

## Sencity Rail Antenna 87010023

### Description

Railway rooftop antenna for sub-2700 MHz 2G/3G/4G/5G cellular and Wi-Fi 1/ Wi-Fi 3 bands.

Embedded GPS antenna (requires separate LNA such as 86010142).

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.



### Product Configuration

#### Technical Data

##### Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	694 - 960	960 - 1710	1710 - 2200	2200 - 2700
VSWR	2	1.7	1.7	1.8
Impedance (Ohm)	50	50	50	50
Gain (dBi)	4.5	5.5	7.5	7.5
Ambient temperature (°C)	25	25	25	25

  

	Band 5
Band Name	GPS
Frequency (MHz)	1574.4 - 1576.4
VSWR	2
Impedance (Ohm)	50
Gain (dBi)	6
Ambient temperature (°C)	25

##### Ports

	Port 1	Port 2
Port name	Cell / WiFi	GPS
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
Port 1	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.

Low noise amplifier GPS 86010142 (please order separately).

##### Mechanical Data

Dimensions (mm)	81 x 145 x 85 (Height x Width x Depth)
Weight (kg)	0.45

## Sencity Rail Antenna 87010023

Radiator: Copper and brass.  
Flange: Anodised Aluminum.  
Radome: Fiberglass.  
All screws and nuts: Stainless steel.  
Colour: Grey.  
Sealing: Neoprene and silicon.

Packaging size (outside): 152 x 91 x 125 mm

### Environmental Data

Environmental conditions	outdoor
Operation temperature (°C)	-40 to 85
Storage temperature (°C)	-40 to 85
IP rating	IP66
Flammability rating 2011/65/EU (RoHS - including 2015/863 and 2017/2102)	EN 45545-2 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-0000862989
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00388946
3D-model	DOC-0000862001