

Trooper™ Multiband High Rejection GLONASS Antenna

Combination Antennas - GNSS, Cellular and Wi-Fi

GLLTEWIFI-TB



Description

High-performance multiband LTE and Wi-Fi antennas with high rejection GLONASS and compact footprint for Intelligent Transportation Systems and Industrial IoT applications.

Technologies

- 4G LTE
- Wi-Fi
- GPS L1 / GLONASS

Features

- No tune, multiband coverage
- Superior out-of-band rejection
- Easy installation and/or replacement
- Weather proof, IP67 housing
- Low-profile design



Trooper™ Multiband High Rejection GLONASS Antenna

Combination Antennas - GNSS, Cellular and Wi-Fi

The Trooper™ GLLTEWIFI-TB antenna provides optimal 4G LTE and dual-band Wi-Fi coverage in a single, low-profile housing. Its compact footprint makes it ideal for installation on surfaces with limited surface space, including vehicular and machine-to-machine applications.

Features

- No tune, multiband coverage – 4G LTE, dual band Wi-Fi and GPS L1/GLONASS frequencies
- Superior out-of-band rejection via proprietary filtering design allows wideband coverage for all GNSS frequencies
- Metal 3/4-inch stud mount with slotted jam nut provides single cable exit for easy installation and/or replacement
- Low-profile housing – Minimizes antenna visibility
- IP67 compliant design provides maximum protection against water or dust ingress under severe environmental conditions¹
- UV-resistant housing complements most vehicular aesthetic requirements

Applications

- Installations with limited surface space
- Public safety vehicles
- Intelligent Transportation Systems (ITS)
- Machine-to-machine

Certifications



¹ When installed according to PCTEL's installation instructions.

Trooper™ Multiband High Rejection GLONASS Antenna

Combination Antennas - GNSS, Cellular and Wi-Fi

Standard Configurations

Model	Elements	Cable	Connector ²	Mount	Housing Color
GLLTEWIFI-TB	4G LTE (1) Wi-Fi (1) GNSS (1)	One-4 meter RG-58 (DBL) (4G LTE) One-4 meter RG-58 (DBL) (Wi-Fi) One-17 feet RG-174/U (GNSS)	SMA Plug (4G LTE) SMA Plug (Wi-Fi) SMA Plug (GNSS)	1-inch (25.4 mm) hole, 3/4-inch long (19.05 mm) zinc stud mount with jam nut	Black

Electrical Specifications – RF Antennas

Element	Frequency Ranges	Gain ³ (Typical)	Maximum VSWR ⁴	Polarization	Nominal Power
4G LTE (1)	698-960 MHz/1710-2700 MHz	2.5 dBi	< 2.0:1	Vertical, linear	50 watts
Wi-Fi (1)	2.4-2.5 GHz/4.9-5.9 GHz	3-4 dBi			

Electrical Specifications – GNSS Antenna

Frequency Range	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
Nominal Gain	3 dBic @ 90° -2 dBic @ 20°
Polarization	Right hand circular
Nominal Impedance	50 ohms

Mechanical Specifications

Physical

Dimensions (W x H)	4.05 W x 3.46 H inches (10.3 x 8.8 cm)
Weight	2.3 lbs (36.8 oz)
Radome Construction	UV-Stable Rugged Thermoplastics
Operating / Storage Temperature	-40°C to +85°C
Gasket Design & Construction	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.

² Consult Customer Service for other connector options.

³ Measured on a 4-foot diameter ground plane. Gain value is measured at the base of the antenna (no cable loss included).

⁴ 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.

CONTACT US

**For more information about
this product contact your
sales representative or visit
> pctel.com/antenna-products**

Solving Complex Wireless Challenges

PCTEL, an Amphenol company, is a leading global provider of wireless technology solutions, including purpose-built antenna systems and test and measurement products. Trusted by our customers for decades, we solve complex wireless challenges to help organizations stay connected, transform, and grow.



PCTEL, Inc.

T: +1 630 372 6800 | pctel.com

Specifications subject to change without notice. PCTEL® and Trooper™ are trademarks or registered trademarks of PCTEL, Inc. 3M® is a registered trademark of 3M. ©2026 PCTEL, Inc. All rights reserved. (August 2026)