

# PCTEL MEDALLION™

## ALL-IN-ONE GPS MOBILE COMBINATION ANTENNA



## GSM, WIFI/WIMAX, 3G AND GPS L1

### ONE RUGGED LOW PROFILE GPS MULTI-BAND ANTENNA: A MULTITUDE OF RF POSSIBILITIES



As a leading supplier of GPS and Satellite Communications antennas, PCTEL utilizes the latest technologies and engineering design tools to design and manufacture high performance products for network timing, precision measurement, aircraft navigation, munition guidance and vehicle tracking applications.

Our GPS Vehicle Tracking Antenna line supports numerous fleet monitoring applications within the Public Safety, Commercial and Delivery, Service, Military, Agriculture, Construction and Mass Transportation industries.

Our new Medallion™ GPS Multi-Band antenna features an attractive modern design in a rugged low profile housing. This antenna offers multi-band coverage of GSM 850, GSM 900, GSM 1800, GSM 1900, 3G and WiFi/WiMAX frequencies, coupled with GPS L1 capability for outstanding value and performance. It is the ideal product for a variety of wireless applications, including:

- Public safety and emergency response vehicles
- Mass transit
- Fleet management and asset tracking
- Telemetry and SCADA
- Field measurement and wireless network optimization
- Wireless data terminals



## MEDALLION™ PLATFORM BENEFITS

- No tune, multi-band coverage: GSM 850, GSM 900, GSM 1800, GSM 1900, 3G, WiFi/WiMAX frequencies, coupled with GPS L1 frequencies
- Modern low profile housing provides “omnidirectional” trouble-free installation while complementing most vehicular aesthetic requirements
- Metal 3/4-inch stud mount with slotted jam nut provides single cable exit for easier installation and/or antenna replacement
- IP56 compliant design with custom over molded gasket provides added protection against water or dust ingress under severe environmental conditions
- High performance, low loss cable and high quality connectors for maximum RF system efficiency



### Electrical Specifications - RF Antennas

Model PCTMDL	Voice/Data RF Element	Broadband Wireless RF Element
Operating Frequencies	806-960 MHz and 1710-2170 MHz	2.3 GHz - 2.6 GHz
Polarization	Vertical, linear	Vertical, linear
Nominal Impedance	50 ohms	50 ohms
Gain (typical)	2.8dBi (806-960 MHz) 3.3dBi (1710-2170 MHz)	3.9dBi
VSWR	< 2.0:1	< 2.0:1

### Electrical Specifications - GPS Antenna

Frequency Band	1575.42 MHz (GPS L1)
GPS Antenna Gain	3.5dBi
Amplifier Gain	27dB
Nominal Impedance	50 ohms
Output VSWR	1.5:1 typical
DC Current	20 mA Nominal; < 30 mA @ -40°C to +85°C
DC Voltage	3-5.5 V
Noise Figure	1.6dB Typical
Grounding Protection	DC grounded (both antennas)
Filtering	20dB rejection @ +/- 100 MHz from center frequency

### Mechanical Specifications

Housing Material	UV resistant, Black ABS
Dimensions	5.1 x 4.95 x 1.7 inches 129.6 x 125.8 x 43.1 millimeters
Coax (3)	17 feet RG-58/U (RF element) 17 feet RG-58/U (Broadband Wireless Element) 17 feet RG-174/U (GPS)
Connectors	SMA Plug (Male) standard*

### Environmental Specifications

Operating/Storage Temperature	-40°C to +85°C
IP56 Compliant	
RoHS Compliant	

\* Standard model. Contact Customer Service to request other options.

