

Sencity Rail Antenna 1399.17.0039

Description

Railway rooftop antenna: GSM 900, GSM 1800, GSM 1900, UMTS, 2.4, 3.5, 5.3 and 5.8 GHz Bands.

Supports Wi-Fi 4/Wi-Fi 6 bands.

Rugged design, meets EN 50155 railway standard.

Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2.

Works also on non-metallic surfaces.

Note: A new version of this product is available with extended frequency to cover the 5G Cellular bands - Article Number: 1399.99.0122 / 84071876.



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
Impedance (Ohm)	50	50	50	50
Gain (dBi)	6	8.5	9.5	9.5
Composite power max (W)	550	450	350	300
Ambient temperature (°C)	25	25	25	25
Band 5				
Frequency (MHz)	5150 - 5875			
VSWR	1.8			
Impedance (Ohm)	50			
Gain (dBi)	8.5			
Composite power max (W)	300			
Ambient temperature (°C)	25			

Ports

	Port 1
Connector	N, jack (female)
Polarization	vertical
DC grounded	Yes

Connections

	Band 1	Band 2	Band 3	Band 4	Band 5
Port 1	X	X	X	X	X

General Data

Ground plane: Indicated VSWR values are valid also for installations on non-metallic surfaces (no specific ground plane requirements).

Mechanical Data

Dimensions (mm) 90 x 100 x 260 (Height x Width x Depth)
Weight (kg) 1.1

High-current-protection: Designed acc. to UIC 533, DC-grounded antenna element (protection against lightning and short circuit with catenary lines(40kA/0.1s).

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Corrosion: Low corrosion design acc. to MIL-F-14072(E).

Mounting: Shall be installed in longitudinal position to wind/driving direction.

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	IP68
Flammability rating	DIN 5510
Solar radiation	DIN 75220
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
Lead-free soldered	yes
WEEE 2012/19/EU	no special marking needed
REACH 1907/2006/EC	compliant

Environmental tests: EN 50155:2004

Flammability rating DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2.

Material Data

Radome colour	RAL 7043 (dark grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
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-0000197320
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00016277
3D-model	DOC-0000252364

Additional Information

This product meets the Deutsche Bahn specifications for rolling stock equipment. Protected by Patents: US7327320B2, CN1765030B, AU2003218856A1, CA2521771C, SG114406, ZA200508290.