

HUBER+SUHNER® DATA SHEET

Sencity Rail Antenna: 1399.17.0044

Rev.: AT



SWA-0859/360/4/0/DFRX30

Description

Railway rooftop antenna: GSM 900, GSM 1800, GSM 1900, UMTS, 2.4, 3.5, 5.3 and 5.8 GHz Bands and GPS/Galileo incl. LNA. Rugged design, meets EN 50155 railway standard. Embedded GPS antenna with integrated LNA. Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, CEN/TS 45545 (2009) Works also on non-metallic surfaces.



Product Configuration

Technical Data

Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	870 - 960	1710 - 2170	2400 - 2700	3400 - 3700
VSWR	1.5	1.5	1.5	1.5
Gain (dBi)	6	8.5	9.5	9.5

	Band 5
Frequency (MHz)	5150 - 5875
VSWR	2
Gain	8.5 dBi

General Data

Nominal impedance	50 Ω
IMD level	143 dBc at carrier power 2x 30 dBm
DC grounded	Yes
Polarisation	vertical
Connector	N, jack (female), bottom
Composite power max.	100 W at ambient temperature 50 °C
Ground plane:	Indicated VSWR values are also valid for installations on non-metallic surfaces (no specific ground plane requirements).

Electrical Data (GPS)

Frequency (MHz)	1574.397 - 1576.443
VSWR	1.6
Nominal impedance	50 Ω
Polarisation	circular right
Connector	N, jack (female)
LNA noise figure	2.7 dB
LNA current consumption	25 mA
Out of band rejection 1	20 dB
Total gain:	33dBi
LNA Input voltage range:	3...5 V
Note	Values for LNA power consumption, noise figure and gain are given for a 5V operating voltage and may differ slightly for a lower voltage

Mechanical Data

Dimensions (mm)	90 x 100 x 260 (Height x Width x Depth)
Weight	1.2 kg
Wind speed	survival: 500km/h, operational: 250 km/h

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

WAIVER!

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



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High-current-protection: Designed acc. to UIC 533, DC-grounded antenna element (protection against lightning and short circuit with catenary lines(40kA/0.1s).
Corrosion: Low corrosion design acc. to MIL-F-14072(E).

Environmental Data

Environmental conditions outdoor
Operation temperature (°C) -40 to 85
Storage temperature (°C) -40 to 85
Transport temperature (°C) -40 to 85
IP rating IP 68
Solar radiation DIN 75220
Environmental tests: EN 50155:2001
Flammability rating DIN 5510-2, BS 6853, NF F16-101/102, CEN/TS 45545 (2009)

Material Data

Radome colour RAL 7043 (dark grey)
Radome material ASA_SAN
Back plate/base plate colour RAL 7043 (dark grey)
Back plate/base plate material Aluminium

Related Products

9091.99.0189 12mm adapter plate for Sencity Rail antenna
9091.99.0196 16mm adapter plate for Sencity Rail antenna

Related Documents

Mounting instruction DOC-0000197864
Painting instruction DOC-0000256180
Security instruction DOC-0000278984
Outline drawing1 DOU-00061635.1
3D-model (Step) DOC-0000252380

Additional Information

This product meets the Deutsche Bahn specifications for rolling stock equipment.

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