



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## PHANTOM<sup>®</sup> UHF ANTENNA OUTPERFORMS CONVENTIONAL MOBILE ANTENNAS IN MANY APPLICATIONS

Laird's unique patented Phantom<sup>®</sup> is a tough antenna for outdoor or indoor applications. Measuring only 3.4" tall, the Phantom UHF antenna's revolutionary design features vertical polarization components. The Phantom<sup>®</sup> 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

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

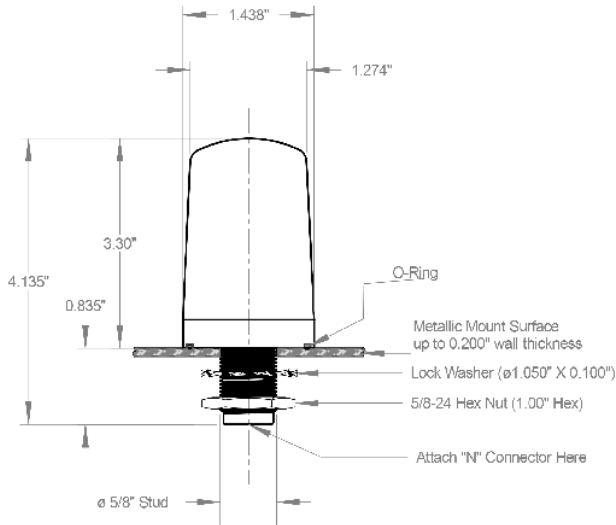
### MARKETS

- Public safety
- Transportation
- Utility
- Military mobile
- Fixed radio applications

## SPECIFICATIONS

ELECTRICAL	
VSWR (Measured on 2' x 2' GP)	< 1.5:1 @ 10 MHz < 2.0:1 @ 20 MHz
Peak Gain	3 dBi
Maximum Power	100 W
Nominal Impedance	50 Ω
Polarization	Vertical
Pattern	Omnidirectional
Half-Power Beamwidth (Elevation° x Azimuth°)	146° x 360°
Coaxial Cable Length & Type	None
Terminations	NMO
Noise Suppressor	BlackHawk NS1535 1-35 VOLT, 15 Amp Noise Suppressor (Sold Separately)

## FORM FACTOR DRAWING



## SPECIFICATIONS

MECHANICAL	
Height (initially)	3½" *
Diameter	1.438"
Weight	0.21 lbs.
Rated Wind Velocity	125mph (210 kph)
Rated Wind Velocity (with 0.5" radial ice)	85mph (137 kph)
Lateral Thrust @ 125mph Wind Velocity	57 lbs. (26kg)
Wind Resistance in Sq. Feet	0.0356 Sq. ft.
Material	ABS
Mounting Information	NMO or Permanent Mountable

\* Add .835" for Permanent Mount option

### Permanent Mounting Option:

Please order by antenna model and insert letter "P" to indicate permanent mounting option (TRA4503P).

## MODEL AND ORDERING INFORMATION

MODEL	DESCRIPTION
TRA3003	300-305 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, White Radome
TRAB3003	300-305 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, Black Radome
TRA3803	380-400 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, White Radome
TRAB3803	380-400 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, Black Radome
TRA4063	406-425 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, White Radome
TRAB4063	406-425 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, Black Radome
TRA4103	410-430 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, White Radome
TRAB4103	410-430 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, Black Radome
TRA4303	430-450 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, White Radome
TRAB4303	430-450 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, Black Radome
TRA4503	450-470 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, White Radome
TRAB4503	450-470 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, Black Radome
TRA4703	470-490 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, White Radome
TRAB4703	470-490 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, Black Radome
TRA4903	490-512 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, White Radome
TRAB4903	490-512 MHz 3 dBi Phantom <sup>®</sup> ¾ NMO, Black Radome
Sealtube3	Heat shrink tubing 3"x1" DIA Elite install (use for jaw protector on installation wrench)

### ANT-DS-PHANTOM UHF 0615

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