

## Sencity Road MIMO Antenna 1399.99.0118

### Description

Rugged vehicle rooftop multi-band antenna for heavy duty vehicles like bus and truck.  
Supports 2G/3G/4G/5G cellular, Wifi 2.4/5 GHz, Wifi 6E and GNSS (Beidou, Galileo, GPS, Glonass).  
5 separate ports for 2x2 cellular MIMO and 2x2 Wifi MIMO plus GNSS.  
Single hole mounting, easy cabling feed-through.



### Product Configuration

#### Technical Data

##### Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	694 - 790	790 - 960	1710 - 2400	2400 - 2500
VSWR	1.8	1.7	1.7	2
Impedance (Ohm)	50	50	50	50
Gain (dBi)	4	4	5	6
Composite power max (W)	40	40	40	40
Ambient temperature (°C)	25	25	25	25
Port Isolation (dB)	10	10	12	10

  

	Band 5	Band 6	Band 7	Band 8
Band Name				GNSS
Frequency (MHz)	2400 - 2690	3400 - 3800	4900 - 7125	1559 - 1610
VSWR	2	1.7	1.8	1.8
Impedance (Ohm)	50	50	50	50
Gain (dBi)	5.5	6	7	
Composite power max (W)	40	30	30	
Ambient temperature (°C)	25	25	25	25
Port Isolation (dB)	22	20	25	

##### Ports

	Port 1	Port 2	Port 3	Port 4	Port 5
Port name	Cell 1	Cell 2	Wifi 1	Wifi 2	GNSS
Connector	SMA, plug (male)	SMA, plug (male)	SMA, jack (female)	SMA, jack (female)	TNC, plug (male)
Cable Type	ENVIROFLEX_316_D-AM	ENVIROFLEX_316_D-AM	ENVIROFLEX_316_D-AM	ENVIROFLEX_316_D-AM	ENVIROFLEX_316_D-AM
Cable Length (m)	0.15	0.21	0.22	0.28	0.26
Polarization	vertical	vertical	vertical	vertical	circular right
DC grounded	No	No	No	No	No

##### Connections

	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8
Port 1	X	X	X		X	X	X	
Port 2	X	X	X		X	X	X	
Port 3				X		X	X	
Port 4				X		X	X	

## Sencity Road MIMO Antenna 1399.99.0118

Port 5

X

### General Data

Ground plane: Indicated VSWR values are valid for a metallic ground plane of 0.5 x 0.5m or larger and Isolation is provided as typical values. Indicated VSWR values are mostly valid for installations on non-metallic surfaces also (no specific ground plane requirements), apart from VSWR 2.5 below 840 MHz and VSWR 3 below 750 MHz. Indicated gain values will be achieved on a metallic ground plane of 1 x 1 m or larger.

Port 2,3 performance in Band 6 is given with typical values of VSWR 1.7 only.

### Electrical Data LNA

LNA noise figure dB	1.6
LNA current consumption (mA)	20
LNA is connected to	Port 5

LNA input voltage range: 3..5V

Total gain @90° elevation: 30 dBiC

### Mechanical Data

Dimensions (mm)	88 x 83 x 208 (Height x Width x Depth)
Weight (kg)	0.5

Mounting breakthrough Ø30mm

### Environmental Data

Environmental conditions	outdoor
Operation temperature (°C)	-40 to 85
Storage temperature (°C)	-40 to 85
Transport temperature (°C)	-40 to 85
IP rating	IP68, IP69
Flammability rating	ECE-R118
Solar radiation	DIN 75220
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
REACH 1907/2006/EC	compliant

Environmental tests: ISO 16750:2010

Low corrosion designed acc. to MIL-F-14072D

ECE-R10

E-Mark

CE-Mark

### Material Data

Radome colour	RAL 7043 (dark grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
Back plate/base plate material	Aluminium

### Related Products

9091.99.0250 Metal ground plane foil 0.6x0.6m

### Related Documents

Mounting instruction	DOC-0000361395
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00338065
3D-model	DOC-0000800070