

Sencity Road Antenna 1399.99.0039

SWA-0860/360/5/10/DFRX30

Description

Rugged vehicle rooftop multi-band antenna for heavy duty vehicles like bus and truck.
 Supports cellular, WiFi 2.4, 5 GHz and IEEE 802.11p, GPS/Glonass.
 Offers a stick antenna socket and separate connector for each application.
 Single hole mounting, easy cabling feed-through.
 Works also on non-metallic surfaces.



Product Configuration

Technical Data

Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	698 - 790	790 - 960	1710 - 2690	1710 - 2690
VSWR	2.1	1.8	2	1.8
Impedance (Ohm)	50	50	50	50
Gain (dBi)	5	5	4	6
Port Isolation (dB)			20	20

	Band 5	Band 6	Band 7
Band Name		GPS/Glonass	Socket
Frequency (MHz)	4900 - 5935	1574 - 1610	
VSWR	1.8	2	
Impedance (Ohm)	50	50	
Gain (dBi)	7		
Port Isolation (dB)	30		

Ports

	Port 1	Port 2	Port 3	Port 4
Connector	SMA, plug (male)	SMA, jack (female)	TNC, plug (male)	TNC, jack (female)
Cable Type	ENVIROFLEX_316	ENVIROFLEX_316_D	ENVIROFLEX_316_D	ENVIROFLEX_316
Cable Length (m)	0.3	0.3	0.3	0.3
Polarization	vertical	vertical	circular right	

Connections

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

General Data

DC Grounding	Yes
Composite Power max (W)	10

Indicated VSWR values are valid for a metallic ground plane of 0.5 x 0.5m or larger. In the 790-5935 MHz band, indicated VSWR values are also valid for installations on non-metallic surfaces.

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A W-CDMA 2100 and LTE 2600 2x2 MIMO configuration is supported by using port 1 and 2. In this setup, no stub antenna shall be equipped in order to ensure best MIMO performance.

Available stick antennas see section 'Related products'.

Electrical Data LNA

LNA noise figure dB	2
LNA current consumption (mA)	30
LNA is connected to	Port 3

LNA input voltage range 3..5V

Total gain @90° elevation 30 dBiC

Values for LNA power consumption, noise figure and gain are given for a 5V operating voltage and may differ slightly for a lower voltage.

Mechanical Data

Dimensions (mm)	82 x 83 x 208 (Height x Width x Depth)
Weight (kg)	0.41

Stick antenna max. length = 0.5m

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
Solar radiation	DIN 75220
RoHS 2011/65/EU	compliant
REACH 2006/1907/EC	compliant

Flammability: materials chosen acc. to UL 94-HB

Environmental tests: ISO 16750:2010

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

E-Mark and 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

9091.99.0246 FM Radio Stick antenna 88-108 MHz

9091.99.0247 TETRA Stick antenna 380-430 MHz

9091.99.0248 TETRA Stick antenna 450-470 MHz

9091.99.0250 Metal ground plane foil 0.6x0.6m

9091.99.0254 TETRA Stick antenna 410-430 MHz

Related Documents

Mounting instruction	DOC-0000361395
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00175956
3D-model	DOC-0000367494

Additional Information

This product can be customized within the order process. Available options are:

- change of amount of radiators
- change of cable length and RF connector type
- change of pigtail label inscriptions
- ...and more.

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Note: The antenna gain as indicated above will vary for a different cable length. Please refer to the value of the cable attenuation per meter listed above.