

GNSMB-COV Ultra Low-Profile Multi-Band MIMO Antenna with High Rejection GNSS



The GNSMB-COV multi-band antenna provides optimal MIMO 4G LTE and single port 802.11ac Wi-Fi coverage in a covert, low-profile housing. The antenna also incorporates PCTEL's unique high rejection GNSS technology for global guidance and support of carrier voice and data networks. Designed for heavy construction, this antenna will withstand the most rugged applications with a sub 1-inch height profile and conduit for ease in installation.

Features

- No tune, multi-band coverage: dual 4G LTE, Wi-Fi and GPS L1/Galileo E1/GLONASS L1/Beidou B1 frequencies
- Sub 1-inch height without magnet mount adapter
- IP67 highly ruggedized design provides maximum protection against water or dust ingress under severe environmental conditions*
- Proprietary filtering design allows wideband coverage while achieving superior out-of-band rejection for all GNSS frequencies
- Braided conduit for ease in installation



GNSMB-COV



STANDARD CONFIGURATION

Model	Cable	Connectors***	Mounting Method	Nominal Impedance
GNSMB-COV	Two-17 ft Pro-Flex™ Plus 195 (4G LTE Elements) One-17 ft Pro-Flex™ Plus 195 (802.11n Wi-Fi Element) One-17 ft RG-174/U (GNSS Element)	SMA Plug x2 (LTE) RP SMA Plug (Wi-Fi) SMA Plug (GNSS)	RP62 VHB Tape Mount (standard) or magnet mount adapter (-MAG)	50 ohms

ELECTRICAL SPECIFICATIONS - RF ANTENNAS

Model	Frequency Range	Elements	Polarization	Gain* (typ.)	Power Handling	VSWR**
GNSMB-COV	690-960 /1710-2170/2300-2700 MHz 2.4-2.495 GHz / 4.91-5.825 GHz	4G LTE Elements (2 each) Wi-Fi Element (1 each)	Vertical, linear	0-4 dBi (698-960MHz), 3-5 dBi (1710-2700MHz) 1-4 dBi (2.4-2.5GHz), 4-6 dBi (4.9-5.9GHz)	10 watts	< 2.0:1

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Model	Frequency Range	LNA Gain	Element Gain	VSWR	DC Current	DC Voltage	Noise Figure	Out-of-Band Rejection	Polarization
GNSMB-COV	1561-1608 MHz	26 dB (typ.) @3.0 VDC:	3 dBic @ 90° -2 dBic @ 20°	2.0:1 (max.)	25 mA (typ.)	2.7 (2.7-6.0V) (operating) ≤12.0V (survival)	2.0 dB (typ.)	f0 = 1586 MHz f0 ± 50 MHz: ≥ 60 dBc f0 ± 60 MHz: ≥ 70 dBc	Right Hand Circular

MECHANICAL SPECIFICATIONS AND ENVIRONMENTAL SPECIFICATIONS

Dimensions (L x W x H)	Housing Material	Temperature Range	Magnet Mount Adapter	Ingress Protection
5.9 x 5.2 x 0.98 in (151 x 132 x 25 mm)	Black, UV-Stable Rugged Thermoplastics	-40°C to +85°C	5.8 mm height 20 lbs pull strength	IP67

* Measured on a 4-foot diameter ground plane. Gain value is measured at the base of the antenna (0.5-ft cable loss included). ** VSWR < 2:1 across all bands when measured in free space with 17-ft cable (ARG-1162). When measured in free space with 0.5-ft cable, VSWR < 3.5:1 698-960MHz, <2:1 1710-2170MHz, and < 2.2:1 2300-2700MHz for 4GLTE, and VSWR <2.5:1 2.4-2.5GHz and <2:1 4.9-5.9GHz for WiFi. *** Consult Customer Service for other connector requirements.