

SENCITY® Rail Antenna with GPS

87010023

Properties

- 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



Electrical data				
	Band 1	Band 2	Band 3	Band 4
Name				
Frequency	694 MHz ... 960 MHz	960 MHz ... 1710 MHz	1710 MHz ... 2200 MHz	2200 MHz ... 2700 MHz
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	2	1.7	1.7	1.8
Gain	4.5 dBi	5.5 dBi	7.5 dBi	7.5 dBi
Ambient Temperature	25 °C	25 °C	25 °C	25 °C

	Band 5
Name	GPS
Frequency	1574.4 MHz ... 1576.4 MHz
Impedance	50 Ω
VSWR	2
Gain	6 dBi
Ambient Temperature	25 °C

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

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Ports		
	Port 1	Port 2
Port name	Cell/Wi-Fi	GPS
Connector	N, jack (female)	TNC, plug (male)
Polarization	vertical	circular right
DC grounded	Yes	Yes

Connections		
	Port 1	Port 2
Port name	Cell/Wi-Fi	GPS
Band 1	✓	
Band 2	✓	
Band 3	✓	
Band 4	✓	
Band 5		✓

Mechanical data	
Weight	0.45 kg
Dimensions	81 mm x 145 mm x 85 mm (Height x Width x Depth)
Remarks	Packaging size (outside): 152 x 91 x 125 mm
	Radiator: Copper and brass.
	Flange: Anodized Aluminum
	Sealing: Neoprene and silicon. All screws and nuts: Stainless steel

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

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)

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Ordering information		
Item description	Item number	Product name
87010023	84459289	SENCITY® Rail Antenna with GPS

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