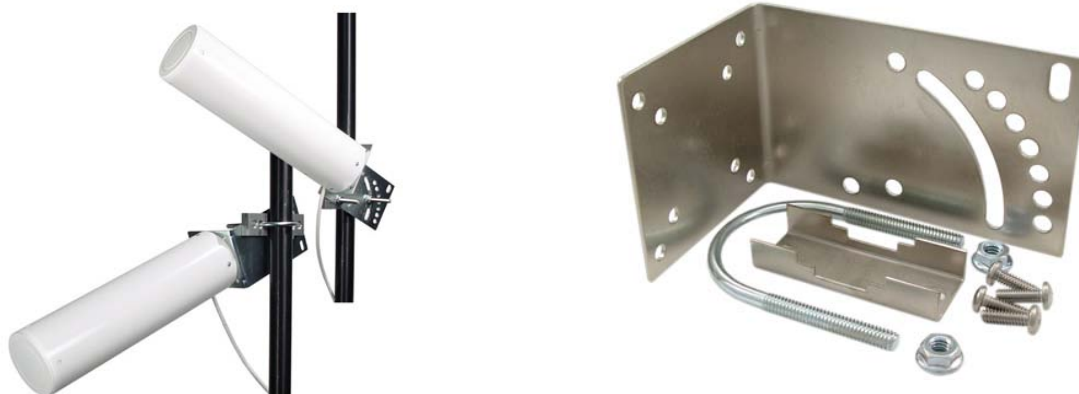
Most of L-com's HyperLink® brand Omni directional antennas include a rugged clamp style mounting bracket which is ideal for pole mounting.



L-com's sector style antennas include upper and lower articulated clamp mounts for pole mounting.

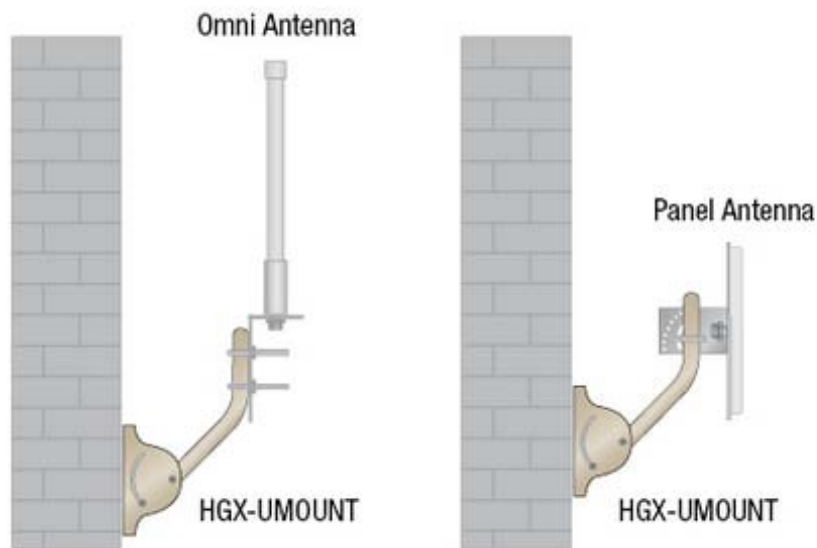


Yagi and Patch Style antennas utilize a tilt and swivel clamp mounting system. These mounting clamps are standard on all of L-com's Yagi antennas and are included with most of our patch style antennas.

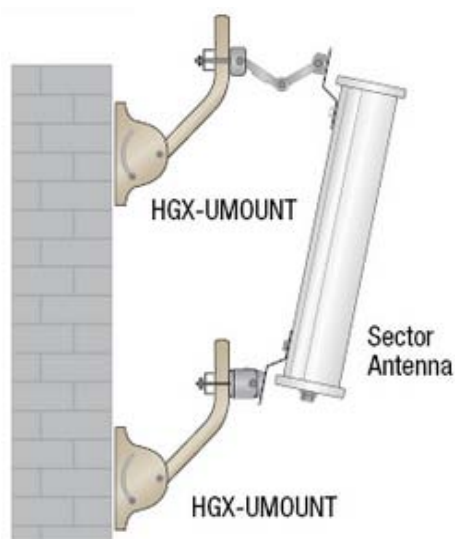


Side of Building Mounting:

The HGX-UMOUNT can be used to mount antennas to the side of building, roof parapet or even under the roof eaves of a building. The HGX-UMOUNT will work with our Omni, Panel/Patch and Yagi style antennas.



L-com's Sector antennas can either be mounted to a pole, as mentioned previously, or to the side of a building or structure using two of the HGX-UMOUNT mounting brackets.



Mobile Mounting:

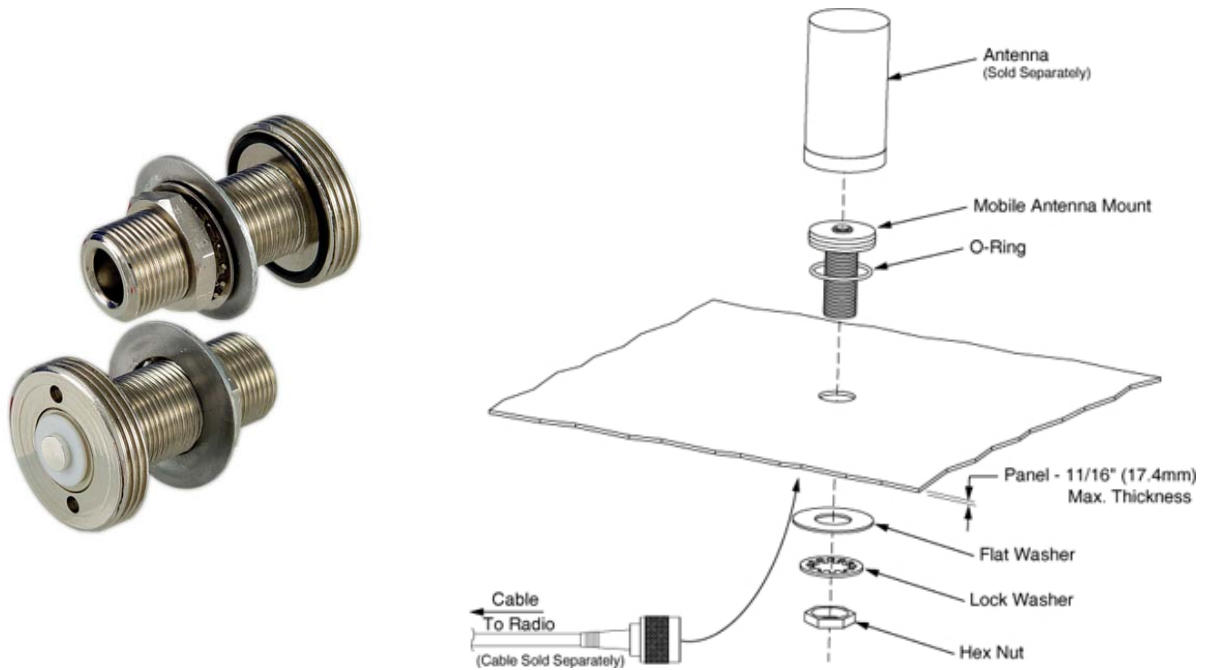
L-com offers several options for mobile mounting an antenna. The first option involves using an HMA3 Series magnetic mount with either an HGV series or outdoor rated Rubber duck antenna such as the HG2408UR-NM or HG2458-7RDR-NM.



Another mobile mounting option uses the NMO style HMA1 series magnetic mount along with an antenna such as a HG2403UR-NMOW.



One other option is to use a NMO bulkhead style mount such as the AXA-AMNFB. This mounting option would require a hole drilled through the vehicle body, an N Male connecting cable to the appropriate radio connector and an NMO antenna.

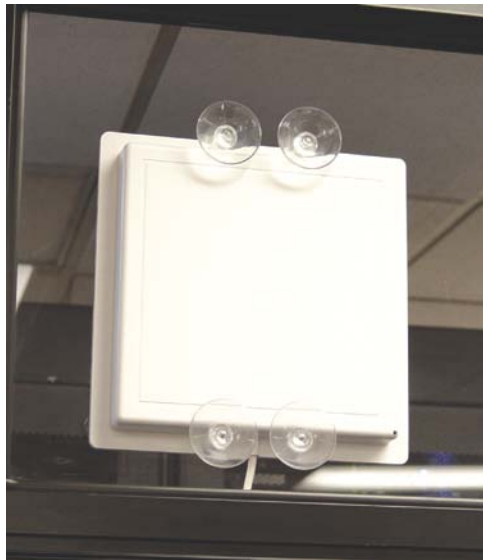


Additionally a CA-AM1RSPA010 mounting cable could be used in a mobile mounting application. These NMO cable mounts are available with multiple connector types on the other end of the assembly to accommodate any antenna interface.



Window Mounting:

For window mounting of Patch antennas we recommend the HGX-PMT08 suction cup mounting kit.

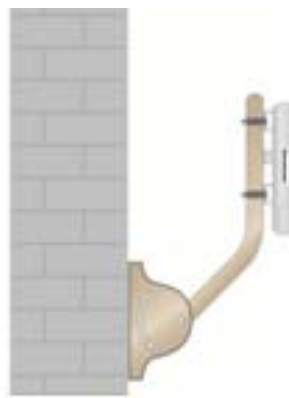


Outdoor Access Point Mounting:

L-com's WLAN-LCCPE28-1 and WLAN-LCCPE516-1 access points can either be pole mounted or wall mounted using the HGX-UMOUNT mounting bracket. Engenius and Ubiquiti outdoor access points can also be mounted the same way.

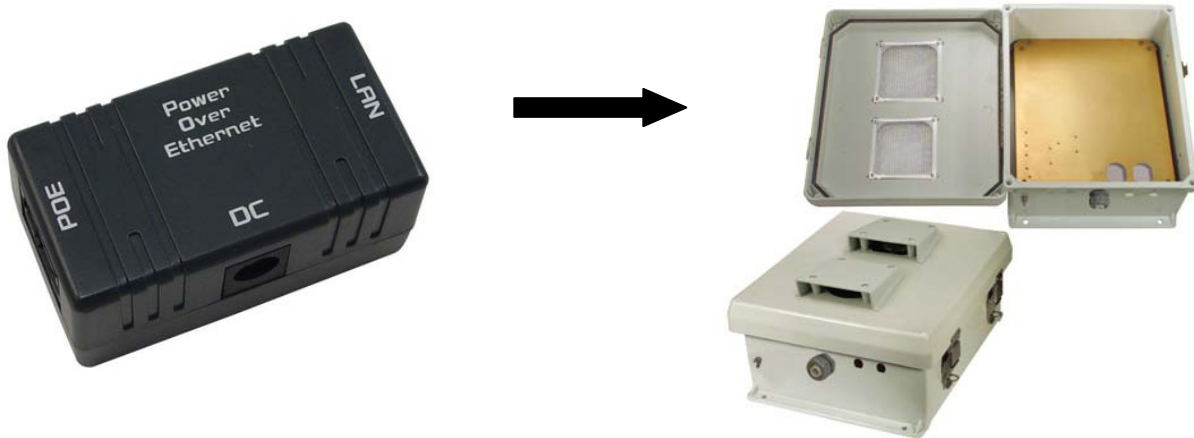


Pole Mounting



Wall Mounting

PoE injectors used with any outdoor access point need to be mounted in a dry location such as inside a shelter or building, or outside in a weatherproof NEMA enclosure.



L-com, a global leader in the manufacture of wired and wireless connectivity products, offers a wide range of solutions and unmatched customer service for the electronics and data communications industries. The company's product portfolio includes cable assemblies, connectors, adapters, computer networking components, and custom products, as well as their Hyperlink line of wireless products which include Antennas, RF Amplifiers, Coaxial lightning and surge protectors, and NEMA rated enclosures.

L-com's HyperLink wireless products are designed for WiFi, WiMAX, SCADA, 802.11a/b/g/n, RFID and Bluetooth applications. Trusted for over 30 years, L-com, which is headquartered in North Andover, MA, is ISO 9001: 2008 certified and many of its products are UL® recognized. www.l-com.com

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