

## SENCITY® Road VHF Antenna K5022221-R

### Description

Broadband vehicle VHF antenna for bus and tram.  
Supports VHF band within 152-178 MHz.  
Rugged design with fiberglass radome.  
Meets EN 50155 Railway Standard.  
Fire retardant according to EN 45545-2.  
Gain dB 0 (ref. to the quarter-wave antenna).



### Product Configuration

#### Technical Data

##### Electrical Data

Band 1	
Band Name	2M Band
Frequency (MHz)	152 - 178
VSWR	2
Impedance (Ohm)	50
Composite power max (W)	100
Ambient temperature (°C)	50

##### Ports

Port 1	
Port name	2M Band
Connector	N, jack (female)
Polarization	vertical
DC grounded	Yes

##### Connections

Band 1	
Port 1	X

##### General Data

Requires mounting on a conductive surface 1.0 x 2.0 m minimum with 3 studs M10 and counterflange.  
Recommended torque: 14 Nm. Preferred frequency range 156-174 MHz with VSWR <<2.  
Note: No superstructures in this area.

##### Mechanical Data

Dimensions (mm) 225 x 252 x 126 (Height x Width x Depth)  
Weight (kg) 1.2

Radiator and Base: Aluminum.  
Radome: Fiberglass, colour: Grey.  
Studs and all screws and nuts: Stainless steel.  
Sealing: Neoprene and polyurethane.  
Note: Don't use detergents that might harm the sealing.

DC grounded to protect against lightning.

Packaging size (outside): 260 x 260 x 130 mm

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### Environmental Data

Environmental conditions	outdoor
Operation temperature (°C)	-40 to 85
Storage temperature (°C)	-55 to 85
IP rating	IP66
Flammability rating	EN 45545-2
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
WEEE 2012/19/EU	no special marking needed
REACH 1907/2006/EC	compliant

Environmental tests: ISO 50155

### Material Data

Radome colour	grey
Back plate/base plate colour	black
Back plate/base plate material	Aluminium

### Related Documents

Mounting instruction	DOC-0000851877
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00485513
3D-model	DOC-0000914705