

## Sencity Rail Excel Antenna 1324.17.0089

### Description

Railway rooftop directional high gain antenna for WiFi-1 / Wi-Fi 3 bands.  
 Designed for use with dedicated trackside/tunnel antennas.  
 Supports the 2.4 to 2.65 GHz frequency bands.  
 Rugged design, meets EN 50155 railway standard.  
 Vertically polarised radiation pattern.  
 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)	2400 - 2550	2550 - 2590	2590 - 2630	2630 - 2650
VSWR	1.5	1.5	1.5	1.5
Impedance (Ohm)	50	50	50	50
Gain (dBi)	14.5	13.5	12.5	11.5
3dB beamwidth (h) (°)	40	33	32	31
3dB beamwidth (v) (°)	22	21	21	21
Composite power max (W)	350	350	350	350
Ambient temperature (°C)	25	25	25	25

##### Ports

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

##### Connections

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

##### General Data

Indicated VSWR values are also valid for installations on non-metallic surfaces (no specific ground plane requirements). Indicated gain values will be achieved on a metallic ground plane of 1 x 1 m or larger.

##### Mechanical Data

Dimensions (mm) 85 x 100 x 510 (Height x Width x Depth)  
 Weight (kg) 2.2

High-voltage-protection: no voltage on RF port, if the catenary line touches the antenna (EN 50124-1, 20 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).

##### 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 IP65, IP67

## Sencity Rail Excel Antenna 1324.17.0089

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 50155:2007

Flammability rating: BS 6853, 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 Documents

Mounting instruction	DOC-0000249490
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00091409
3D-model	DOC-0000362745

### Additional Information

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

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[HUBER+SUHNER:](#)

[1324.17.0089](#)