



Laird's Phantom® UHF antenna outperforms conventional mobile antennas in many indoor and outdoor applications. Measuring only 86.4 mm (3.4 in.) tall, the Phantom UHF antenna's revolutionary design features vertical polarization components. The Phantom provides low visibility, wide bandwidth and a low angle radiation pattern that is superior to traditional gain antennas in most applications.

The industry standard NMO mounting socket mates with all Laird magnetic, trunk lid, and hole mounts. A threaded permanent stud mount model is also available for vandal resistant mounting on brackets, panels, ceilings or any other kind of housing. The Phantom® patented technology is beneficial when high performance is desired and extreme ruggedness and low profile is required.

### FEATURES AND BENEFITS

- Phantom® outperforms a 3dB whip in many applications
- U.S. Patent Nos. 5,977,931 – 6,292,156 and 7,209,096

#### ELECTRICAL SPECIFICATIONS

Operating Frequency (MHz)	300-305	380-400	406-425	410-430	430-450	450-470	470-490	490-512
Gain (dBi)	3							
VSWR*	<1.5:1 @ 10 MHz, <2.0:1 @ 20 MHz							
Nominal Impedance (Ohms)	50							
Max Power - Ambient 25°C (W)	100							
Radiation Pattern	Omnidirectional							
Polarization	Vertical							

\*Measured on a 0.61 m x 0.61 m (2 ft x 2 ft) ground plane

#### MECHANICAL SPECIFICATIONS

Dimensions – diameter x height – mm (inches)	36.53 x 82.55 (1.438 x 3.25)
Weight – kg (lbs.)	.095 x (.21)
Cable Type	None
Radome Material	SABIC Lexan
Connector Type	NMO/ P-Mount option available

#### ENVIRONMENTAL SPECIFICATIONS

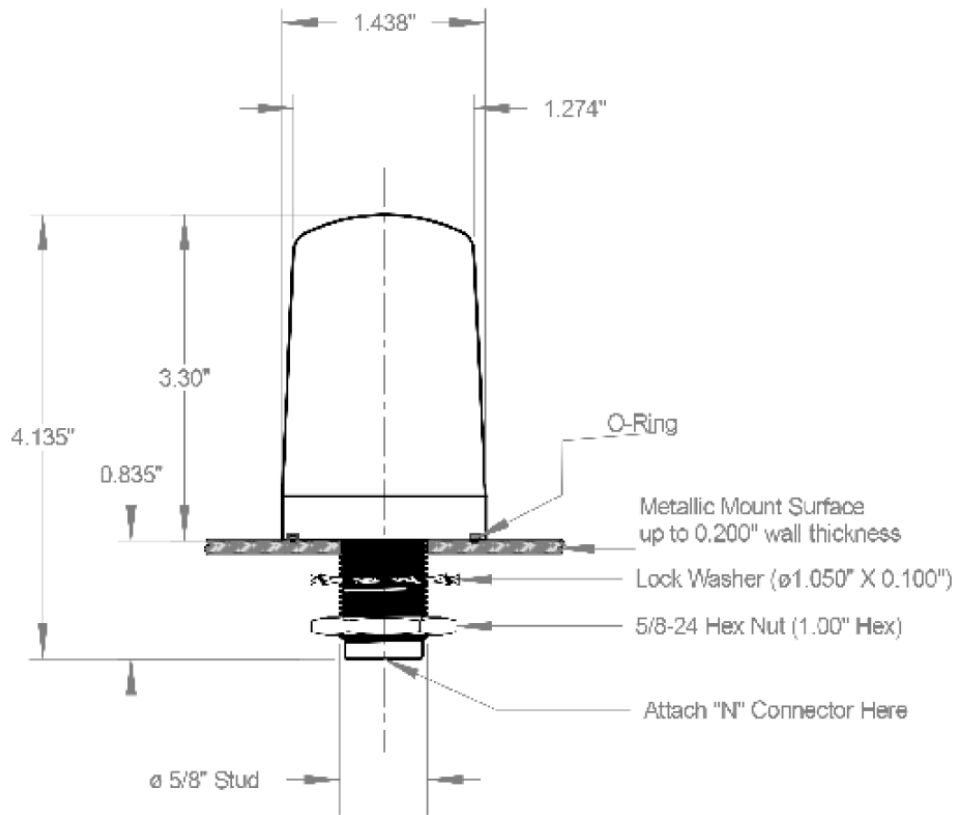
Operating Environment (Indoor or Outdoor)	Indoor and Outdoor
Wind Survival – km/hr (mph)	210 (125)
Material Substance Compliance	RoHS
Ingress Protection	IP67

#### CONFIGURATION

**Note:** To replace NMO mount with a permanent mount, add "P" to the end of any part number. (e.g. TRA3003P).

PART NUMBER	DESCRIPTION	RADOME COLOR	CONNECTOR
TRA3003	300-305 MHz 3 dBi Phantom®	White	¾ NMO Mount
TRAB3003	300-305 MHz 3 dBi Phantom®	Black	¾ NMO Mount
TRA3803	380-400 MHz 3 dBi Phantom®	White	¾ NMO Mount
TRAB3803	380-400 MHz 3 dBi Phantom®	Black	¾ NMO Mount
TRA4063	406-425 MHz 3 dBi Phantom®	White	¾ NMO Mount
TRAB4063	406-425 MHz 3 dBi Phantom®	Black	¾ NMO Mount
TRA4103	410-430 MHz 3 dBi Phantom®	White	¾ NMO Mount
TRAB4103	410-430 MHz 3 dBi Phantom®	Black	¾ NMO Mount
TRA4303	430-450 MHz 3 dBi Phantom®	White	¾ NMO Mount
TRAB4303	430-450 MHz 3 dBi Phantom®	Black	¾ NMO Mount
TRA4503	450-470 MHz 3 dBi Phantom®	White	¾ NMO Mount
TRAB4503	450-470 MHz 3 dBi Phantom®	Black	¾ NMO Mount
TRA4703	470-490 MHz 3 dBi Phantom®	White	¾ NMO Mount
TRAB4703	470-490 MHz 3 dBi Phantom®	Black	¾ NMO Mount
TRA4903	490-512 MHz 3 dBi Phantom®	White	¾ NMO Mount
TRAB4903	490-512 MHz 3 dBi Phantom®	Black	¾ NMO Mount
Sealtube3	Heat Shrink 3"x1" DIA Elite Install (jaw protector on installation bench)	N/A	N/A

MECHANICAL DRAWING



**✓RoHS**

Laird warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations Laird will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the Laird product is installed. Useful lifetime of the original end product may vary but is not to exceed five (5) years from the original date of the end product purchase.

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