

SENCITY® Tram

1399.99.0202

Properties

- Supports 2G/3G/4G/5G cellular and Wifi 2.4/5 GHz, Wifi 6E bands and GNSS (Beidou, Galileo, GPS, Glonass)
- Embedded GNSS antenna with integrated low-noise amplifier
- Fire retardant acc. to EN45545-2 and NFPS-130
- Works without metal ground plane
- Works also on non-metallic surfaces
- Single hole mounting, easy cabling feed-through
- Meets EN50155 railway standard

**Electrical data**

	Band 1	Band 2	Band 3	Band 4
Name				
Frequency	694 MHz ... 790 MHz	790 MHz ... 960 MHz	1710 MHz ... 2690 MHz	1710 MHz ... 2690 MHz
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	2.1	1.8	2	1.8
Gain	5 dBi	5 dBi	4 dBi	6 dBi
Isolation between Ports	25 dB	25 dB	25 dB	25 dB
Ambient Temperature	25 °C	25 °C	25 °C	25 °C
Composite Power max	40 W	40 W	40 W	40 W

	Band 5	Band 6	Band 7
Name			GNSS
Frequency	3400 MHz ... 3800 MHz	4900 MHz ... 7125 MHz	1559 MHz ... 1610 MHz
Impedance	50 Ω	50 Ω	50 Ω
VSWR	2	2	1.8
Gain	6 dBi	7 dBi	
Isolation between Ports	25 dB	20 dB	
Ambient Temperature	25 °C	25 °C	

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	Band 5	Band 6	Band 7
Composite Power max	30 W	30 W	

Ports			
	Port 1	Port 2	Port 3
Port name	Cell 1 (white)	Wifi 1 (blue)	GNSS (black)
Connector	SMA, jack (female)	SMA, jack (female)	TNC, plug (male)
Cable type	RADOX_RF_316_D	RADOX_RF_316_D	RADOX_RF_316_D
Cable length	0.21 m	0.2 m	0.26 m
Polarization	vertical	vertical	circular right
DC grounded	No	No	No

Connections			
	Port 1	Port 2	Port 3
Port name	Cell 1 (white)	Wifi 1 (blue)	GNSS (black)
Band 1	✓		
Band 2	✓		
Band 3	✓		
Band 4		✓	
Band 5	✓		
Band 6		✓	
Band 7			✓

Electrical data LNA	
LNA is connected to	Port 3
Input voltage	3 V ... 5 V
Current consumption	20 mA
Noise figure	1.6 dB
Total gain @90° elevation	30 dBic

Mechanical data	
Weight	0.41 kg
Dimensions	82 mm x 83 mm x 208 mm (Height x Width x Depth)
Mounting breakthrough	Ø 30 mm
Remarks	Stick antenna max. length 0.5m

Material data	
Radome material	PC (Polycarbonate)
Radome colour	RAL 9017 (black)
Back plate/base plate material	Aluminium

Environmental data	
Operation temperature	-40 °C ... 85 °C
Storage temperature	-40 °C ... 85 °C
Transport temperature	-40 °C ... 85 °C
Ingress protection (IP Rating)	Mated / IP68, IP69k
Flammability rating	EN 45545-2 NFPA-130

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Environmental data	
Solar radiation	DIN 75220
Environmental remarks	
Environmental tests: EN50155:2018-05 High-voltage protection: EN50124-1:2017-03 (tested without stick antenna) Low corrosion designed acc. to MIL-F-14072D This Antenna is compliant with the Radio Equipment Directive 2014/53/EU CE-Mark	
Ordering information	
Item number	Item description
85177259	1399.99.0202

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DOCUMENT PIM-P35265 / Date of publication: 08.01.2025 / uncontrolled copy