



#### TRA806/17103P

U.S. Patent Nos. 5,977,931; 6,292,156; and other patents pending

## Multi Band Phantom<sup>®</sup> Antennas

#### **Features**

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 field diversity Phantom<sup>®</sup> technology ensures uninterrupted voice and data transmissions in urban canyons and rural drop off areas

### **Applications**

- Mobile Radio
- Fixed Station
- In-Building Wireless

#### Specifications

	AMPS	GSM	GPS	DCS	PCS	UMTS	ISM (BT)
Frequency Ranges	806-896	890-960	1575.42	1710-1880	1850-1990	1900-2170	2.4-2.5GHz
Peak Gain Polarization	5.9 dBi Vertical and	5.8 dBi I Horizontal	5.1 dBi	4.2 dBi	4.2 dBi	4.4 dBi	3.0 dBi

Impedance  $50\Omega$ 

Input Power 100 watts

Input Connection ISM/BT < 2.5:1 All other bands <2:1

Dimensions 1.44" wide x 2.30" tall (NMO) 1.44" wide x 3.15" tall (P-mount)

Radome Material ABS

Weight .15 lb. (NMO) and .25 lb (P-mount)

Model	and	Orderi	na In	forma	tion:
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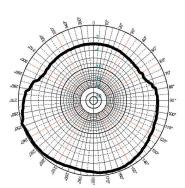
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Model Number	Description	Mount	Color	Radome Height	Weight	Connector	
TRAB806/17103	Multi-Band Phantom®	NMO	Black	2.30"	.15 lbs	NMO	
TRAB806/17103P	Multi-Band Phantom®	Permanent	Black	2.30"	.25 lbs	N Female	
TRA806/17103	Multi-Band Phantom®	NMO	White	2.30"	.15 lbs	NMO	
TRA806/17103P	Multi-Band Phantom®	Permanent	White	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							



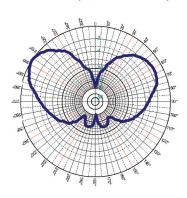


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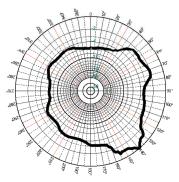
### Azimuthal (X, Y or E-Plane)

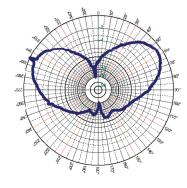


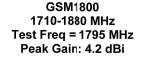
Elevation (Y, Z or H-Plane)

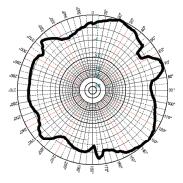


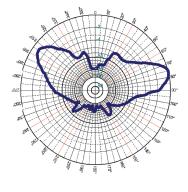
AMPS / GSM900 880-960 MHz Test Freq = 920 MHz Peak Gain: 5.8 dBi



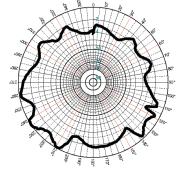


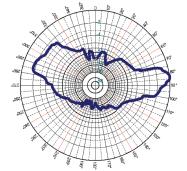






UMTS 1900-2170 MHz Test Freq = 2035 MHz Peak Gain: 4.4 dBi





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

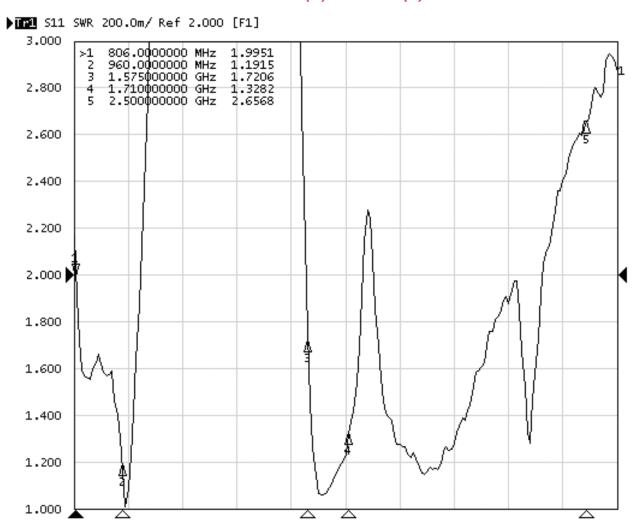






## Multi Band Phantom® Antennas

### 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 06/30/2006