

GPS+ Combination Antennas



The Max-Matics™ GPS+ antennas are available with various mount configurations, including magnetic (above top) and permanent/blind installation stud (above bottom).



The Max-Matics™ GPS+ antennas have been designed to provide maximum performance and versatility for telematics applications, including fleet monitoring and asset tracking.

By combining the high performance of a GPS antenna with the flexibility to add virtually any PCTEL permanent mount compatible mobile antenna, the GPS+ provides reliable, real-time wireless voice and data coverage for fleet monitoring applications. This antenna is designed to facilitate installation. It includes all necessary hardware for “blind” installations when removal of the vehicle’s headliner is not desired.

Its precise performance and ease of installation provides outstanding value and flexibility for the most demanding wireless mobile applications.

Features

- Combination GPS/mobile antenna design provides GPS tracking coverage and voice/data wireless coverage capabilities for fleet monitoring or fleet tracking applications.
- UV-stable housing features attractive industrial design that is available in off-white or black textured finishes.
- 3 or 5 Vdc operating voltage supply enables operation with most GPS systems on the market.
- Several models are available, including trunk lid mount, permanent stud mount, mirror mount or magnet mount versions. The variety of mounts provides flexibility and versatility to end users.
- Various connector options are available for both the GPS antenna and the mobile antenna’s permanent mount.
- High frequency mobile antenna mount provides a VSWR of less than 1.5:1 at frequencies from 27 MHz to 2.4 GHz for all PCTEL mobile antennas used as part of the GPS+ antenna series.

Low Noise Amplifier Specifications

Frequency Band: 1575.42 MHz
Amplifier Gain: 26 dB +/-3
Polarization: Right hand circular
Nominal Impedance: 50 ohms
Output VSWR: 1.5:1, typical
DC Current: 20 mA Nominal; <30 mA @ -40°C to +85°C
DC Voltage: 3-5.5V (internal regulated)
Axial Ratio: < 3.0 dB @ boresight
Noise Figure: 1.8 typical
Filtering: Hybrid (including pre-selector)
Out-of-band Rejection: >40 dB @ +/- 50 MHz

For detailed specifications, visit <http://antenna.pctel.com>.

Mechanical Specifications

Housing Material	Housing Dimensions	Mobile Antenna Mount Interface	Cable	Cable Pull Force	Mounting Options
Black or off-white, UV-stable polycarbonate	2.25" W x 4.25" L x 1.25" H	1-1/8"-18 thread mount	17' RG-174 (GPS antenna side) 17' RG-58/U (mobile antenna side)	5 kgf, minimum (magnetic mount models)	Stud, mirror, trunk or magnet

Environmental Specifications

Burn-out Protection	Operating Temperature Range	Storage Temperature Range
Protected from damage by RF signals when the power received by the antenna is no greater than +17 dBm, maximum	-40° C to +85° C	-40° C to +100° C

To order, please follow the following part number configuration:

Color	Mount type	GPS Connector	Mobile Antenna Connector
Black textured finish is standard and no color code is required for this choice. For a white textured finish, begin the part number with "W"	Add the appropriate suffix (choose from the list below) to indicate your choice of mount:	Choose among: Male SMA (MSMA) Female SMA (FSMA) Male TNC (MC) Female FME (FFME) Right angle SMB jack (RASBJ) Right angle SMB plug (RASBP) MCX MMCX Right angle MMCX plug (RAMMCX) Male SMC (MSMC) Male BNC (BN)	Choose among any of the connector options available for the BM mounts with RG-58 cable: PL259 (standard) Reverse Polarity SMA (MSMARP) Mini-UHF (PL) BNC (BN) TNC (C) Male N (NM) Female FME (FME) Male SMA (MSMA) Right Angle Male SMA (RAMSMA)
N/A	GPSPMM (for magnet mount)	Specify your GPS connector of choice by adding the connector abbreviation from the above list to the part number.	Specify your connector of choice for the mobile antenna side by adding the connector abbreviation from the above list to the part number.
(W)*	GPSPSM (for stud mount)		
N/A	GPSPMR (for mirror mount)	Male SMA (MSMA)	N/A
N/A	GPSPTM (for trunk mount)	Right angle SMB plug (RASBP)	N/C

* WHITE VERSION ONLY AVAILABLE IN STUD MOUNT (GPSPSM) MODELS