

HUBER+SUHNER® DATA SHEET

Sencity Rail Antenna: 1399.99.0032

Rev.: W



SWA-0825/360/5/30/DF

Description

Railway rooftop antenna for GSM 900, GSM 1800, GSM 1900, UMTS, LTE and WiFi 2.4 GHz Band communication.
Embedded GPS antenna.
Rugged design, meets EN 50155 railway standard.
Extremely low profile (40mm).
Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, CEN/TS 45545 (2009)



Product Configuration

Technical Data

Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	790 - 806	806 - 870	870 - 960	1710 - 2170
VSWR	2.2	1.8	1.5	1.8
Gain (dBi)	5	5	5	6

	Band 5	Band 6
Frequency (MHz)	2400 - 2500	2500 - 2700
VSWR	1.9	2.2
Gain (dBi)	6	6

General Data

Nominal impedance 50 Ω
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 valid for a metallic ground plane of 0.2 x 0.2m or larger.

Electrical Data (GPS)

Frequency (MHz) 1574.397 - 1576.443
VSWR 1.5
Nominal impedance 50 Ω
Polarisation circular right
Antenna gain at 90° elevation 7 dBi
Connector TNC, plug (male)
Connector: pigtail, using EF316D cable with 0.14m length.

Warning: The center conductor of the GPS antenna is grounded (DC short circuit) and therefore, precautions should be taken with receivers providing a DC power supply for active antennas.

Mechanical Data

Dimensions (mm) 40 x 100 x 145 (Height x Width x Depth)
Weight 0.527 kg
Wind speed survival: 500km/h, operational: 500 km/h
High-current-protection: Designed acc. to UIC 533, DC-grounded antenna element (protection against lightning and short circuit with catenary lines(40kA/0.1s).

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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Corrosion: Low corrosion design acc. to MIL-F-14072(E).
Mounting: Shall be installed in longitudinal position to the wind/driving direction.

Environmental Data

Environmental conditions outdoor
Operation temperature (°C) -40 to 85
Storage temperature (°C) -40 to 85
IP rating IP 69K
Solar radiation DIN 75220
RoHS 2002/95/EC compliant
Environmental tests: EN 50155:2007
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 material Aluminium

Related Products

9090.99.0062 Sencity Rail Mounting plate ***Customer specific***

Related Documents

Mounting instruction DOC-0000311051
Painting instruction DOC-0000256180
Security instruction DOC-0000278984
Outline drawing1 DOU-00133573
3D-model (Step) DOC-0000293611

Additional Information

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

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