

Laird Technologies' Vehicular Antennas

Laird Technologies vehicular land mobile radio antennas are the industry standard for public safety agencies, fleet and transportation networks. From 27 MHz to 5.8 GHz, Laird Technologies designs and manufactures a wide variety of mobile antennas with a multitude of mounting options.



The patented whip-less Phantom® and Phantom Elite® low-profile antenna family has no equal with true field diversity performance. The patented technology utilizes dual polarization for unsurpassed performance in urban canyons as well as rural drop off areas. Laird Technologies also offers traditional mobile coil antennas, value conscious quarterwaves and A-base products with superior workmanship and design features. A wide array of specialty antennas including dual bands, elevated feed point and wide band models are also available. Tuf Duck® portable antennas have been the standard for two-way radio applications since their introduction over twenty-five years ago. Multiple cable options, connectors, mounts and bracket products provide a complete antenna system.

Patented Phantom® antennas set industry standard that cannot be duplicated

The patented Phantom® series is a tough antenna for outdoor or indoor applications. Available in standard, low profile and stealth Phantom Elite® models, all antennas feature field diversity with both vertical and horizontal polarization components. This gives the antennas diversity, frequency agility, low visibility, wide bandwidth and a low angle radiation pattern that is superior to traditional gain antennas in most applications.

- True Field Diversity
- U.S. Patent No. 5,977,931 and 6,292,156 - do not be fooled by imitators that have no gain or field diversity
- Available in VHF, UHF, 800/900, 2.4, 5.8 GHz, and multi-band cellular and GPS frequencies
- 3dB MEG outperforms a conventional 3dB antenna in many applications
- Available in standard NMO, permanent, direct N female and ceiling tile mounts
- Less susceptible to damage
- Thousands in service worldwide



TRAB4503

TRA4503P

Phantom Antenna



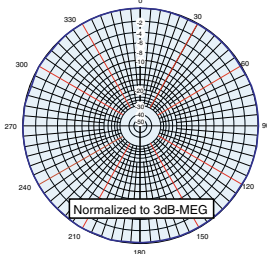
Model	Description	Frequency Range	Gain	Color	Radome Height	Max. Power
VHF Tunable Unity Models						
TRAT1420	Phantom VHF Antenna	142-160 MHz	Unity	White	3.5"	60 watt
TRABT1420	Phantom VHF Antenna	142-160 MHz	Unity	Black	3.5"	60 watts
TRAT1500	Phantom VHF Antenna	150-168 MHz	Unity	White	3.5"	60 watts
TRABT1500	Phantom VHF Antenna	150-168 MHz	Unity	Black	3.5"	60 watts
TRABT1500P	Phantom VHF Antenna P. Mt.*	150-168 MHz	Unity	Black	3.5"	60 watts
TRAT1560	Phantom VHF Antenna	156-172 MHz	Unity	White	3.5"	60 watts
TRABT1560	Phantom VHF Antenna	156-172 MHz	Unity	Black	3.5"	60 watts
TRABT1560P	Phantom VHF Antenna P. Mt.*	156-172 MHz	Unity	Black	3.5"	60 watts
TRA2100	Phantom VHF Antenna	210-225 MHz	Unity	White	2.9"	100 watts
TRAB2100	Phantom VHF Antenna	210-225 MHz	Unity	Black	2.9"	100 watts

*Add .625" overall height for all P mount models



TRAT1420

 **Patented
Field Diversity™**



TRA4303

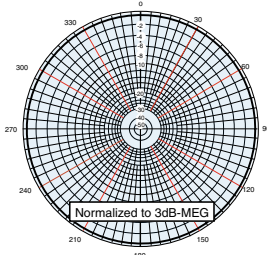


TRAB7603
TRA7603P

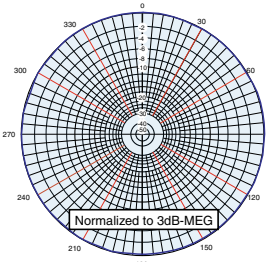
NEW

Trunking Radio Band Phantom

- Low profile field diversity antenna
- 760 - 870 MHz



TRA8063N



TRAB24003N

Model	Description	Frequency Range	Gain	Color	Radome Height	Max. Power
UHF 3 dB-MEG (Mean Effective Gain) Models -						
TRA4103	Phantom UHF Antenna	410-430 MHz	3-dB MEG	White	3.40"	150 watts
TRAB4103	Phantom UHF Antenna	410-430 MHz	3-dB MEG	Black	3.40"	150 watts
TRA4303	Phantom UHF Antenna	430-450 MHz	3-dB MEG	White	3.40"	150 watts
TRAB4303	Phantom UHF Antenna	430-450 MHz	3-dB MEG	Black	3.40"	150 watts
TRA4303P	Phantom UHF Antenna P. Mt.*	430-450 MHz	3-dB MEG	White	3.40"	150 watts
TRAB4303P	Phantom UHF Antenna P. Mt.*	430-450 MHz	3-dB MEG	Black	3.40"	150 watts
TRA4500N	Phantom UHF Antenna NGP	450-470 MHz	3-dB MEG	White	3.40"	150 watts
TRAB4500N	Phantom UHF Antenna NGP	450-470 MHz	3-dB MEG	Black	3.40"	150 watts
TRA4503	Phantom UHF Antenna	450-470 MHz	3-dB MEG	White	3.40"	150 watts
TRAB4503	Phantom UHF Antenna	450-470 MHz	3-dB MEG	Black	3.40"	150 watts
TRA4503P	Phantom UHF Antenna P. Mt.*	450-470 MHz	3-dB MEG	White	3.40"	150 watts
TRAB4503P	Phantom UHF Antenna P. Mt.*	450-470 MHz	3-dB MEG	Black	3.40"	150 watts
TRA4703	Phantom UHF Antenna	470-490 MHz	3-dB MEG	White	3.40"	150 watts
TRAB4703	Phantom UHF Antenna	470-490 MHz	3-dB MEG	Black	3.40"	150 watts
TRA4703P	Phantom UHF Antenna P. Mt.*	470-490 MHz	3-dB MEG	White	3.40"	150 watts
TRAB4703P	Phantom UHF Antenna P. Mt.*	470-490 MHz	3-dB MEG	Black	3.40"	150 watts
TRA4903	Phantom UHF Antenna P. Mt.*	490-512 MHz	3-dB MEG	White	3.40"	150 watts
TRAB4903	Phantom UHF Antenna	490-512 MHz	3-dB MEG	Black	3.40"	150 watts

700 MHz - 5.8 GHz 3 dB-MEG Models

TRA7463	Phantom Antenna	746-796 MHz	3-dB MEG	White	2.70"	150 watts
TRAB7463	Phantom Antenna	746-796 MHz	3-dB MEG	Black	2.70"	150 watts
TRA7603	Phantom Antenna	760-870 MHz	3-dB MEG	White	2.70"	150 watts
TRAB7603	Phantom Antenna	760-870 MHz	3-dB MEG	Black	2.70"	150 watts
TRA7603P	Phantom Antenna P. Mt.*	760-870 MHz	3-dB MEG	White	2.70"	150 watts
TRAB7603P	Phantom Antenna P. Mt.*	760-870 MHz	3-dB MEG	Black	2.70"	150 watts
TRA8063	Phantom Antenna	806-866 MHz	3-dB MEG	White	2.70"	150 watts
TRAB8063	Phantom Antenna	806-866 MHz	3-dB MEG	Black	2.70"	150 watts
TRA8063P	Phantom Antenna P. Mt.*	806-866 MHz	3-dB MEG	White	2.70"	150 watts
TRAB8063P	Phantom Antenna P. Mt.*	806-866 MHz	3-dB MEG	Black	2.70"	150 watts
TRA8063NP	Phantom Antenna P. Mt.*/NGP	806-866 MHz	3-dB MEG	White	2.70"	150 watts
TRAB8063NP	Phantom Antenna P. Mt.*/NGP	806-866 MHz	3-dB MEG	Black	2.70"	150 watts
TRA8213	Phantom Antenna	821-896 MHz	3-dB MEG	White	2.70"	150 watts
TRAB8213	Phantom Antenna	821-896 MHz	3-dB MEG	Black	2.70"	150 watts
TRA8213P	Phantom Antenna P. Mt.*	821-896 MHz	3-dB MEG	White	2.70"	150 watts
TRAB8213P	Phantom Antenna P. Mt.*	821-896 MHz	3-dB MEG	Black	2.70"	150 watts
TRA8213NP	Phantom Antenna P. Mt.*/NGP	821-896 MHz	3-dB MEG	White	2.70"	100 watts
TRAB8213NP	Phantom Antenna P. Mt.*/NGP	821-896 MHz	3-dB MEG	Black	2.70"	100 watts
TRA8903	Phantom Antenna	890-960 MHz	3-dB MEG	White	2.70"	150 watts
TRAB8903	Phantom Antenna	890-960 MHz	3-dB MEG	Black	2.70"	150 watts
TRA9023	Phantom Antenna	902-928 MHz	3-dB MEG	White	2.70"	150 watts
TRAB9023	Phantom Antenna	902-928 MHz	3-dB MEG	Black	2.70"	150 watts
TRA9023P	Phantom Antenna P. Mt.*	902-928 MHz	3-dB MEG	White	2.70"	150 watts
TRAB9023P	Phantom Antenna P. Mt.*	902-928 MHz	3-dB MEG	Black	2.70"	150 watts
TRA9023NP	Phantom Antenna P. Mt.*/NGP	902-928 MHz	3-dB MEG	White	2.70"	100 watts
TRAB9023NP	Phantom Antenna P. Mt.*/NGP	902-928 MHz	3-dB MEG	Black	2.70"	100 watts
TRA24003	Phantom Antenna	2.4-2.5 GHz	3-dB MEG	White	2.70"	100 watts
TRAB24003	Phantom Antenna	2.4-2.5 GHz	3-dB MEG	Black	2.70"	100 watts
TRA24003P	Phantom Antenna P. Mt.*	2.4-2.5 GHz	3-dB MEG	White	2.70"	100 watts
TRAB24003P	Phantom Antenna P. Mt.*	2.4-2.5 GHz	3-dB MEG	Black	2.70"	100 watts

*Add .625" overall height for all P mount models



Model	Description	Frequency Range	Gain	Color	Radome Height	Max. Power
TRA24003NP	Phantom Antenna P. Mt.*/NGP	2.4-2.5 GHz	3-dB MEG	White	2.70"	100 watts
TRAB24003NP	Phantom Antenna P. Mt.*/NGP	2.4-2.5 GHz	3-dB MEG	Black	2.70"	100 watts
TRA58003	Phantom Antenna	4.9-6.0 GHz	3-dB MEG	White	3.40"	150 watts
TRAB58003	Phantom Antenna	4.9-6.0 GHz	3-dB MEG	Black	3.40"	150 watts
TRA58003P	Phantom Antenna P. Mt.*	4.9-6.0 GHz	3-dB MEG	White	3.40"	150 watts
TRAB58003P	Phantom Antenna P. Mt.*	4.9-6.0 GHz	3-dB MEG	Black	3.40"	150 watts



TRA24003

Multi-Band 3 dB-MEG Models

TRA821/18503	Phantom Cell/PCS Antenna	821-896 MHz 1850-1990 MHz	3-dB MEG	White	2.30"	100 watts
TRAB821/18503	Phantom Cell/PCS Antenna	821-896 MHz 1850-1990 MHz	3-dB MEG	Black	2.30"	100 watts
TRA821/18503P	Phantom Cell/PCS Permanent Mt.*	821-896 MHz 1850-1990 MHz	3-dB MEG	White	2.30"	100 watts
TRAB821/18503P	Phantom Cell/PCS Permanent Mt.*	821-896 MHz 1850-1990 MHz	3-dB MEG	Black	2.30"	100 watts
TRA806/17103	Phantom DCS/GSM/UMTS Antenna	806-960 MHz 1710-2500 MHz	3-dB MEG	White	2.30"	100 watts
TRAB806/17103	Phantom DCS/GSM/UMTS Antenna	806-960 MHz 1710-2500 MHz	3-dB MEG	Black	2.30"	100 watts
TRA806/17103P	Phantom DCS/GSM/UMTS Permanent Mt.*	806-960 MHz 1710-2500 MHz	3-dB MEG	White	2.30"	100 watts
TRAB806/17103PP	Phantom DCS/GSM/UMTS Permanent Mt.*	806-960 MHz 1710-2500 MHz	3-dB MEG	Black	2.30"	100 watts

Model	Description	Freq	Gain	Overall Height	Connector Type	Coax Type
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Low Profile Models with integrated plane

All models listed with permanent mount*

DTRA8063P	Low Profile Phantom	806-866 MHz	3 dB-MEG	1.25"	TNC-Male	ATX195
DTRA8213P	Low Profile Phantom	821-896 MHz	3 dB-MEG	1.25"	TNC-Male	ATX195

Dual-Band Phantom with GPS

All models listed with permanent mount*

GPSD4503P	Standard AVL w/Phantom	450 - 470 MHz	3 dB-MEG	3.5"	TNC-Male	ATX195
GPSD7463P	Low Profile AVL w/Phantom	746 - 786 MHz	3 dB-MEG	1.25"	TNC-Male	ATX195
GPSD8063P	Low Profile AVL w/Phantom	806 - 866 MHz	3 dB-MEG	1.25"	TNC-Male	ATX195
GPSD8063EP	As above with ext. 1" mounting nut	806 - 866 MHz	3 dB-MEG	1.25"	TNC-Male	ATX195
GPSD8213P	Low Profile AVL w/Phantom	821 - 896 MHz	3 dB-MEG	1.25"	TNC-Male	ATX195
GPSD8903P	Low Profile AVL w/Phantom	890 - 960 MHz	3 dB-MEG	1.25"	TNC-Male	ATX195
GPSD9023P	Low Profile AVL w/Phantom	902 - 928 MHz	3 dB-MEG	1.25"	TNC-Male	ATX195

Tri-Band Phantom with GPS AVL

GPS821/18503P	Cell/PCS/GPS Low Profile*	821-896 MHz/ 1850-1990 MHz	3 dB-MEG	1.25"	TNC-Male	17-RG174
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Custom tuning available

*Add .625" overall height for all P mount models

Ordering Guide

DTRA8063P =

Low Profile, Phantom, Black finish, 806-866 MHz, 3 dB-MEG gain, permanent mount

- D** Low Profile
- TRA** Phantom antenna
- B** B = Black Finish Blank = White Finish
- 806** Initial Frequency
- 3** Gain
Blank = Unity
3 = 3 dB MEG (Mean Effective Gain)
- P** Mount option
Blank = NMO
P = Permanent
N = No Ground Plane



DTRA8063P



GPSD4503P



GPSD7463P

TNC-Male connector with 17' cable standard on all P mounts. Other connectors available