



GPS/GSM Multi-Band Through Hole Low-Profile Antenna

PCTEL's GPSGSMMSMA multi-band GPS antenna provides omnidirectional coverage of GSM frequencies from 824-896 MHz and 1710-1990 MHz plus GPS L1 vehicle tracking support. This low-profile antenna is designed for permanent roof top vehicular installations. It is ideal for mass transit applications requiring voice coverage and GPS tracking to improve operational dispatch and schedule maintenance efficiencies. The antenna's very low-profile design minimizes its exposure to theft or vandalism.

Features

- Extremely low-profile housing for minimum visibility and maximum overhead clearance
- Multi-band frequency coverage and GPS support minimize the number of antennas required on the vehicle for easier, more cost effective installations
- UV stability for long lasting outdoor operation
- Adhesive VHB tape layer supports permanent installation and provides added protection to the vehicle's surface
- Protective cable sheath for easier installation



GPSGSMMSMA

STANDARD CONFIGURATION

| Model | Cable | Connector | Mount |
|------------|--|----------------------------------|--|
| GPSGSMMSMA | 16.4 feet RG-174/U (GPS) 16.4 feet RG-174/U (GSM) | Male SMA (GPS) Male SMA (GSM) | 1/2-inch through hole mount Mount assembly includes flat adapter shim for installations on existing larger hole diameters. Adhesive VHB tape layer included. |

ELECTRICAL SPECIFICATIONS - RF ANTENNA

| Impedance | Frequency Range | Gain | Maximum Power | Polarization | VSWR |
|-----------|-------------------------|--------|---------------|------------------|---------|
| 50 ohms | 824-896 / 1710-1990 MHz | 2 dBi* | 8 watts | Linear, vertical | < 2.5:1 |

ELECTRICAL SPECIFICATIONS - GPS ANTENNA

| Frequency Range | LNA Gain | Polarization | VSWR |
|---------------------|-----------|---------------------------|---------|
| L1: 1575.42 ± 3 MHz | 25 ± 3 dB | Right hand circular (GPS) | < 1.5:1 |

ELECTRICAL SPECIFICATIONS - GPS ANTENNA, continued

| Current Draw | Noise Figure | Input Impedance |
|-----------------|--------------------|-----------------|
| < 15 mA @ 3-5 V | < 2.0 dB (typical) | 50 ohms |

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

| Dimensions | Weight | Housing Material | Temperature Range |
|------------------------------------|-----------------------|--------------------------|-------------------|
| 3.1 OD x 0.59 H in (8 x 1.5 cm) | 0.45 lbs (.204 kg) | Black, UV-stable plastic | -40°C to +85°C |

* Gain will vary depending on frequency and method of installation. Measured on a 9-inch ground plane, not including cable attenuation.

** For other connector options, please refer to GPS Multi-Band Mobile Antenna Configurator Part Number Guide.