

Smart Technology. Delivered.

Phantom[®] Multi-Band Antennas



DUAL-BAND PHANTOM® ANTENNA IS IDEAL FOR CELLULAR AND PCS APPLICATIONS

Laird's unique patented Phantom® multi band cellular antenna operates simultaneously on seven bands and is a tough antenna for outdoor or indoor applications. The revolutionary design measures only 2.3". The patented field Phantom® technology ensures uninterrupted voice and data transmissions in urban canyons and rural drop off areas.

The industry standard NMO mounting socket mates with all Laird's 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.

FEATURES **FROHS**

- Operates simultaneously on 7 bands AMPS 806-896 MHz GSM 890-960 MHz GPS 1575.42 MHz DCS 1710-1880 MHZ PCS 1850-1990 MHz UMTS 1900-2170 MHz ISM (BT) 2.4 - 2.5 GHz
- Patented Phantom® technology ensures uninterrupted voice and data transmissions in urban canyons and rural drop off areas
- U.S. Patent Nos. 5,977,931 6,292,156; other patents pending

MARKETS

- Mobile Radio
- Fixed Station
- In-Building Wireless

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SPECIFICATIONS

	AMPS	GSM	GPS	DCS	PCS	UMTS	ISM				
Frequency Range MHz	806-896	890-960	1575.42	1710-1880	1850-1990	1900-2170	2400-2500				
Peak Gain dBi	5.9	5.8	5.1	4.2	4.2	4.4	3.0				
Polarization	Vertical										
Impedance	50 Ω										
Input Power	100 watts										
Input Connection		<2.5:1									
Dimensions	1.44" wide x 2.30" tall (NMO), 1.44" x 3.15" tall (P-mount)										
Radome Material	ABS										
Weight	.15 lb (NMO) and .25 lb (P-mount)										

MODEL AND ORDERING INFORMATION

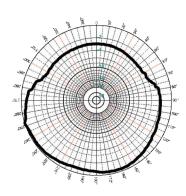
MODEL	DESCRIPTION N	MOUNT	COLOR	RADOME HEIG	HT WEIGI	HT CONNEC	тог		
TRAB806/17103	Multi-Band Phantom [®]	NMO	Black	2.30"	.15 lbs	NMO			
TRAB806/17103P	Multi-Band Phantom [®]	Permaner	nt Blac	k 2.30"	.25 lbs	N Female			
TRA806/17103	Multi-Band Phantom [®]	NMO	Whit	e 2.30"	.15 lbs	NMO			
TRA806/17103P	Multi-Band Phantom®	Permaner	nt Whit	e 2.30"	.25 lbs	N Female			
TRADCA	Drop ceiling antenna adaptor for P-mount Phantom								
TRADCAGP	Drop ceiling antenna adaptor for P-mount Phantom with 6" x 6" x .016" ground plane								

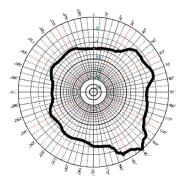


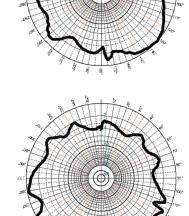
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ANTENNA PATTERNS

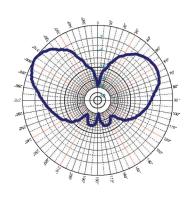
Azimuthal (X, Y or E-Plane)

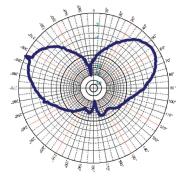


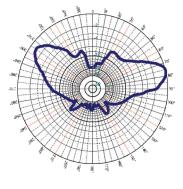


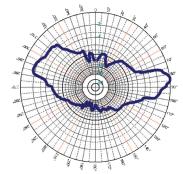


Elevation (Y, Z or H-Plane)









AMPS / GSM900 880-960 MHz Test Freq = 920 MHz Peak Gain: 5.8 dBi

GSM1800 1710-1880 MHz Test Freq = 1795 MHz Peak Gain: 4.2 dBi

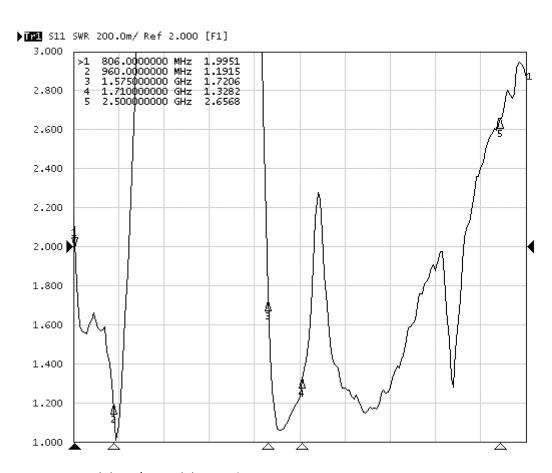
UMTS 1900-2170 MHz Test Freq = 2035 MHz Peak Gain: 4.4 dBi

ISM / BT / Wifi 2400-2500 MHz Test Freq = 2450 MHz Peak Gain: 3.0 dBi



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VSWR of TRA(B)806/17103(P)



TRA(B)806/17103(P) Typical VSWR sweeps

Cell / GSM900 Frequency Range 806-960 MHz (VSWR <2:1)

Marker 1: 1.9951 to 1 @ 806 MHz Marker 2: 1.1915 to 1 @ 960 MHz GPS Frequency 1575 MHz (VSWR <2:1) Marker 3: 1.7206 to 1 @ 1575 MHz

DCS / GSM1800 / UMTS / WiFi Frequency Range 1710-2500 MHz (VSWR <2:1)

Marker 4: 1.3282 to 1 @ 1710 MHz Marker 5: 2.6568 to 1 @ 2500 MHz

6/30/2006