

# Railway rooftop antennas

HUBER+SUHNER offers the most comprehensive range of train rooftop antennas, supporting cellular, Wi-Fi, GSM-R, PTC, and multiband GNSS. Engineered for railway needs, they ensure high current and voltage protection.

#### **SENCITY®** Rail ACTIVE



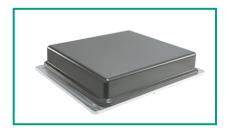
The first-of-its-kind omni-directional, broadband rooftop antenna has an integrated connected compute module, cellular radios, Wi-Fi access point and GNSS receiver. It provides power and data via just one ethernet cable.

#### **SENCITY®** Rail



Omni-directional railway roof-top antenna family for all types of trains. It can be used as the onboard antenna in deployment for Railway communication train-to-ground systems.

#### **SENCITY® Rail MIMO+**



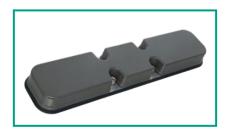
Dual-Polarised, Omnidirectional Cellular 2×2 and 4×4 MIMO rooftop antennas are designed for wireless applications.

# **SENCITY®** Rail MIMO



Omni-directional MIMO broadband railway rooftop antennas for all types of trains.

# **SENCITY®** Rail low profile



Omni-directional broadband MIMO and SISO rooftop antennas for all types of trains. Ultra low profile design with a maximum height of only 40 mm.

# **SENCITY® Rail MULTI**



Omni-directional broadband 4×4 MIMO rooftop antennas are designed for wireless applications to be used for train-to-ground systems.



#### **SENCITY® OMNI-SR Slim**



Compact omni-directional MIMO in-carriage antenna for Wi-Fi applications, used as the wireless interface in Wi-Fi communication systems such as Railway passenger Wi-Fi.

#### **SENCITY® SPOT-SR**



Compact directional railway in-carriage antenna family for all types of trains.

#### **SENCITY® OMNI-SR Dome**



Omni-directional SISO railway in-carriage antenna family for all types of trains.

# SENCITY® OMNI-SR



Omni-directional MIMO railway in-carriage antenna family are suitable for all types of trains.

# **SENCITY®** Rail ACTIVE



Omni-directional MIMO railway in-carriage antenna + access point suitable for all types of trains. Compact form factor allows easy deployment of Wi-Fi systems on trains, no RF cables required.



special requirements of railway applications including environmental and fire certifications.

# **SENCITY® SPOT-S**



Compact directional railway trackside antenna family for all types of trains.

# SENCITY® SPOT-M



Directional high gain (14dBi) Wi-Fi band antenna for indoor and outdoor applications.

# **SENCITY® SPOT-L**



Directional high gain (23dBi) Wi-Fi band antenna for indoor and outdoor applications.

#### SENCITY® SPOT-M YAGI



Directional high gain (19dBi) Wi-Fi antenna for railway trackside and tunnel applications.

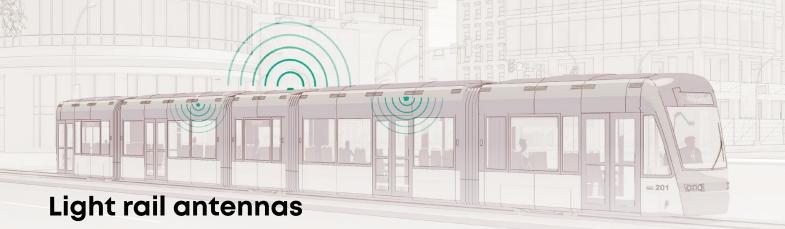
# Railway inter-carriage antennas

HUBER+SUHNER has developed a specialized antenna designed to support wireless inter-carriage coupling with advanced antenna technology to prevent interference with other systems.

# **SENCITY®** Bridge



Directional railway inter-carriage antennas for high-throughput data transmission between train carriages which require no manual configuration during train operation.



SENCITY® TRAM antennas are developed to provide an all-in-one wireless solution for trams, metros and other vehicles requiring railway certifications such as EN50155, EN45545 and NFPA-130. They are multi-application antennas for cellular, Wi-Fi, Tetra, UHF and GNSS.

#### **SENCITY® Tram MIMO**



Supports 2×2 MIMO systems by use of several radiating elements within one common housing or 4×4 MIMO systems by installing multiple antennas apart from each other for an optimised performance.

#### **SENCITY®** Tram



Offers different combinations of radiating elements efficiently designed to fit into a single compact housing.

#### **SENCITY® Tram MULTI**



Designed for 4×4 MIMO operation in cellular, 8×8 MIMO in Wi-Fi networks. It also offers a variety of combinations of up to 9 radiators within one housing and comes with an GNSS option for L1, L2, L5 operation.

# SENCITY® Rail in-carriage antenna portfolio (see p. 3)

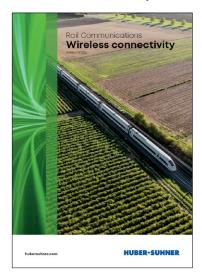


HUBER+SUHNER offers a comprehensive portfolio of antennas for installation inside trains, covering all Wi-Fi bands, as well as cellular services.

# **Accessories**

|   | Product name   | Product ID   | Product name  | Product ID   |
|---|--|--------------|---|--------------|
|   | SENCITY® Rail<br>MIMO+ antenna<br>adaptor plate from<br>HUBER+SUHNER<br>footprint        | 9091.99.0287 | SENCITY® Rail antenna grounding kit   | 9091.99.0235 |
|   | SENCITY® Rail MIMO+<br>Antenna Adaptor<br>Plate from Kathrein /<br>Low profile Footprint | 9091.99.0291 | SENCITY® Rail flexible<br>mounting plate for<br>surface thickness of<br>0.5 – 12 mm | 9091.99.0261 |
|   | SENCITY® Rail<br>aluminium mounting<br>plate for MULTI<br>antennas (full size)           | 9091.99.0263 | SENCITY® Rail<br>antenna adaptor<br>plate from Kathrein<br>footprint                | 9091.99.0252 |
|   | SENCITY® Rail steel<br>mounting plate for<br>MULTI antennas (full<br>size)               | 9091.99.0264 | Bracket for SENCITY® SPOT-S antenna   | 9091.99.0267 |
|   | SENCITY® Rail<br>aluminium mounting<br>plate for MULTI<br>antennas (half size)           | 9091.99.0269 | Bracket for SENCITY® SPOT-M antenna  Bracket for SENCITY®                           | 9091.99.0201 |
|   | SENCITY® Rail steel<br>mounting plate for<br>MULTI antennas<br>(half size)               | 9091.99.0270 | SPOT-L antenna  TETRA Stick antenna 380 – 430 MHz                                   | 9091.99.0247 |
|   | SENCITY® Low Noise<br>Amplifier GNSS (GPS,<br>GLONASS, BeiDou,<br>Galileo)               | 86010142     | TETRA Stick antenna 450 – 470 MHz  TETRA Stick antenna                              | 9091.99.0248 |
|   | SENCITY® Rail M8<br>sealing washer kit   | 9091.99.0256 | 410 – 430 MHz   | 9091.99.0234 |
| 0 | SENCITY® Rail M10<br>Sealing Washer Kit  | 9091.99.0257 | FM radio stick<br>antenna 88 – 108<br>MHz   | 9091.99.0246 |
| 0 | SENCITY® Rail<br>antenna conduit<br>support kit  | 9091.99.0236 | Metal ground plane foil 0.6×0.6m  | 9091.99.0250 |

# Download the Rail Communications Wireless connectivity catalogue





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HUBER+SUHNER is certified to ISO 9001, ISO 14001, ISO 45001, EN/AS 9100, IATF 16949 and ISO/TS 22163-IRIS.