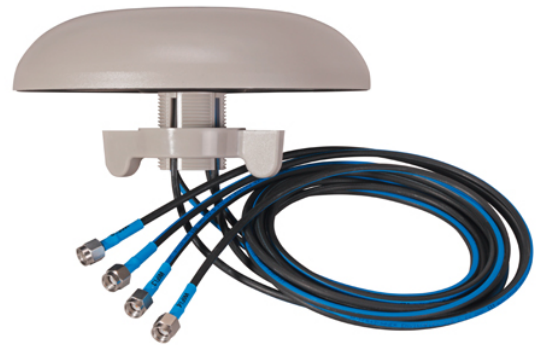


## SENCITY® Omni-S 4x4 WiFi MIMO Antenna

### 1399.59.0005

### Description

Omni-directional 4x4 WiFi MIMO and LTE 2300, 2600 and 3500 MHz antenna  
 Rugged and low profile cabinet and pole/wall mount antenna  
 Supports WiFi dual-band 2.4 - 2.5 / 4.9 - 6 GHz, IEEE 802.11 b/g/a/h/p/n/ac  
 And cellular LTE 2300, 2500, 2600 and 3500 MHz band configurations  
 Single hole cabinet mounting, for outdoor & indoor applications  
 Vandalism proof "IK10" acc. to IEC 62262/2002-02



### Product Configuration

### Technical Data

#### Electrical Data

|                          | Band 1      | Band 2      | Band 3      | Band 4      |
|--------------------------|-------------|-------------|-------------|-------------|
| Frequency (MHz)          | 2300 - 2500 | 2500 - 2690 | 3400 - 3800 | 4900 - 5975 |
| VSWR                     | 1.7         | 1.8         | 2           | 1.5         |
| Impedance (Ohm)          | 50          | 50          | 50          | 50          |
| Gain (dBi)               | 1.5         | 1.5         | 2           | 3.5         |
| Composite power max (W)  | 40          | 40          | 30          | 30          |
| Ambient temperature (°C) | 25          | 25          | 25          | 25          |
| Port Isolation (dB)      | 15          | 16          | 25          | 27          |

#### Ports

|                          | Port 1                   | Port 2                   | Port 3                   | Port 4                   |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Port name                | WiFi 1                   | WiFi 2                   | WiFi 3                   | WiFi 4                   |
| Connector                | SMA-reverse, plug (male) | SMA-reverse, plug (male) | SMA-reverse, plug (male) | SMA-reverse, plug (male) |
| Cable Type               | ENVIROFLEX_316_D         | ENVIROFLEX_316_D         | ENVIROFLEX_316_D         | ENVIROFLEX_316_D         |
| Cable Length (m)         | 1                        | 1                        | 1                        | 1                        |
| Min. radius static (mm)  | 5                        | 5                        | 5                        | 5                        |
| Min. radius dynamic (mm) | 30                       | 30                       | 30                       | 30                       |
| Polarization             | vertical                 | vertical                 | vertical                 | vertical                 |
| DC grounded              | Yes                      | Yes                      | Yes                      | Yes                      |

#### Connections

|        | Band 1 | Band 2 | Band 3 | Band 4 |
|--------|--------|--------|--------|--------|
| Port 1 | X      | X      | X      | X      |
| Port 2 | X      | X      | X      | X      |
| Port 3 | X      | X      | X      | X      |
| Port 4 | X      | X      | X      | X      |

#### General Data

GROUND PLANE: Antenna works on metallic as well as on non-metallic ground plane. VSWR is valid for both mounting options

GAIN VALUES: Indicated gain values are valid for non-metallic ground plane. Gain of this antenna on metallic surface (measured on 500 x 500 mm plane) is higher: 4.5 dBi for 2.3 to 2.7 GHz and 5.5 dBi for 3.4 to 3.8 GHz and 6.5 dBi for 4.9 to 5.975 GHz

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### INGRESS PROTECTION:

- IP 69K when mounted on cabinet's flat surface or roof
- IP 66 and IP67 when mounted on bracket with sealed cable conduit

### Mechanical Data

|                 |                                |
|-----------------|--------------------------------|
| Dimensions (mm) | 33.2 x 145 (Height x Diameter) |
| Weight (kg)     | 0.32                           |

### Environmental Data

|                                                      |                        |
|------------------------------------------------------|------------------------|
| Environmental conditions                             | indoor/outdoor         |
| Operation temperature (°C)                           | -55 to 85              |
| Storage temperature (°C)                             | -55 to 85              |
| Transport temperature (°C)                           | -55 to 85              |
| Flammability rating                                  | UL 94-V0               |
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant              |
| Lead-free soldered                                   | yes                    |
| WEEE 2012/19/EU                                      | special marking needed |
| REACH 1907/2006/EC                                   | compliant              |

TEMPERATURE RANGE: EN 60068-2-1 (2007), test Ab, -55°C, 16h and EN-60068-2-2 (2007), test Bb, +85°C, 16h

THERMAL SHOCK: IEC 60068-2-14 (2009), test Na, -55°C to +85°C, 3h, 5 cycles

SOLAR RADIATION: EN 60068-2-5, test Sa, procedure B, 1200 W/m<sup>2</sup>, 3 x 24h

RELATIVE HUMIDITY: EN 60068-2-78 (2012), test Cb, RH 95%, 21d (damp heat, steady state)

RELATIVE HUMIDITY: EN 60068-2-30 (2005), RH 97%, 6 cycles (damp heat, cyclic)

SALT SPRAY: EN 60068-2-11 (2002), test Ka, 96h

MECHANICAL VIBRATION / SHOCK: IEC 61373 (1999), § 9 and § 10, category 2

VANDALISM: EN 60068-2-75 (1997), IEC 62262 (2002) IK10, test Ehc

CORROSION: MIL-F-14072 E type 1 "exposed"

### Material Data

|                 |                    |
|-----------------|--------------------|
| Radome colour   | RAL 7044 (grey)    |
| Radome material | PC (Polycarbonate) |

### Related Products

9091.99.0259 Bracket kit for SENCITY® Omni-S MIMO antenna

Accessory kit 9091.99.0259 is available via H+S customizing process, no item number as extra deliverable assigned yet.

### Related Documents

|                      |                |
|----------------------|----------------|
| Mounting instruction | DOC-0000711826 |
| Painting instruction | DOC-0000256180 |
| Security instruction | DOC-0000278984 |
| Outline drawing      | DOU-00290492   |
| 3D-model             | DOC-0000684258 |

### Additional Information

This product can be customized alternatively in the following way: - 1 to 4 radiation elements, as described above - Cable length from 300 to 5000 mm - Choice of RF connector (SMA, R-SMA, QMA, TNC, R-TNC, N) - Customer specific port labeling on pigtails - Further wireless band options available: Cellular LTE 800 up to LTE 2600 (EUR bands) or Cellular LTE 700 up to LTE 2600 (US bands), Cellular LTE with GPS/Glonass incl. LNA