

## Sencity Rail Antenna 1309.17.0093

### Description

Railway rooftop antenna for GSM-R 900  
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.  
An alternative antenna type for GSM-R is 741009 / 84460303



### Product Configuration

#### Technical Data

##### Electrical Data

	Band 1
Frequency (MHz)	806 - 960
VSWR	1.5
Impedance (Ohm)	50
Gain (dBi)	6
Composite power max (W)	550
Ambient temperature (°C)	25

##### Ports

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

##### Connections

	Band 1
Port 1	X

##### General Data

IMD level 143 dBc at carrier power 2x dBm

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).

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  
Transport temperature (°C) -40 to 85

## Sencity Rail Antenna 1309.17.0093

IP rating	IP68
Flammability rating	DIN 5510
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 50155:2007

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### Material Data

Radome colour	RAL 7043 (dark grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
Back plate/base plate material	Aluminium

### Related Products

9091.99.0189 Adapter plate for antenna 1399.17.0043/ .0044

Allows the replacement of the antenna from another antenna mounting footprint without any modifications of the mounting holes located on the vehicle's roof. Using this interface, the mounting hole dimension for the connector has to be 17 ... 42 mm and the antenna secured using four M10 screws.

### Related Documents

Mounting instruction	DOC-0000197320
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00118290
3D-model	DOC-0000362879

### Additional Information

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