

## SENCITY Omni-S-SC 1399.17.0243

### Description

Outdoor omni-directional antenna for Small Cells  
 2x2 cellular MIMO 1710 MHz up to 5850 MHz and 2x2 WiFi MIMO  
 2.4 and 5 GHz  
 with 4.3-10+ connectors



### Product Configuration

#### Technical Data

##### Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	1710 - 2700	3400 - 3800	5150 - 5850	2400 - 2500
VSWR	2	2	2	1.8
Impedance (Ohm)	50	50	50	50
Gain (dBi)	4.5	5.5	5	3.5
Ambient temperature (°C)				
Port Isolation (dB)	-15	-15	-15	-15

  

	Band 5
Frequency (MHz)	5150 - 5975
VSWR	1.8
Impedance (Ohm)	50
Gain (dBi)	4.5
Port Isolation (dB)	-18

##### Ports

	Port 1	Port 2	Port 3	Port 4
Port name	Port 1 Cellular	Port 2 Cellular	Port 3 WiFi	Port 4 WiFi
Connector	N, jack (female)	N, jack (female)	N, jack (female)	N, jack (female)
Cable Type	SUCOFORM_122_LA_CU_CMP	SUCOFORM_122_LA_CU_CMP	SUCOFORM_122_LA_CU_CMP	SUCOFORM_122_LA_CU_CMP
Cable Length (m)	0.28	0.28	0.28	0.28
Min. radius static (mm)	5	5	5	5
Polarization	vertical	vertical	vertical	vertical
DC grounded	Yes	Yes		

##### Connections

	Band 1	Band 2	Band 3	Band 4	Band 5
Port 1	X	X	X		
Port 2	X	X	X		
Port 3				X	X
Port 4				X	X

##### General Data

IMD level -150 dBc at carrier power 2x 37dBm

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The gain expressed above is the mean value in the given frequency range.

Detailed gain values per frequency:

Frequency | Gain (stand alone) | Gain (with groundplane 50cm)

1710 MHz | 2.1 dBi | 5.3 dBi  
 2170 MHz | 4.1 dBi | 4.7 dBi  
 2300 MHz | 4.9 dBi | 5.5 dBi  
 2400 MHz | 5.7 dBi | 5.3 dBi  
 2500 MHz | 6.5 dBi | 5.5 dBi  
 2600 MHz | 6.8 dBi | 5.6 dBi  
 2700 MHz | 7 dBi | 5.5 dBi  
 3400 MHz | 5.8 dBi | 5.5 dBi  
 3700 MHz | 6.3 dBi | 5.7 dBi  
 3800 MHz | 5.8 dBi | 5.8 dBi  
 5150 MHz | 5.2 dBi | 7.7 dBi  
 5250 MHz | 5.5 dBi | 7.4 dBi  
 5850 MHz | 4.8 dBi | 6.4 dBi

### 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  
 IP rating IP69  
 Flammability rating UL 94-V0  
 RoHS 2011/65/EU compliant  
 Lead-free soldered yes  
 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/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"

IP69 when mounted on a surface larger than the antenna

### Material Data

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

### Related Documents

Mounting instruction DOC-0000711826  
 Painting instruction DOC-0000256180  
 Security instruction DOC-0000278984  
 Outline drawing DOU-00323797

### Additional Information

Art. N. 85080773