

Multiband LTE MIMO & Dual 802.11ac Antennas with High Rejection GPS

PCTEL's Max-Matics Trooper antenna provides optimal 4G LTE and dual-band 802.11ac Wi-Fi coverage in a single, low profile housing. The antenna also incorporates PCTEL's high rejection GPS technology for optimal performance and support of carrier voice and data networks.



Max-Matics™ Trooper - Permanent Mount

Features

- No tune, multiband coverage: dual 4G LTE, dual band 802.11ac Wi-Fi and GPS L1 frequencies
- Metal 3/4-inch stud mount with slotted jam nut provides single cable exit for easier installation and/or antenna replacement
- IP67 compliant design provides maximum protection against water or dust ingress under severe environmental conditions*
- UV resistant black or white housing options complement most vehicular aesthetic requirements

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Elements	Operating Frequencies	Polarization	Nominal Impedance	Gain** (typical)	Maximum Power	VSWR***
GPSDLTEMIMO-LTB	4 G LTE Elements (2 each) Wi-Fi Elements (2 each)	698-960 MHz / 1710-2700 MHz 2.4-2.5 GHz / 4.9-5.9 GHz	Vertical, linear	50 ohms	2.5 dBi 3-4 dBi	50 watts	< 2.0:1

ELECTRICAL SPECIFICATIONS - GPS ANTENNA

Frequency Range	Amplifier Gain	Nominal Impedance	Output VSWR	DC Current	DC Voltage	Noise Figure	Filtering
1575.42 MHz (GPS L1)	@ 3.0 VDC: 26 dB (typical)	50 ohms	1.5:1 (typical)	20 mA nominal; < 30 mA @ -40° to + 85° C	2.8-6.0 V (operating) ≤ 12.0 V (survivability)	1.8 dB (typical)	> 40 dB rejection @ +/- 50 MHz from center frequency

MECHANICAL SPECIFICATIONS

Dimensions (W x H)	Coax	Connectors	Gasket Design & Construction
4.05 x 3.46 inches	Two-17 feet Pro-Flex™ Plus 195 (4G LTE Elements) Two-17 feet Pro-Flex™ Plus 195 (802.11n Wi-Fi Elements) One-17 feet RG-174/U (GPS Element)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GPS)	Contour matching, conformable, thermoplastic-elastomer gasket designed to seal between radome and baseplate. Gasket flexes and conforms to contoured surfaces. Baseplate has a 3M™ VHB mounting pad for anti-rotation.

MECHANICAL SPECIFICATIONS, continued

Radome Construction	Mounting Method	Operating/Storage Temperature
Black, UV Stable Rugged Thermoplastics ****	1-inch hole, 3/4-inch long (.75") zinc stud mount with jam nut	-40°C to +85°C

* If installed according to PCTEL's installation instructions ** Measured on a 4-foot diameter ground plane. Gain value is measured at the base of the antenna (no cable loss included).
*** VSWR < 2:1 across all bands when measured on 1-ft diameter ground plane with 17-ft cable. When measured on 1-ft diameter ground plane with 1-ft cable, VSWR < 2:1 698-960MHz, < 2:1 1710-2170MHz, and < 2.5:1 2300-2700MHz. **** For white radome option, add suffix "W" to the part number. (GPSDLTEMIMO-LTW)