

Sencity Rail MIMO Low Profile Antenna 1399.17.0135

Description

Railway rooftop antenna for Cellular and WiFi bands.
 Supports 2x2 Cellular MIMO for 3G and 4G.
 Supports 2x2 WiFi MIMO in 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.
 Extremely low profile (40mm).



Product Configuration

Technical Data

Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	790 - 806	806 - 870	870 - 960	1350 - 2700
VSWR	2.2	1.9	1.5	1.9
Impedance (Ohm)	50	50	50	50
Gain (dBi)	5	5	5	5
Composite power max (W)	50	50	50	40
Ambient temperature (°C)	25	25	25	25
Port Isolation (dB)	18	18	18	18

	Band 5
Frequency (MHz)	4900 - 6425
VSWR	2
Impedance (Ohm)	50
Gain (dBi)	7.5
Composite power max (W)	30
Ambient temperature (°C)	25
Port Isolation (dB)	30

Ports

	Port 1	Port 2
Connector	N, jack (female)	N, jack (female)
Cable Type	ENVIROFLEX_316_D	ENVIROFLEX_316_D
Cable Length (m)	0.2	0.2
Polarization	vertical	vertical
DC grounded	Yes	Yes

Connections

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

General Data

Indicated VSWR and gain values are valid for a metallic ground plane of 0.5 x 1 m or larger.

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Mechanical Data

Dimensions (mm)	40 x 100 x 465 (Height x Width x Depth)
Weight (kg)	1.2

High-voltage-protection: no voltage on RF port, if catenary line touches antenna (EN 50124-1, 3.8 kVDC, 27.5 kVAC).

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)	-55 to 85
IP rating	IP69
Flammability rating	DIN 5510
Solar radiation	DIN 75220
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
WEEE 2012/19/EU	no special marking needed
REACH 1907/2006/EC	compliant

Environmental tests: EN 50155

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 material	Aluminium

Related Products

9090.99.0062 Sencity Rail Mounting plate xxxCustomer specificxxx

9091.99.0257 Sencity Rail - M10 sealing washer kit

Related Documents

Mounting instruction	DOC-0000714303
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00298127
3D-model	DOC-0000691532

Additional Information

This product meets the Deutsche Bahn specifications for rolling stock equipment. Protected by Patents: DE202015009331(U1), US10116056(B2), CN106663861B.