

SENCITY® Rail Antenna with GNSS/LNA

87010022

Properties

- Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 4/Wi-Fi 6 bands.
- Includes embedded GNSS antenna with integrated LNA supporting GPS L1, Galileo E1, BeiDou B1 and GLONASS G1
- Rugged design, meets EN 50155 Railway Standard
- Fire retardant acc. to EN 45545-2
- Contains a heavy duty fibreglass radome

**Electrical bands**

	Band 1	Band 2	Band 3	Band 4
Name	Cell/Wi-Fi	Cell/Wi-Fi	Cell/Wi-Fi	Cell/Wi-Fi
Frequency (MHz)	694 MHz ... 960 MHz	960 MHz ... 2200 MHz	2200 MHz ... 2700 MHz	2700 MHz ... 3300 MHz
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	1.5	2	2	2
Gain (dBi)	5 dBi	6 dBi	7.5 dBi	7 dBi
Ambient Temperature	25 °C	25 °C	25 °C	25 °C

	Band 5	Band 6	Band 7
Name	Cell/Wi-Fi	Cell/Wi-Fi	GNSS
Frequency (MHz)	3300 MHz ... 4900 MHz	4900 MHz ... 6425 MHz	1559 MHz ... 1620 MHz
Impedance	50 Ω	50 Ω	50 Ω
VSWR	1.5	1.7	2
Gain (dBi)	6.5 dBi	7.5 dBi	28 dBi
Ambient Temperature	25 °C	25 °C	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	GNSS

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Ports		
	Port 1	Port 2
Connector	N, jack (female)	N, jack (female)
Polarization	vertical	circular right
DC grounded	Yes	Yes

Connections		
Port number	Port 1	Port 2
Band 1	✓	
Band 2	✓	
Band 3	✓	
Band 4	✓	
Band 6	✓	
Band 7		✓

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

Interface and material data	
Radome material	Fiberglass
Radome colour	Grey
Back plate/base plate material	Aluminium
Back plate/base plate colour	Black

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

Environmental remarks
Environmental tests: EN 50155:2018-05 Flammability rating: EN 45545-2.

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