Multi-Band LTE MIMO & 802.11ac Antennas with High Rejection GPS/GLONASS

The Coach antennas provide optimal 4G LTE and dual-band 802.11ac Wi-Fi coverage in a single, low-profile housing. The antennas also incorporate PCTEL's unique high rejection GPS/GLONASS technology for optimal performance and support of carrier voice and data networks.

GLHPDLTEMIMO-SF (left)
BGLHPDLTEMIMO-SF (right)

Features

- No tune, multi-band coverage: dual 4G LTE, dual or triple 802.11 ac Wi-Fi MIMO options, and GPS L1/Galileo/GLONASS frequencies
- Metal 1-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
- Proprietary filtering design allows wideband coverage while achieving superior out-of-band rejection for all GNSS frequencies

STANDARD CONFIGURATION

Model	Cable	Connectors***	Mounting Method
GLHPDLTEMIMO-SF	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 (GNSS Element)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GNSS)	1-inch OD, 3/4-inch long (.75") zinc stud mount with jam nut (all models)
GLHPDLTE-SF	Two-17 feet Pro-Flex™ Plus 195 (4G LTE Elements) One-17 feet RG-174/U (GNSS Element)	SMA Plug (LTE) SMA Plug (GNSS)	
GLHPDM3-SF	Two-17 feet Pro-Flex™ Plus 195 (4G LTE Elements) Three-17 feet Pro-Flex™ Plus 195 (802.11n Wi-Fi Elements) One-17 feet RG-174/U (GNSS Element)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GNSS)	

ELECTRICAL SPECIFICATIONS - RF ANTENNAS

Model	Frequency Range	Elements	Polarization	Nominal Impedance	Gain** (typical)	Maximum Power	VSWR**
GLHPDLTEMIMO-SF	698-960 MHz / 1710-2700 MHz 2.4-2.5 GHz / 4.9-5.9 GHz	4G LTE Elements (2 each) Dual-Band Wi-Fi Elements (2 each)	Vertical, linear	50 ohms	2.5 dBi 3-4 dBi	50 watts	< 2.0:1
GLHPDLTE-SF	698-960 MHz / 1710-2700 MHz	4G LTE Elements (2 each)	Vertical, linear	50 ohms	2.5 dBi	50 watts	< 2.0:1
GLHPDM3-SF	698-960 MHz / 1710-2700 MHz 2.4-2.5 GHz / 4.9-5.9 GHz	4G LTE Elements (2 each) Dual-Band Wi-Fi Elements (3 each)	Vertical, linear	50 ohms	2.5 dBi 3-4 dBi	50 watts	< 2.0:1

* When properly installed on a vehicle rooftop per PCTEL installation instructions. ** Measured on a 4-foot diameter ground plane. Gain value is measured at the base of the antenna (no cable loss included).
*** Consult Customer Service for other connector options.

Multi-Band LTE MIMO & 802.11ac Antennas with High Rejection GPS/GLONASS

RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Frequency Band	Amplifier Gain	Output VSWR	DC Current	DC Voltage	Noise Figure:	Out-of-Band Rejection:
1565-1608 MHz	@ 3.0 VDC: 26 dB (typical)	2.0:1 (maximum)	25 mA (typical)	2.8-6.0 V (operating) ≤ 12.0 V (survivability)	< 2.0 dB (typical)	f0 = 1586 MHz f0 ± 50 MHz: ≥ 60 dBc f0 ± 60 MHz: ≥ 70 dBc

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Frequency Band	Nominal Gain	Polarization	Nominal Impedance
1565-1608 MHz	3 dBic @ 90° -2 dBic @ 20°	Right hand circular	50 ohms

MECHANICAL SPECIFICATIONS AND ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

Dimensions	Housing Material*****	Temperature Range	Gasket Design & Construction
5.1 x 3.6 in (130 x 92 mm)	White or Black, UV-Stable Rugged Thermoplastics	-40°C to +85°C	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.

**** 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 < 2:1 698-960 MHz, <2:1 1710-2170 MHz, and < 2.5:1 2300-2700 MHz. 3M is a trademark of 3M Company.
*****Black radome option also available. Add "B" in front of the part number for black radome option.