## **Data Sheet**



# SENCITY® Omni-S 4x4 WiFi MIMO Antenna 1399.59.0005

SWA-2459/360/6/20/MIMO\_1

## **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
Port Isolation (dB)	15	16	25	27

#### **Ports**

	Port 1	Port 2	Port 3	Port 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	

#### Connections

	Band 1	Band 2	Band 3	Band 4
Port 1	Χ	Χ	Χ	X
Port 2	Х	X	X	X
Port 3	Χ	Χ	Χ	X
Port 4	Х	X	X	X

### **General Data**

DC Grounding Yes
Composite Power max (W) 10

PIM (IM3) PERFORMANCE (typical): -150 dBc, measured at 2600 MHz @ 2 x 30 dBm

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  $\times$  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

#### INGRESS PROTECTION:

- IP 69K when mounted on cabinet's flat surface or roof

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- 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 outdoor Operation temperature (°C) -55 to 85 -55 to 85 Storage temperature (°C) Transport temperature (°C) -55 to 85 Flammability rating UL 94-V0 RoHS 2011/65/FC compliant Lead-free soldered ves REACH 2006/1907/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/m2, 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 VIBRATIONI / 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 Documents**

 Mounting instruction
 DOC-000711826

 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, 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

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