



**PHANTOM® ANTENNA IS IDEAL FOR CELL, GSM, PCE, WIFI, 802.11 AND BLUETOOTH WIRELESS APPLICATIONS**

Laird Technologies' unique patented Phantom® is a tough low-profile antenna for outdoor or indoor applications. Measuring only 2.7" tall, the Phantom 800 MHz to 5.8 GHz antenna models' 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.

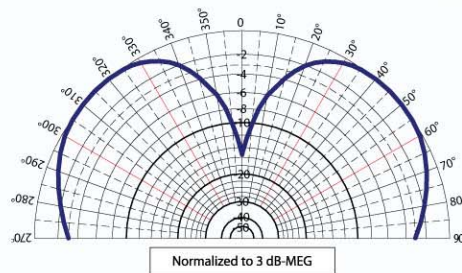
**FEATURES** 

- True Field Diversity design ensures uninterrupted transmissions in urban canyons and rural drop off areas
- Phantom® outperforms a 3dB whip in many applications
- U.S. Patent Nos. 5,977,931 – 6,292,156 and 7,209,096

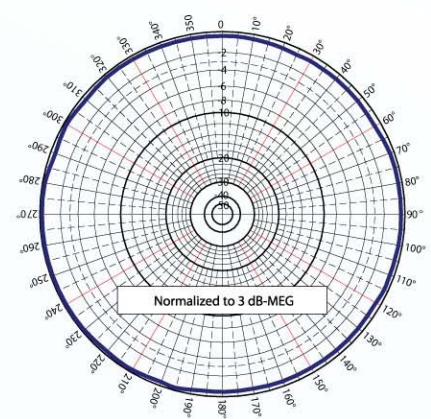
**MARKETS**

- Cell
- GSM and PCS
- WiFi
- 802.11
- Bluetooth wireless applications

**ANTENNA PATTERNS**



Elevation Pattern (Y, Z, or H-plane)



Azimuth Pattern (X,Y, or E-plane)

global solutions: local support™

## SPECIFICATIONS

ELECTRICAL	
VSWR	< 2.1
Nominal Gain	3 dB-M.E.G.
Maximum Power	100 W
Nominal Impedance	50 Ω
Polarization	Vertical & Horizontal
Pattern	Omnidirectional
Half-Power Beamwidth (Elevation° x Azimuth°)	130° x 360°
Coaxial Cable Length & Type	None
Terminations	NMO Socket or, type N-female

MECHANICAL	
Color	Black or White
Height (initially)	2¾"
Diameter	1.438"
Weight	0.173 lb
Material	ABS
Mounting Information	NMO (PN: MB8, MAB8) Sold Separately
Noise Suppressor	BlackHawk NS1535 1-35 VOLT, 15 Amp Noise Suppressor (Sold Separately)

### Permanent Mounting Option:

Please order by antenna model and insert letter "P" to indicate permanent mounting option (TRA8063P).

## MODEL AND ORDERING INFORMATION

MODEL	DESCRIPTION
TRA8063	806-870 MHz 3 dB-MEG Phantom® ¾ NMO, White Radome
TRA8213	821-896 MHz 3 dB-MEG Phantom® ¾ NMO, White Radome
TRA8903	890-960 MHz 3 dB-MEG Phantom® ¾ NMO, White Radome
TRA9023	902-928 MHz 3 dB-MEG Phantom® ¾ NMO, White Radome
TRA18503	1.85 - 1.99 GHz 3dB-MEG Phantom® ¾ NMO, White Radome
TRA24003	2.4 – 2.5 GHz 3 dB-MEG Phantom® ¾ NMO, White Radome
TRA58003	4.9 – 6.0 GHz 3 dB-MEG Phantom® ¾ NMO, White Radome
TRADCAGP	G - Drop ceiling antenna adaptor for P-mount Phantom w/ 6"x6"x0.016" ground plane
Sealtube3	Heat shrink tubing 3"x1"DIA install (use for jaw protector on installation wrench)

Add "B" to model number for black radome. Example: TRAB8063

Add "P" to model number for Permanent Mount. Example: TRA8063P