

SENCITY® Road MULTI Antenna 1399.19.0412

Description

Rugged vehicle rooftop multi-band antenna for commercial vehicles like bus and truck.

Supports 2G/3G/4G/5G cellular, Wifi 2.4/5 GHz, Wifi 6E.

7 separate ports for 4x4 cellular MIMO and 3x3 Wifi MIMO.

Meets ISO16750 automotive standard.

Fire retardant acc. to ECE-R118.

Single hole mounting, easy cabling feed-through.



Product Configuration

Technical Data

Electrical Data

| | Band 1 | Band 2 | Band 3 | Band 4 |
|--------------------------|--------------|--------------|--------------|--------------|
| Band Name | Cellular 1-4 | Cellular 1-4 | Cellular 1-4 | Cellular 1-4 |
| Frequency (MHz) | 617 - 960 | 1350 - 2700 | 3300 - 4200 | 4900 - 7125 |
| VSWR | 2 | 2.1 | 2 | 2 |
| Impedance (Ohm) | 50 | 50 | 50 | 50 |
| Gain (dBi) | 2 | 4 | 4 | 5 |
| Composite power max (W) | 40 | 40 | 40 | 40 |
| Ambient temperature (°C) | 25 | 25 | 25 | 25 |
| Port isolation (dB) | 9 | 18 | 15 | 18 |

| | Band 5 | Band 6 |
|--------------------------|-------------|-------------|
| Band Name | WiFi 1-2 | WiFi 1-2 |
| Frequency (MHz) | 2400 - 2500 | 4900 - 7125 |
| VSWR | 2 | 2 |
| Impedance (Ohm) | 50 | 50 |
| Gain (dBi) | 6 | 6 |
| Composite power max (W) | 30 | 30 |
| Ambient temperature (°C) | 25 | 25 |
| Port isolation (dB) | 24 | 24 |

Ports

| | Port 1 to 4 | Port 5 to 7 |
|------------------|---------------------|---------------------|
| Port name | Cell 1-4 (white) | WiFi 1-2 (blue) |
| Connector | SMA, plug (male) | SMA, plug (male) |
| Cable Type | ENVIROFLEX_316_D-AM | ENVIROFLEX_316_D-AM |
| Cable Length (m) | 0.3 | 0.3 |
| Polarization | Vertical | Vertical |
| DC Grounded | Yes | Yes |

Connections

| | Band 1 | Band 2 | Band 3 | Band 4 | Band 5 | Band 6 |
|-------------|--------|--------|--------|--------|--------|--------|
| Port 1 to 4 | X | X | X | X | | |
| Port 5 to 7 | | | | | X | X |
| Port 7 | | | | | | |

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General Data

Ground plane: Indicated VSWR values are valid for a metallic ground plane of 0.5 x 0.5m or larger and Isolation is provided as typical values. Indicated VSWR values are mostly valid for installations on non-metallic surfaces also (no specific ground plane requirements). Indicated gain values will be achieved on a metallic ground plane of 1 x 1 m or larger.

Mechanical Data

| | |
|-----------------------|------------------------------|
| Dimensions (mm) | 210 x 60 (Diameter x Height) |
| Weight (kg) | 1.1 |
| Mounting breakthrough | Ø30mm |

Environmental Data

| | |
|--|-------------|
| Environmental conditions | outdoor |
| Operation temperature (°C) | -40 to 85 |
| Storage temperature (°C) | -40 to 85 |
| Transport temperature (°C) | -40 to 85 |
| IP rating | IP68, IP69k |
| Flammability rating | ECE-R118 |
| Solar radiation | DIN 75220 |
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant |
| REACH 1907/2006/EC | compliant |

Environmental tests: ISO 16750:2012/2010
Low corrosion designed acc. to MIL-F-14072D
E-Mark
CE-Mark

Material Data

| | |
|--------------------------------|----------------------|
| Radome colour | RAL 7043 (dark grey) |
| Radome material | PC (Polycarbonate) |
| Back plate/base plate material | Aluminium |

Related Products

(Order separately)
9091.99.0250 Metal ground plane foil 0.6x0.6m

Related Documents

| | |
|----------------------|----------------|
| Mounting instruction | DOC-0001163417 |
| Painting instruction | DOC-0000256180 |
| Security instruction | DOC-0000278984 |
| Outline drawing | DOU-01159002 |
| 3D-model | DOC-0001155892 |