PCTEL®

5G & 4G Dual LTE with 802.11ac Option

The Coach[™] multi-band antenna platform supports the high speed requirements of complex RF communication systems used for Intelligent Transportation Systems (ITS), and IIoT applications. These antennas feature two 5G elements compatible with the world's leading cellular routers that support 600 MHz to 6 GHz frequencies.

Features

- No tune, multi-band coverage: dual port 5G LTE elements; Wi-Fi options available
- 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*
- 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









BPCTHPDLTE-SF

STANDARD CONFIGURATION

| Model | Connector | Cable | Mount | | | | |
|------------------|-------------------------------|--|---|--|--|--|--|
| PCTHPDLTEMIMO-SF | MSMA (LTE) RP-MSMA (Wi-Fi) | Two-17 feet Pro-Flex™ Plus 195 (LTE) Two-17 feet Pro-Flex™ Plus 195 (Wi-Fi) | | | | | |
| PCTHPDLTE-SF | MSMA (LTE) | Two-17 feet Pro-Flex™ Plus 195 (LTE) | Built-in 3/4-inch long (.75″) zinc stud mount with jam nut for 1-inch hole | | | | |
| PCTHPDLTEWIFI-SF | MSMA (LTE) RP-MSMA (Wi-Fi) | Two-17 feet Pro-Flex™ Plus 195 (LTE) One-17 feet Pro-Flex™ Plus 195 (Wi-Fi) | | | | | |

ELECTRICAL SPECIFICATIONS - RF ANTENNAS

| | Frequ Range | iency (MHz) | | 6 | iain (dB)* | ** | Efficiency*** | | | | |
|-------------|----------------|----------------|-------|------|------------|--------------|---------------|--------------|--------------|----------------------|------------------|
| Elements | Low | High | SWR** | Max. | Typical | Range (±) | Avg. | Range (±) | Polarization | Nominal Impedance | Maximum Power |
| | 617 | 698 | 2.4 | 3.8 | 2.4 | 1.4 | 55% | 19% | | | |
| | 698 | 802 | 1.7 | 5.2 | 4.1 | 1.1 | 68% | 6% | | | |
| | 824 | 960 | 1.3 | 6.2 | 4.3 | 1.9 | 61% | 12% | | | |
| LTE 1&2 | 1710 | 2200 | 1.5 | 7.5 | 6.0 | 1.5 | 78% | 11% | Linear | 50 ohms | 50 watts |
| | 2300 | 2690 | 1.6 | 8.9 | 7.1 | 1.8 | 78% | 8% | | | |
| | 3400 | 3800 | 1.9 | 5.4 | 4.7 | 0.6 | 57% | 5% | | | |
| | 5150 | 5950 | 1.7 | 8.1 | 6.8 | 1.3 | 59% | 10% | | | |
| | 2400 | 2500 | 1.1 | 9.4 | 9.0 | 0.4 | 81% | 3% | | | |
| Wi-Fi (all) | 4900 | 5925 | 1.4 | 9.4 | 8.9 | 0.5 | 70% | 12% | | | |

* When installed on a sealed surface according to PCTEL installation instructions

** VSWR measured with 17-ft of cable and 2-ft ground plane *** Gain and efficiency values measured at the base of the antenna (no cable included)



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ISOLATION SPECIFICATIONS

Minimum Isolation (dB) (measured with 17-ft of cable and 2-ft ground plane)

| Elements | LTE Prim | ary (1&2) | Wi-Fi | | |
|----------|--|---------------|--|----------------------|--|
| LTE 1&2 | 617-960MHz 1.71-2.7GHz 3.3-5.9 GHz | 9 15 32 | 617-960MHz 1.71-2.7GHz 3.3-5.9 GHz | 20.0 17.0 35.0 | |
| Wi-Fi | | | 2.4-2.5GHz 4.9-5.9GHz | 25.0 32.0 | |

| MECHANICAL & ENVIRONMENTAL SPECIFICATIONS | | | | | | |
|---|---------------------|--|----------------------|----------------------------|--|--|
| Dimensions | Weight | Gasket Design & Construction | Temperature Range | Radome Construction | | |
| 5.2 x 3.4 in (132 x 94 mm) | 2.3 lbs (1.0 kg) | 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. | -40°C to +85°C | UV-Stable CYCOLOY C6200 | | |

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