



## PHANTOM® 800 MHz-5.8 GHz Antennas

Laird's unique patented Phantom® antenna is ideal for cell, GSM, PCE, WIFI, 802.11 and Bluetooth wireless applications. Measuring only 2.7" tall, the Phantom 800 MHz to 5.8 GHz antenna models' revolutionary design features a robust IP67 rated mechanical solution with frequency agility, low visibility, wide bandwidth and a low angle radiation pattern that is superior to traditional gain antennas in most applications, both outdoor and indoor. 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 AND BENEFITS

- A low profile mechanically robust high- power solution.
- Outperforms a 3-dB whip in many applications
- U.S. Patent Nos. 5,977,931 – 6,292,156 and 7,209,096

#### ELECTRICAL SPECIFICATIONS

Operating Frequency (MHz)	806-870/821-896/890-960/902-928/1850-1990/2400-2500/4900-6000
VSWR	< 2.1
Gain (dBi)	3
Max Power - Ambient 25°C (W)	100
Nominal Impedance (Ohms)	50
Polarization	Vertical
Pattern	Omnidirectional
Half-Power Beamwidth (Elevation° x Azimuth°)	130 x 360

## MECHANICAL SPECIFICATIONS

Dimensions - diameter x height - mm (inches)	36.52 x 69.85 (1.438 x 2.75)
Weight - kg (lbs.)	0.078 (0.173)
Material	SABIC Lexan
Color	Black or White
Mounting Information	NMO (PN: MB8, MAB8) - Sold separately
Noise Suppressor	BlackHawk NS1535
1-35 VOLT, 15 Amp - Sold separately	1-35 VOLT, 15 Amp - Sold separately
Operating Temperature - °C (°F)	-40 to +85°C (-40 to +185°F)

## CONFIGURATION

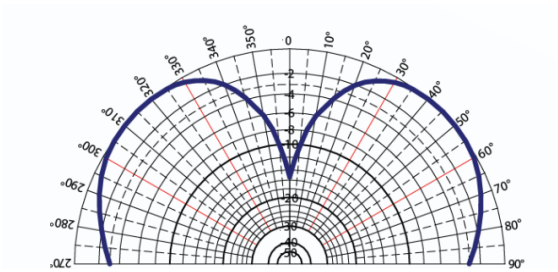
PART NUMBER	DESCRIPTION
TRA8063	806-870 MHz 3 dBi Phantom® ¾ NMO, White Radome
TRA8213	821-896 MHz 3 dBi Phantom® ¾ NMO, White Radome
TRA8903	890-960 MHz 3 dBi Phantom® ¾ NMO, White Radome
TRA9023	902-928 MHz 3 dBi Phantom® ¾ NMO, White Radome
TRA18503	1.85 - 1.99 GHz 3 dBi Phantom® ¾ NMO, White Radome
TRA24003	2.4 - 2.5 GHz 3 dBi Phantom® ¾ NMO, White Radome
TRA58003	4.9 - 6.0 GHz 3 dBi 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 in. x 1 in. DIA install (use for jaw protector on installation wrench)

Note:

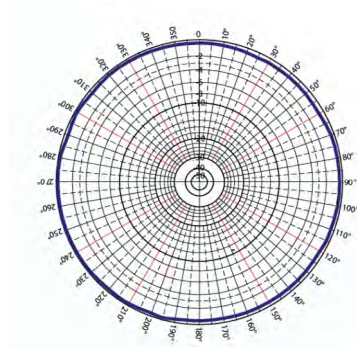
Add "B" to model number for black radome. Example: TRAB8063

Add "P" to model number for Permanent Mount. Example: TRA8063Px

# ANTENNA PATTERNS



**Elevation Pattern (Y, Z, or H-plane)  
Normalized to 3 Db-MEG**



**Azimuth Pattern (X,Y, or E-plane)  
Normalized to 3 dB-MEG**

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