

Sencity Rail MIMO Antenna 1399.17.0222

SWA-0759/360/6/0/MIMO

Description

Railway rooftop antenna for 2G/3G/4G cellular and WiFi 2.4 and 5 GHz bands.
 Supports 2x2 cellular MIMO for UMTS and LTE.
 Rugged design, meets EN 50155 railway standard.
 Fire retardant acc. to BS 6853, NF F16-101/102, prEN 45545 (2009).
 Works also on non-metallic surfaces.



Product Configuration

Technical Data

Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	698 - 790	790 - 960	1710 - 2170	2400 - 2700
VSWR	1.7	1.7	1.8	1.8
Gain (dBi)	5	5.5	8	8
Band 5				
Frequency (MHz)	4900 - 5935			
VSWR	2			
Gain (dBi)	8.5			

General Data

Nominal impedance	50 Ω
DC Grounding	Yes
Polarisation	vertical
Connector	N, jack (female), bottom
Pigtail	Type: ENVIROFLEX_142, Length: 0.2 m
Composite power max.	10 W at ambient temperature 50 °C

Ground plane: Indicated VSWR values are valid for a metallic ground plane of 0.5 x 0.5m or larger. In the 790-5935 MHz band, Indicated VSWR values are also valid for installations on non-metallic surfaces (no specific ground plane requirements).
 Isolation between ports 1+2 >15 dB (<1 GHz)
 >25 dB (>1.7 GHz)

The above listed parameters are valid for port 1 and port 2. Please refer to the outline drawing to identify port 1 and port 2.

Mechanical Data

Dimensions (mm)	81.6 x 102.5 x 352.5 (Height x Width x Depth)
Weight	1.5 kg

High-current-protection: Designed acc. to UIC 533, DC-grounded antenna element (protection against lightning and short circuit with catenary lines(40kA/0.125s, 70kA/0.05s).
 Corrosion: Low corrosion design acc. to MIL-DTL-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	-40 to 85 °C
Storage temperature	-55 to 85 °C

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Transport temperature	-40 to 85 °C
IP rating	IP69K
Solar radiation	DIN 75220
RoHS 2011/65/EC	compliant
REACH 2006/1907/EC	Compliant

Environmental tests EN 50155:2007

Flammability rating BS 6853, NF F16-101/102, prEN 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

9091.99.0235 Sencity Rail Antenna grounding kit

9091.99.0236 Sencity Rail conduit Support Kit

Related Documents

Mounting instruction	DOC-0000443802
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing1	DOU-00258855
3D-model	DOC-0000450919

Additional Information

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