

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.