

Sencity Road MIMO Antenna 1399.99.0129

Description

Rugged vehicle rooftop multi-band antenna for heavy duty vehicles like bus and truck. Supports 2G/3G/4G cellular bands in 2x2 MIMO configurations and GPS/Glonass. Single hole mounting, easy cabling feed-through.



Product Configuration

Technical Data

Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	698 - 790	790 - 960	1710 - 2170	2400 - 2690
VSWR	2.2	2	2	2
Impedance (Ohm)	50	50	50	50
Gain (dBi)	4	4	6	6
Composite power max (W)	80	50	40	40
Ambient temperature (°C)	25	25	25	25
Port Isolation (dB)	12	12	15	15

Band 5	
Band Name	GPS/Glonass
Frequency (MHz)	1574 - 1610
VSWR	2
Impedance (Ohm)	50

Ports

	Port 1	Port 2	Port 3
Connector	SMA, plug (male)	SMA, plug (male)	TNC, plug (male)
Cable Type	ENVIROFLEX_316_D-AM	ENVIROFLEX_316_D-AM	ENVIROFLEX_316_D-AM
Cable Length (m)	0.17	0.23	0.25
Polarization	vertical	vertical	circular right
DC grounded	No	No	No

Connections

	Band 1	Band 2	Band 3	Band 4	Band 5
Port 1	X	X	X	X	
Port 2	X	X	X	X	
Port 3					X

General Data

Ground plane: Indicated VSWR values are valid for a metallic ground plane of 0.75 x 0.75m or larger. In the 790-2700 MHz band, indicated VSWR values are also valid for installations on non-metallic surfaces (no specific ground plane requirements).

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Electrical Data LNA

LNA noise figure dB	2
LNA current consumption (mA)	30
LNA is connected to	Port 3

LNA input voltage range: 3..5V

Total gain @90° elevation 30 dBiC

Values for LNA power consumption, noise figure and gain are given for a 5V operating voltage and may differ slightly for a lower voltage

Mechanical Data

Dimensions (mm)	88 x 83 x 208 (Height x Width x Depth)
Weight (kg)	0.5

Mounting breakthrough Ø30mm

Environmental Data

Environmental conditions	indoor/outdoor
Operation temperature (°C)	-40 to 85
Storage temperature (°C)	-40 to 85
Transport temperature (°C)	-40 to 85
IP rating	IP68, IP69
Flammability rating	ECE-R118
Solar radiation	DIN 75220
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
WEEE 2012/19/EU	no special marking needed
ELV 2000/53/EC	compliant
REACH 1907/2006/EC	compliant

ISO 16750:2010 environmental tests

MIL-F-14072D low corrosion design

E-Mark

CE-Mark

Material Data

Radome colour	RAL 7043 (dark grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
Back plate/base plate material	Aluminium

Related Products

9091.99.0250 Metal ground plane foil 0.6x0.6m

Related Documents

Mounting instruction	DOC-0000361395
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00273723
3D-model	DOC-0000468130

Additional Information

This product can be customized within the order process. Available options are: - Different radiator combinations - Different cable pigtail length and RF connector types - Fulfillment of fire safety standards EN 45545, DIN 5510 or ECE-R118 - ...and more. Note: The antenna gain as indicated above will vary for a different cable length. For a gain calculation please consider the cable attenuation per meter for the respective frequency band.