

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

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 1.8
 Nominal impedance 50 Ω
 Polarisation circular right
 Connector TNC, plug (male)
 Connector: pigtail, using EF316D cable with 0.14m length
 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
 EMC 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

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 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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Sencity Rail Antenna: 1399.99.0037

Rev.: AA



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. 4x composite sealing washers included for silicone-free sealing of the mounting screws.

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 (acrylic ester-styrene-acrylonitrile)
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.

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