





# **Phantom<sup>®</sup> UHF Series**

Rugged Indoor and Outdoor Mobile Antennas 300-305 MHz/380-400 MHz/406-425 MHz/410-430 MHz/430-450 MHz/450-470 MHz/470-490 MHz/490-512 MHz

Laird's Phantom<sup>®</sup> 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<sup>®</sup> patented technology is beneficial when high performance is desired and extreme ruggedness and low profile is required.

# **FEATURES AND BENEFITS**

- Phantom<sup>®</sup> 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	

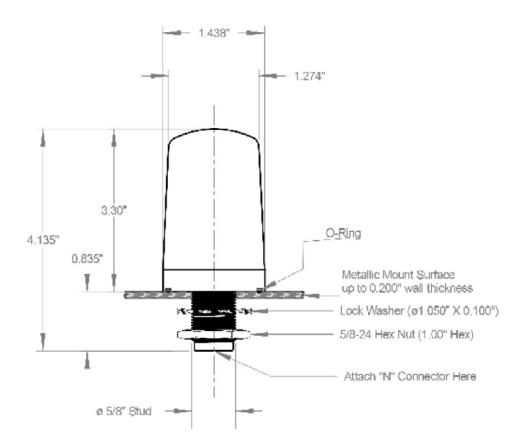
ENVIRONMENTAL SPECIFICATIONS			
Operating Environment (Indoor or Outdoor)	Indoor and Outdoor		
Wind Survival - km/hr (mph)	210 (125)		
Material Substance Compliance	RoHS		
Ingress Protection	IP67		

## **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	<sup>3</sup> ⁄ <sub>4</sub> 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**



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DATA AND DEVICES / PHANTOM® UHF SERIES