

SENCITY® Rail Antenna with GPS

87010006

Properties

- Railway rooftop multiband antenna for 430-470 MHz and 870-960 MHz
- Embedded GPS antenna (requires separate LNA such as 86010142)
- The antenna can be operated in all frequency ranges simultaneously
- Multiple Antenna installations support Cellular MIMO
- Rugged design, meets EN 50155 Railway Standard
- Fire retardant acc. to EN 45545-2
- Works also on non-metallic surfaces

**Electrical data**

	Band 1	Band 2	Band 3
Name			GPS
Frequency	430 MHz ... 470 MHz	870 MHz ... 960 MHz	1574.4 MHz ... 1576.4 MHz
Impedance	50 Ω	50 Ω	50 Ω
VSWR	1.5	1.5	2
Gain	3.5 dBi	4.5 dBi	6.5 dBi
Ambient Temperature	25 °C	25 °C	

Electrical remarks

Remarks	Indicated VSWR values are valid for a metallic ground plane of 1M x 2M or larger
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Ports

	Port 1	Port 2
Port name	Tetra/Cell	GPS
Connector	N, jack (female)	TNC, plug (male)
Polarization	vertical	circular right

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Ports		
	Port 1	Port 2
DC grounded	Yes	Yes

Connections		
	Port 1	Port 2
Port name	Tetra/Cell	GPS
Band 1	✓	
Band 2	✓	
Band 3		✓

Mechanical data	
Weight	0.5 kg
Dimensions	150 mm x 145 mm x 85 mm (Height x Width x Depth)
	Packaging size (outside): 150 x 90 x 190 mm
Remarks	Radiator: Copper and brass. Flange: Anodized Aluminum. All screws and nuts: Stainless steel. Sealing: Neoprene and silicon.

Material data	
Radome material	Fiberglass
Radome colour	Grey
Back plate/base plate material	Aluminum
Back plate/base plate colour	Black

Environmental data	
Operation temperature	-40 °C ... 85 °C
Storage temperature	-40 °C ... 85 °C
Environment (application)	Outdoor
Ingress protection (IP Rating)	Mated / IP66
Flammability rating	EN 45545-2

Environmental remarks
Environmental tests: EN 50155:2018-05

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

Antenna accessories		
Item description	Item number	Product name
86010142	84460305	SENCITY® Low Noise Amplifier GNSS (GPS, GLONASS, BeiDou, Galileo)

Antenna accessories remarks
86010142 Low Noise Amplifier GNSS (GPS, GLONASS, BEIDOU, GALILEO) 2501.17.0091 Diplexer 80 - 520 / 694 - 2700 MHz can be used to operate both frequencies simultaneously.

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Ordering information		
Item description	Item number	Product name
87010006	84460309	SENCITY® Rail Antenna with GPS

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