PR-LLP-W Series

PASSENGER RAILROAD RATED LOW-PROFILE WIFI MIMO ANTENNA

PRODUCT OVERVIEW

The PR-LLP-W Series is a passenger railroad rated, low-profile, and high performance WiFi MIMO antenna platform for rail and transit applications requiring multiple WiFi 6E/7 connections in a single ground-plane-independent housing.

- **High-Density WiFi MIMO:** Available in 8x or 12x WiFi configurations for 2.4–2.5 GHz and 5.150–7.125 GHz WiFi 6E/7 Bluetooth coverage.
- **Passenger Rail Rated:** NFPA-130 plastic housing with IP67 ingress protection, shock/vibration ratings, and rail-focused flammability compliance.
- **Ground-Plane Independent:** Thru-hole mounting supports low-profile installation across railcar and transit surfaces.

Tested and trusted, Mobile Mark focuses on quality and leveraging the expertise of highly skilled professionals, specializing in customizable manufacturing solutions across North America and Europe. By combining advanced technologies with comprehensive team knowledge, we ensure tailored products that meet diverse needs, all delivered efficiently to exceed expectations.

To Purchase, visit www.TheAntennaStore.com.

Electrical Specifications	
Frequency & Gain	2.4 - 2.5 GHz & 5.150 - 7.125 GHz, 5 dBi Peak
Technology	WiFi 6E/7 Bluetooth
Polarization	Vertical
VSWR	< 2.5:1
Impedance	50 Ohm Nominal
Power Rating	10 Watts Max
Isolation	>17 dB standard

Mechanical Specifications	
Radome Material & Color	NFPA-130 Plastic, Available in Black or White
Radome Dimension	9.00" L x 3.50" W x 1.25" H (22.8 cm x 8.9 cm x 31.8 mm)
Standard Connectors	SMA Plugs (Male)
Cables	LMR-100FR, 12 in (30.5 cm)
Weight	1.0 lb (453 g)
Operating Temperature	-40° to +80° C
Mounting	7/8" (2.2 cm) Thru Hole Panel Thickness 0.5" (1.3 cm) max Ground Plane Independent
Water & Dust Ingress	IP67
Shock & Vibration	IEEE1478, EN61373, MIL-810G, TIA-329.2-C, EN50155
Flammability Rating	NFPA-130, UL94V0, EN45545-2
RoHS Compliant	Yes
Available Configurations	
12x WiFi	PR-LLP-W12-C-WHT-12
8x WiFi	PR-LLP-W8-C-WHT-12



HIGHLIGHTS:

- Covers WiFi 6E/7 & Bluetooth Frequencies
- Low-Profile Passenger Rail Design
- Compact MIMO Housing
- Ground-Plane Independent
- IP67 Water & Dust Ingress Rating
- Manufactured in North America & Europe

COMMON APPLICATIONS:

- Passenger Rail WiFi
- Onboard Passenger Connectivity
- Railcar Wireless Systems
- Transit Fleet Communications
- WiFi 6E/7 MIMO Installations
- Ground-Plane-Independent Vehicle Mounting

BANDS:

- WiFi / Bluetooth: 2.4–2.5 GHz
- WiFi 6E / WiFi 7: 5.150–7.125 GHz

US Headquarters +1.847.671.6690 • US/CA Toll Free +1.800.648.2800
European Facility +44.1543.459555 • www.MobileMark.com

Moving Wireless Forward®

► Subject to Change Without Notice Rev 1 CD-8/2026 © 2026 Mobile Mark, Inc.

► Email info@mobilemark.com (US) or enquiries@mobilemarkeurope.co.uk (UK)