

LTE MIMO, 802.11n High Rejection GNSS GPS/GLONASS Multiband Antennas

PCTEL's SkyLink™ LTE MIMO antennas provide optimal 4G LTE and dual-band 802.11n Wi-Fi coverage in a single multi-port, low profile housing. The antennas also incorporate PCTEL's SkyLink™ unique high rejection GPS/Glonass element for optimal performance and support of carrier voice and data networks.

Features

- No tune, multiband coverage: dual 4G LTE, dual or triple 802.11n Wi-Fi, GPS L1, and GLONASS L1 frequencies
- Magnetically mounted using heavy duty internal rare earth magnets
- Rubber pad on the bottom of the antenna prevents slippage and protects the mounting surface
- Attractive low profile housing for added overhead clearance
- IP67 compliant design provides maximum protection against water or dust ingress under severe environmental conditions
- High performance, low loss cable and high quality connectors for maximum RF system efficiency
- UV resistant black or white housing options complement most vehicular aesthetic requirements



GLHPDLTEMIMO-SF-MM



BGLHPDLTEMIMO-SF-MM

Low Noise Amplifier Specifications

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

GNSS Antenna Element Specifications

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



Electrical Specifications - RF Antennas

Model	Elements	Operating Frequencies	Polarization	Nominal Impedance	Gain* (typical)	Maximum Power	VSWR**
GLHPDLTEMIMO-SF-MM BGLHPDLTEMIMO-SF-MM	4 G LTE Elements (2 each) 802.11n Dual-Band Wi-Fi Elements (2 each)	698-960 MHz 1710-2170 MHz 2300-2700 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
GLHPDLTE-SF-MM BGLHPDLTE-SF-MM	4 G LTE Elements (2 each)	698-960 MHz 1710-2170 MHz 2300-2700 MHz	Vertical, linear	50 ohms	2.5 dBi	50 watts	< 2.0:1
GLHPDM3-MM BGLHPDM3-MM	4 G LTE Elements (2 each) 802.11n Dual-Band Wi-Fi Elements (3 each)	698-960 MHz 1710-2170 MHz 2300-2700 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

Mechanical Specifications

Model	Dimensions (OD x H)	Coax	Connectors***	Gasket Design & Construction
GLHPDLTEMIMO-SF-MM BGLHPDLTEMIMO-SF-MM	5.1 x 3.6 in (130 x 92 mm)	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 Glonass Element)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GPS Glonass)	Anti-skid liner installed at contact surface to ensure a high friction and mar-free magnetic mount.
GLHPDLTE-SF-MM BGLHPDLTE-SF-MM	5.1 x 3.6 in (130 x 92 mm)	Two-17 feet Pro-Flex Plus 195 (4G LTE Elements) One-17 feet RG-174/U (GPS L1 Element)	SMA Plug (LTE) SMA Plug (GPS)	
GLHPDM3-MM BGLHPDM3-MM	5.1 x 3.6 in (130 x 92 mm)	Two-15 feet Pro-Flex Plus 195 (4G LTE Elements) Three-15 feet Pro-Flex Plus 195 (802.11n Wi-Fi Elements) One-15 feet RG-174/U (GPS Glonass Element)	SMA Plug (LTE) Reverse Polarity SMA Plug (Wi-Fi) SMA Plug (GPS Glonass)	

Mechanical & Environmental Specifications

Part Number	Radome Color	Radome & Baseplate Construction	Mounting Method	Operating/Storage Temperature	Ingress Protection
GLHPDLTEMIMO-SF-MM	White	UV Stable Rugged Thermoplastics	Magnetic Mount	-40° C to +85° C	IP67***
BGLHPDLTEMIMO-SF-MM	Black				
GLHPDLTE-SF-MM	White				
BGLHPDLTE-SF-MM	Black				
GLHPDM3-MM	White				
BGLHPDM3-MM	Black				

* Measured on a 4-foot diameter ground plane. Gain value is measured at the base of the antenna (no cable loss included).

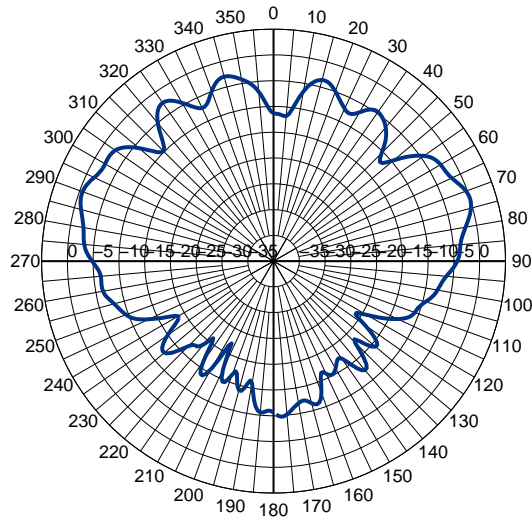
** VSWR < 2:1 across all bands when measured on 1-ft diameter ground plane with 17-ft cable. When measured on 1-ft diameter ground plane with 1-ft cable, VSWR < 2:1 698-960MHz, <2:1 1710-2170MHz, and < 2.5:1 2300-2700MHz.

*** Consult Customer Service for other connector requirements.

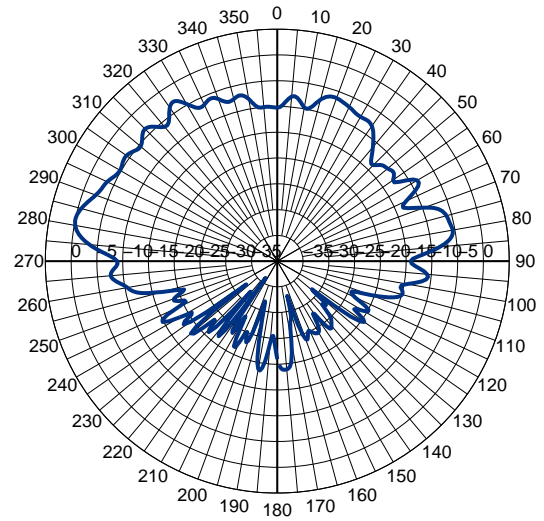
**** When properly installed on a vehicle rooftop per PCTEL installation instructions.



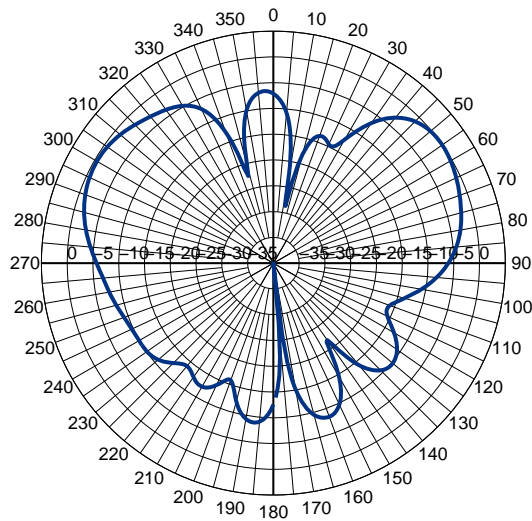
2.4GHz Wi-Fi



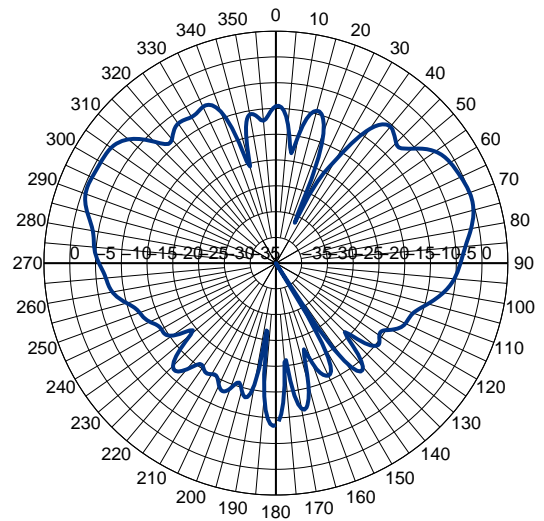
5GHz Wi-Fi



Lowband Cellular/LTE



Highband Cellular/LTE



NOTE: Elevation Patterns are normalized to 0dB.

