

PR-LLPG508

PASSENGER RAIL ANTENNA (NFPA-130)

PRODUCT OVERVIEW

This multi-band antenna, PR-LLPG508, meets rail industry standard EN 50155 (environmental) and NFPA-130 fire safety requirements. Rail compliant cable conduit support is available as an option.

The 5-cable PR-LLPG508 passenger rail antennas include 2x Global 5G Sub-6 antennas, 2x WiFi antennas, and a GNSS antenna. This provides MIMO (multiple-input-multiple-output) coverage for both Cellular and WiFi.

This 5G Sub-6 antenna covers: 617-960 & 1710-6000 MHz. The WiFi 6 (802.11ax) element covers 2.4 & 5 GHz and is backward compatible with earlier generations of the 802.11 protocol. The GNSS element operates on GPS, Galileo, Glonass, QZSS, or Beidou at 1561, 1575, & 1602 MHz. Visit our [eStore](#) to purchase an Antenna online.

Electrical Specifications

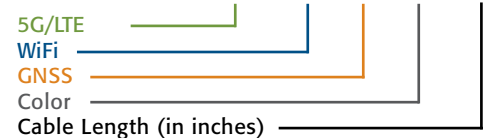
Frequency & Gain		617 - 700 MHz, 1 dBi 700 - 960 MHz, 3 dBi 1700 - 2700 MHz, 4 dBi 3400 - 4200 MHz, 6 dBi 4900 - 6000 MHz, 6 dBi
	5G/LTE Cables 1 - 2	
	WiFi Cables 3 - 4	2.4-2.5 GHz, 4 dBi 4.9-6.0 GHz, 5 dBi
	GNSS Cable 5	1561, 1575, & 1602 MHz, LNA 26 dB, 5 dBi (RHCP)
VSWR	< 2.5:1 VSWR	
Impedance	50 Ohm Nominal	
Power Rating	10 Watts	
GNSS	Amplifier Bias Voltage	2.7 to 5 VDC
	Gain	26 dB, 5 dBi
	Current	20 mA max, 10 mA typical

Mechanical Specifications

Radome Material & Color	PC Plastic, Available in Black
Radome Dimension	9.00" (228 mm) x 3.50" (89 mm) x 1.25" (31.8 mm) in Height
Standard Connectors	SMA Plugs (Male) for LTE/5G & GNSS, Rev Pol SMA Plugs for WiFi
Cables	15 Feet (4.5 m) Cables: LMR-195 FR for LTE/5G & WiFi, LMR-100-FR for GNSS, Other Lengths Available
Operating Temperature	-40° to +80° C
Mounting	Thru Hole, Ground Plane Dependent
Shock & Vibration	IEEE-1478, EN 50155, EN 61373, MIL-810G, TIA 329.2-C
Dust & Water Ingress	IP69K (Stud Mount, When Properly Mounted)
Flammability Rating	NFPA-130, EN 45545
RoHS Compliant	Yes



PR-LLPG508-91C91C91J91J71C-BLK-180



HIGHLIGHTS:

- Multiband: 2x 5G Sub-6, 2x WiFi 6, 1x GNSS
- 5G Cellular Coverage 617-6000 MHz
- Meets Rail Industry Standard EN 50155 and NFPA-130 Requirements
- Low Profile
- Made-in-the-USA & UK

RELATED MODELS:

- PR-LLP508 (GPS Model)
- PR-LTMG508 (Same Freq, LTM Model)
- PR-NXD-W (4x WiFi)

COMMON APPLICATIONS:

- Passenger Railroad
- Installation requiring EN 50155 and NFPA-130 compliance
- Advanced Multiband Modems
- Tall Vehicles with Height Restrictions
- Fixed Site with Vandalism Risks



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