

## Sencity Rail Antenna 1399.17.0043

SWA-0859/360/4/0/DF

### Description

Railway rooftop antenna for GSM 900, GSM 1800, GSM 1900, UMTS, WiFi and WiMAX 2.4, 3.5, 5.3 and 5.8 GHz Bands.  
 Rugged design, meets EN 50155 railway standard.  
 Embedded GPS antenna.  
 Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2.  
 Works also on non-metallic surfaces.



### 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

  

	Band 5	Band 6
Band Name		GPS
Frequency (MHz)	5150 - 5875	1574.397 - 1576.443
VSWR	2	1.6
Impedance (Ohm)	50	50
Gain (dBi)	8.5	

#### Ports

	Port 1	Port 2
Connector	N, jack (female)	N, jack (female)
Polarization	vertical	circular right

#### Connections

	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6
Port 1	X	X	X	X	X	
Port 2						X

#### General Data

DC Grounding	Yes
Composite Power max (W)	100

Ground plane: Indicated VSWR values are also valid for installations on non-metallic surfaces (no specific ground plane requirements).  
 Warning: The center conductor of the GPS antenna is grounded (DC short circuit)

#### Mechanical Data

Dimensions (mm)	90 x 100 x 260 (Height x Width x Depth)
Weight (kg)	1.2

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
Solar radiation	DIN 75220
RoHS 2011/65/EU	compliant
REACH 2006/1907/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-0000197864
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00018445.1
3D-model	DOC-0000287112

### Additional Information

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