



PATENTED WHIPLESS PHANTOM® UHF ANTENNA'S FEATURE TRUE FIELD DIVERSITY DESIGN

Laird Technologies' unique patented Phantom® is a tough antenna for outdoor or indoor applications. Measuring only 3.5" tall, the Phantom® UHF antenna's revolutionary design features field diversity with both vertical and horizontal polarization components. This gives the antenna diversity, frequency agility, 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 Technologies' 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.

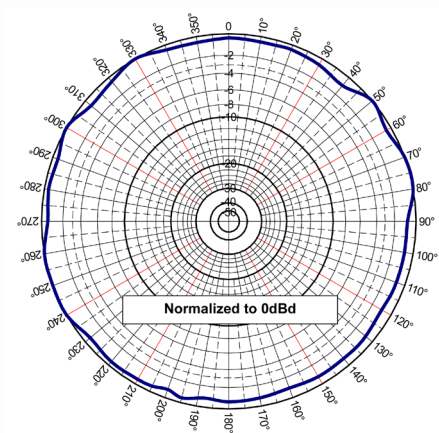
FEATURES

- The antenna is available in both custom tune and field tunable options
- True field diversity design ensures uninterrupted transmissions in urban canyons and rural drop off areas
- Phantom out performs a 3 dB 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

ANTENNA PATTERNS



Azimuthal Pattern (Y, Z, or E-plane)

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SPECIFICATIONS

| ELECTRICAL | |
|--------------------------|--|
| Frequency Range | 210-225 MHz |
| Frequency Bandwidth | 2.2 MHz @VSWR < 2.0:1 |
| VSWR | < 2.0:1 |
| Return Loss | -10 dB min |
| Nominal Gain | Unity 3 dB-MEG (elevation = 0°) 5 dBi (elevation = 45°) -11 dBi (elevation = 90°) |
| Maximum Power | 60W |
| Nominal Impedance | 50Ω |
| Polarization | Vertically polarized |
| Pattern | Omnidirectional |
| Azimuthal Angle Coverage | 360° |
| Lightning Protection | AC Ground |
| Cable | None |
| Termination | NMO |
| Tuning | Adhesive Tuning Disk |

| MECHANICAL | |
|------------|---------------------------------------|
| Size | Width = 3 – 1/4" Height = 3 – 1/2" |
| Weight | 0.25 lbs |
| Finish | GE X-17 ABS |
| Color | White (Black also available) |

MODEL AND ORDERING INFORMATION

| MODEL | DESCRIPTION | TUNING OPTIONS |
|-----------|--------------------------------------|----------------|
| TRA2100 | 210-225 MHz VHF Phantom ¾ NMO, White | Custom tune |
| TRAB2100 | 210-225 MHz VHF Phantom ¾ NMO, Black | Custom tune |
| TRAT2100 | 210-225 MHz VHF Phantom ¾ NMO, White | Field tunable |
| TRABT2100 | 210-225 MHz VHF Phantom ¾ NMO, Black | Field tunable |

Mounting Designed To:

4' x 4' metallic ground plane mobile applications

ANT-DS-TRABT2100-0710

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