



RADWIN TerraBridge

Delivering wireless Inter-carriage connectivity at 5G speeds

RADWIN TerraBridge provides continuous high-speed connectivity between train carriages to warrant end-to-end gigabit networks across any train.

TerraBridge is an exceptional 60GHz mmWave wireless connectivity solution that assures operational efficiency, ease of use and unparalleled flexibility when looking to upgrade onboard networks for trains.

Inter-carriage connectivity options available today have various limitations:

- » Existing mechanical couplers are occasionally bandwidth limited and provide no simple upgrade option (cost, space)
- » Dynamic train carriage composition causes high wear & tear to mechanical couplers, ultimately increasing maintenance costs
- » Current wireless solutions based on the 2.4 & 5GHz Wi-Fi spectrum are sensitive to interference from other onboard and in-station wireless access points
- » Other wireless solutions also include multiple components (radios, cables, and antennas) that can be cumbersome to install and maintain

TerraBridge Highlights:



5G speeds based on the 60GHz millimeter-wave, license free spectrum



1.5 Gbps throughput



Uniquely designed for railway applications



Minimal footprint, low visual impact



Minimal setup and configuration



Supports dynamic carriage composition



Ideal for short range connectivity



Easy to install, with zero maintenance

Enabling over 1Gbps per link, RADWIN's TerraBridge is ideal for wireless inter-carriage connectivity. This hand-sized, low-weight solution is easy to install and requires practically no maintenance at all.

The product is designed specifically for the railway industry, to assure a highly reliable connection, with minimal maintenance.

TerraBridge software:

- » Web based, easy to use management
- » Auto connect functionality
- » No need for pre-defined links

Technical highlights:

Throughput:	1.5 Gbps throughput
Latency:	Maximum<4msec; Average <2msec (for 90% load)
Power:	PoE Gbe interface, 802.3af
Connector:	M12 X-coded connector
Operating Temperatures:	-40° to 70°C / -40° to 158°F
Environmental:	IP-69K, NEMA-type 4
Railway standards:	EN50155, EN50121, EN61373, EN45545
Antenna:	Integrated inside the radio unit
Size (HxWxD):	12x12x2.25 cm / 4.7x4.7x1 in



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