

## Sencity Rail Antenna 87010032

### Description

Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 4/Wi-Fi 6 bands.  
 Embedded Multi-band GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO).  
 Multiple Antenna installations support Cellular and Wi-Fi MIMO.  
 Rugged design, meets EN 50155 railway standard.  
 Fire retardant acc. to EN 45545-2.  
 Works also on non-metallic surfaces.  
 GNSS requires separate LNA such as 86010142.



### Product Configuration

#### Technical Data

##### Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	694 - 960	960 - 2200	2200 - 2700	2700 - 3300
VSWR	1.5	2	2	2
Impedance (Ohm)	50	50	50	50
Gain (dBi)	5	6	7.5	7
Ambient temperature (°C)	25	25	25	25

	Band 5	Band 6	Band 7
Frequency (MHz)	3300 - 4900	4900 - 6425	1559 - 1610
VSWR	1.5	1.8	2
Impedance (Ohm)	50	50	50
Gain (dBi)	6.5	7.5	
Ambient temperature (°C)	25	25	25

##### Ports

	Port 1	Port 2
Port name	Cell / WiFi	GNSS
Connector	N, jack (female)	TNC, plug (male)
Polarization	vertical	circular right
DC grounded	Yes	Yes

##### Connections

	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7
Port 1	X	X	X	X	X	X	
Port 2							X

##### General Data

Indicated VSWR values are valid for a metallic ground plane of 1M x 1M or larger.

Compatible with Low noise amplifier GPS 86010142 / 84460305 (please order separately).

##### Mechanical Data

Dimensions (mm) 93 x 146 x 86 (Height x Width x Depth)  
 Weight (kg) 0.63

## Sencity Rail Antenna 87010032

Radiator: Aluminum  
Flange: Aluminum.  
Radome: Fiberglass.  
All screws and nuts: Stainless steel.  
Colour: Grey.  
Sealing: Polyurethan and silicone.

This antenna, tested by an independent institute, is DC grounded to protect against lightning and short circuit from high-tension lines.

Packaging size (outside): 170 x 120 x 100 mm

### Environmental Data

Environmental conditions	outdoor
Operation temperature (°C)	-40 to 85
Storage temperature (°C)	-40 to 85
IP rating	IP66
Flammability rating	EN 45545-2
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 50155:2018-05

Flammability rating: EN 45545-2.

### Material Data

Radome colour	grey
Back plate/base plate colour	black
Back plate/base plate material	Aluminium

### Related Products

86010142 Low Noise Amplifier GNSS (GPS, GLONASS, BEIDOU, GALILEO)

### Related Documents

Mounting instruction	DOC-0000862842
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00393801
3D-model	DOC-0000863442

### Additional Information

Protected by Patents No.: D871,377 S / USD801,320 S / US10,355,345 B2