

Sencity Rail Antenna 87010006

Description

Railway rooftop multi-band antenna for 430-470 MHz, 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.



Product Configuration

Technical Data

Electrical Data

	Band 1	Band 2	Band 3
Band Name			GPS
Frequency (MHz)	430 - 470	870 - 960	1574.4 - 1576.4
VSWR	1.5	1.5	2
Impedance (Ohm)	50	50	50
Gain (dBi)	3.5	4.5	6.5
Ambient temperature (°C)	25	25	

Ports

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

Connections

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

General Data

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

Low noise amplifier GPS 86010142 (please order separately).

Mechanical Data

Dimensions (mm) 150 x 145 x 85 (Height x Width x Depth)
 Weight (kg) 0.5

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

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

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Packaging size (outside): 150 x 90 x 190 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)

2501.17.0091 Diplexer 80 - 520 / 694 - 2700 MHz can be used to operate both frequencies simultaneously.

Related Documents

Mounting instruction	DOC-0000864304
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00389224
3D-model	DOC-0000864308