

## SENCITY® Spot-L 3x3 WiFi MIMO Antenna 1356.17.0090

### Description

Directional, planar, triple slant 3 x 3 WiFi MIMO antenna  
 Frequency band 4.9 - 6.1 GHz, 18dBi, WLAN  
 WiFi IEEE 802.11a/h/n/p/ac standard  
 For outdoor or indoor applications  
 Ingress protection IP67



### Product Configuration

### Technical Data

#### Electrical Data

	Band 1	Band 2	Band 3
Frequency (MHz)	4900 - 5150	5150 - 6000	6000 - 6100
VSWR	1.8	1.8	1.8
Impedance (Ohm)	50	50	50
Gain (dBi)	17	18	16
3dB beamwidth (h) (°)	20	20	15
3dB beamwidth (v) (°)	20	20	12
Composite power max (W)	6		
Ambient temperature (°C)	25		
Front to back ratio (dB)	30	30	30
Port Isolation (dB)	35	35	30

#### Ports

	Port 1	Port 2	Port 3
Port name	- 45	VER	+ 45
Connector	N, jack (female)	N, jack (female)	N, jack (female)
Polarization	-45° slant	vertical	+45° slant
DC grounded	Yes	Yes	Yes

#### Connections

	Band 1	Band 2	Band 3
Port 1	X	X	X
Port 2	X	X	X
Port 3	X	X	X

#### General Data

Polarisation - 45° slant, vertical slant and +45° slant (port 1 to 3)

List of halfpower beamwidth horizontal plane:

Vertical slant port:

20° (typ) @ 4.9 - 5.875 GHz

15° (typ) @ 5.875 - 6.1 GHz

Dual slant +/- 45° ports:

20° (typ) @ 4.9-6.1 GHz

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List of halfpower beamwidth vertical plane:

Vertical slant port:

12° (typ) @ 4.9 - 6.1 GHz

Dual slant +/- 45° ports:

20° (typ) @ 4.9-6.1 GHz

Side lobes level azimuth:

Vertical slant port:

-15 dB(typ) @ 4.9-5.875 GHz

- 9 dB(typ) @ 5.875-6.1 GHz

Dual slant +/- 45° ports:

-15 dB(typ) @ 4.9-6.0 GHz

-13 dB(typ) @ 6.0-6.1 GHz

Side lobes level elevation:

Vertical slant port:

-15 dB(typ) @ 4.9-5.875 GHz

-10 dB(typ) @ 5.875-6.1 GHz

Dual slant +/- 45° ports:

-15 dB(typ) @ 4.9-5.875 GHz

-11 dB(typ) @ 5.875-6.1 GHz

### Mechanical Data

Dimensions (mm)	305 x 305 x 15 (Height x Width x Depth)
Weight (kg)	1.5
Windload	frontal: 263 N at 160 km/h, lateral: 13 N at 160 km/h , Wind speed survival: 220 km/h

### Environmental Data

Environmental conditions	outdoor
Operation temperature (°C)	-45 to 70
Storage temperature (°C)	-45 to 70
IP rating	IP67
Flammability rating	UL 94-HB
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 condition low -55°, IEC 60068-2-1

Temperature condition high +71°, IEC 60068-2-2

Temperature cycling IEC 60068-2-14 1h -45°C to +70°C 3 cycles

Salt spray IEC 60068-2-11 Ka / 500 h

Humidity ETSI EN300-2-4 T4.1E / 144h / 95%

Solar radiation ASTM G53 / 2000 h

Mechanical shock EC 60721-3-4, 4M3

Vibration IEC 60721-3-4 30 min/axis random 4M3

### Material Data

Radome colour	RAL 9002 (grey-white)
Radome material	Plastic
Back plate/base plate material	Aluminium

### Related Products

9091.99.0201 Planar Antenna Downtilt Bracket

### Related Documents

Mounting instruction	DOC-0000225623
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00233557
3D-model	DOC-0000455814

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