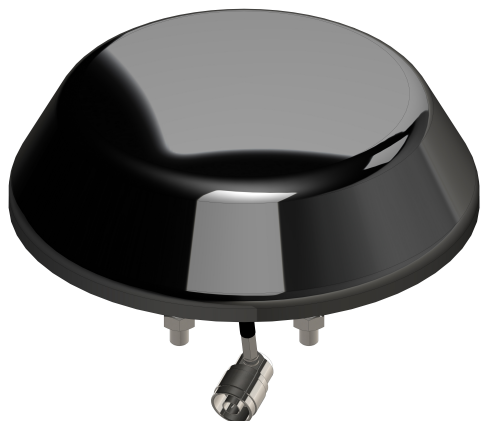


Antenna-Railway-2L2WG

Multiband train-antenna for mounting on trains with German EBA base certification, MIMO LTE, MIMO WiFi and GNSS



The Antenna-Railway-2LG is an omnidirectional multiband train antenna with certification according to railway standard EN 50155 for mounting on trains and vehicles. The antenna is designed for 2G, 3G, 4G and also GSM-R networks, for WiFi and also GNSS. With protection level IPX9k and supported temperature range from -60 °C to +80 °C, the antenna can be used on top of vehicles for train to ground communications and much more.

The antenna combines multiple antennas in a single housing and thus supports MIMO LTE/UMTS/GSM/GSM-R, MIMO WiFi 2.4/5 GHz and GNSS (GPS & GLONASS) with amplifier. The antenna can be mounted permanently with six bolts and 5 included 3m cables allow a flexible positioning.

Features

- MIMO WiFi 2.4/5 GHz
- MIMO LTE/UMTS/GSM/GSM-R
- Passive GNSS
- EN 50155 certified

Frequencies

- 694 - 960 MHz
- 1710 - 2690 MHz
- 1560 - 1606 MHz
- 2400 - 2500 MHz
- 5180 - 5835 MHz

Specifications

Supported Technologies	MIMO LTE/UMTS/GSM/GSM-R MIMO WiFi 2.4 GHz / MIMO WiFi 5.8 GHz Passive GNSS (GPS & GLONASS)
Cellular	Frequencies: 694 - 960 / 1710 - 2690 MHz Gain: 7,1 dBi (LTE 700) / 5,6 dBi (GSM 900) / 7,8 dBi (UMTS) VSWR: $\leq 1,8$ Impedance: 50 Ohm Radiation: Omnidirectional; vertical, horizontal polarization Connectors: 2x TNC male Cables: 2x FRNC 3m
GNSS	Frequencies: 1560 - 1606 MHz Type: Passive Gain: 5,1 dBi VSWR: $\leq 1,8$ typ. Impedance: 50 Ohm Radiation: Omnidirectional; right-hand circular polarization Connector: N (m) Cable: RG 223 FRNC; 0.3m
GNSS Amplifier	Power: 2.5 - 5 V Gain: 25 dB typ. Impedance: 50 Ohm Connector: TNC male Cable: FRNC 3m
WiFi 1	Frequencies: 2400 - 2500 / 5180 - 5835 MHz Gain: 8 dBi (WLAN 2.4) / 10 dBi (WLAN 5.8) VSWR: $\leq 1,8$ typ. Impedance: 50 Ohm Radiation: Omnidirectional; cross polarization Connector: TNC male Cable: FRNC 3m
WiFi 2	Frequencies: 2400 - 2500 / 5180 - 5835 MHz Gain: 10,3 dBi (WLAN 2.4) / 9,6 dBi (WLAN 5.8) VSWR: $\leq 1,8$ typ. Impedance: 50 Ohm Radiation: Omnidirectional; cross polarization Connector: TNC male Cable: FRNC 3m
Certifications	EN 50155, EN 50122, EN 50124, IEC 60068, IEC 61373, ISO 20653, ISO 9227, EN 45545-2, DIN 5510-2, NF F 16-102 2014/30/EU; 2006/28/EC; 2002/95/EC
Protection level	Plastic case UV-resistance, waterproof IPX9k
Temperature range	-60 °C to +80 °C
Environment	Outdoor
Color	Black or customized (all RAL types)
Dimensions	D: 200 mm H: 60 mm
Mounting	6 bolts on pitch circle 110 mm, M8 x 40 mm, 60° Torque: 12 Nm
Order number	Antenna-Railway-2L2WG