HUBER+SUHNER® DATA SHEET Sencity Rail Antenna: 1399.99.0037



SWA-0825/360/5/30/DFRX30

Description

Railway rooftop antenna for GSM 900, GSM 1800, GSM 1900,

UMTS, LTE and WiFi 2.4 GHz Band communication.

Embedded GPS antenna with LNA.

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

 $\begin{array}{lll} \mbox{Nominal impedance} & \mbox{50} \ \Omega \\ \mbox{DC grounded} & \mbox{Yes} \\ \mbox{Polarisation} & \mbox{vertical} \\ \end{array}$

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

 $\begin{array}{lll} \text{VSWR} & 1.8 \\ \text{Nominal impedance} & 50 \ \Omega \\ \text{Polarisation} & \text{circular right} \\ \text{Connector} & \text{TNC, plug (male)} \\ \text{Connector: pigtail, using EF316D cable with 0.14m length} \end{array}$

LNA noise figure 1.8 dB
LNA current consumption 30 mA
LNA Input voltage range 3...5V
Total gain @90° elevation 34dBiC

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 EN 50121-3-2:2001, ETSI EN 301 489-1 V1.8.1 (2008-04)

Mechanical Data

Dimensions (mm) 40 x 100 x 145 (Height x Width x Depth)

Weight 0.535 kg

Wind speed survival: 500km/h, operational: 500 km/h

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

WAIVER!

EMC

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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HUBER+SUHNER AG RF Industrial 9100 Herisau, Switzerland Phone +41 (0)71 353 41 11 Fax +41 (0)71 353 45 90 www.hubersuhner.com

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(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).

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, 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-00144558

 3D-model (Step)
 DOC-0000329807

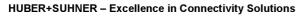
Additional Information

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

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

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