

**SENCITY® Rail Antenna**

87010010

**Properties**

- Railway rooftop antenna for 1800/1900/UMTS/LTE/WiFi 1/Wi-Fi 3 band
- Multiple Antenna installations support Cellular and Wi-Fi MIMO
- Rugged design, meets EN 50155 Railway Standard
- Fire retardant acc. to EN45545-2
- Contains a heavy-duty fiberglass radome
- Works also on non-metallic surfaces

**Electrical data**

|                     | Band 1                | Band 2                | Band 3                | Band 4                |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Frequency           | 1710 MHz ... 1920 MHz | 1920 MHz ... 2600 MHz | 2600 MHz ... 3200 MHz | 3200 MHz ... 3800 MHz |
| Impedance           | 50 Ω                  | 50 Ω                  | 50 Ω                  | 50 Ω                  |
| VSWR                | 1.7                   | 1.5                   | 1.6                   | 1.5                   |
| Gain                | 7 dBi                 | 6.5 dBi               | 5.5 dBi               | 7 dBi                 |
| Ambient Temperature | 25 °C                 | 25 °C                 | 25 °C                 | 25 °C                 |

**Electrical remarks**

|         |                                                                                         |
|---------|-----------------------------------------------------------------------------------------|
| Remarks | Indicated VSWR values are valid for a metallic ground plane of 500mm x 500mm or larger. |
|---------|-----------------------------------------------------------------------------------------|

**Ports**

|              | Port 1           |
|--------------|------------------|
| Port name    | Cell/Wi-Fi       |
| Connector    | N, jack (female) |
| Polarization | vertical         |
| DC grounded  | Yes              |

**Connections**

|           |            |
|-----------|------------|
|           | Port 1     |
| Port name | Cell/Wi-Fi |
| Band 1    | ✓          |

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| Connections |   |
|-------------|---|
| Band 2      | ✓ |
| Band 3      | ✓ |
| Band 4      | ✓ |

| Mechanical data |                                                                   |
|-----------------|-------------------------------------------------------------------|
| Weight          | 0.45 kg                                                           |
| Dimensions      | 81 mm x 145 mm x 85 mm (Height x Width x Depth)                   |
| Remarks         | Wind load frontal: 0.5 N at 600 km/h, lateral: 0.05 N at 600 km/h |
|                 | Packaging size (outside): 152 x 91 x 125 mm                       |
|                 | Radiator: Copper and brass.                                       |
|                 | Flange: Aluminum.                                                 |
|                 | All screws and nuts: Stainless steel.                             |
|                 | Sealing: Neoprene and silicon.                                    |

| Material data                  |            |
|--------------------------------|------------|
| Radome material                | Fiberglass |
| Radome colour                  | Grey       |
| Back plate/base plate material | Aluminum   |
| Back plate/base plate colour   | Black      |

| Environmental data             |                  |
|--------------------------------|------------------|
| Operation temperature          | -40 °C ... 85 °C |
| Storage temperature            | -40 °C ... 85 °C |
| Environment (application)      | Outdoor          |
| Ingress protection (IP Rating) | Mated / IP66     |
| Flammability rating            | EN 45545-2       |

| Environmental remarks                 |
|---------------------------------------|
| Environmental tests: EN 50155:2018-05 |

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