



# Multiband LTE MIMO & 802.11ac Antennas with SkyLink™ High Rejection GPS/GLONASS, Compact Footprint



The SkyCompass™ Trooper antennas provide optimal 4G LTE and dual-band 802.11ac Wi-Fi coverage in a single, low profile housing. Its compact footprint makes this antenna ideal for installation on surfaces with limited surface space, including leading public safety vehicle rooftops and many machine-to-machine applications. The antennas also incorporate PCTEL's unique SkyLink™ high rejection GPS/GLONASS technology for optimal performance and support of carrier voice and data networks.



#### GLHPDLTEMIMO-LTB

#### **Features**

- No tune, multiband coverage: dual 4G LTE, 802.11ac Wi-Fi and GPS L1/GLONASS 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

STANDARD CONFIGURATION							
Model	Cable	Connector	Mount	Housing Color			
GLHPDLTEMIMO-LTB	Two-17 feet Pro-Flex™ Plus 195 (4G LTE) Two-17 feet Pro-Flex™ Plus 195 (802.11ac Wi-Fi) One-17 feet RG-174/U (GNSS)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GNSS)	1-inch hole, 3/4-inch long (.75") zinc stud mount with jam nut	Black			
GLHPDLTEMIMO-LTW	Two-17 feet Pro-Flex™ Plus 195 (4G LTE) Two-17 feet Pro-Flex™ Plus 195 (802.11ac Wi-Fi) One-17 feet RG-174/U (GNSS)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GNSS)	1-inch hole, 3/4-inch long (.75") zinc stud mount with jam nut	White			
GLHPDM3-LTB	Two-17 feet Pro-Flex™ Plus 195 (4G LTE) Three-17 feet Pro-Flex™ Plus 195 (802.11ac Wi-Fi) One-17 feet RG-174/U (GNSS)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GNSS)	1-inch hole, 3/4-inch long (.75") zinc stud mount with jam nut	Black			
GLHPDM3-LTW	Two-17 feet Pro-Flex™ Plus 195 (4G LTE) Three-17 feet Pro-Flex™ Plus 195 (802.11ac Wi-Fi) One-17 feet RG-174/U (GNSS)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GNSS)	1-inch hole, 3/4-inch long (.75") zinc stud mount with jam nut	White			

ELECTRICAL SPECIFICATIONS - RF ANTENNA							
Model	Elements	Operating Frequencies	Polarization	Nominal Impedance	Gain** (typical)	Maximum Power	VSWR***
GLHPDLTEMIMO-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
GLHPDLTEMIMO-LTW	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
GLHPDM3-LTB	4 G LTE Elements (2 each), Wi-Fi Elements (3 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
GLHPDM3-LTW	4 G LTE Elements (2 each), Wi-Fi Elements (3 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

<sup>\*</sup> 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, VSWR < 2:1 698-960MHz, < 2:1 1710-2170MHz, and < 2.5:1 2300-2700MHz.

\*\*\*\* Consult Customer Service for other connector requirements. \*\*\*\*\* For white radome option, add suffix "W" to the part number (i.e. GLHPDLTEMIMO-LTW)



**GLHPDLTEMIMO-LT** 

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## **ELECTRICAL SPECIFICATIONS - GNSS ANTENNA**

Frequency Range	Amplifier Gain	Nominal Impedance	Output VSWR	DC Current	DC Voltage	Noise Figure
1565-1608 MHz	@ 3.0 VDC: 26 dB (typical)	50 ohms	2.0:1 (maximum)	25 mA (typical)	2.8-6.0 V (operating) ≤ 12.0 V (survivability)	< 2.0 dB (typical)

### **ELECTRICAL SPECIFICATIONS - GNSS ANTENNA, continued**

Out-of-Band Rejection	Nominal Gain	Polarization
$f0 = 1586 \text{ MHz} / f0 \pm 50 \text{ MHz}$ : $\geq 60 \text{ dBc} / f0 \pm 60 \text{ MHz}$ : $\geq 70 \text{ dBc}$	3 dBic @ 90° / -2 dBic @ 20°	Right hand circular

### **MECHANICAL SPECIFICATIONS**

Dimensions	Radome	Operating/Storage	Gasket Design & Construction
(W x H)	Construction	Temperature	
4.05 W x 3.46 H in (10.3 x 8.8 cm)	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.