Data Sheet

HUBER+SUHNER

Sencity Road Antenna
1399.99.0039

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
Composite power max (W)	80	40	40	40
Ambient temperature (°C)	25	25	25	25
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		
Composite power max (W)	30		
Ambient temperature (°C)	25		
Port Isolation (dB)	30		

Ports

	Port 1	Port 2	Port 3	Port 4
Port name	(white sleeve)	(blue sleeve)	(black sleeve)	(red sleeve)
Connector	SMA, plug (male)	SMA, jack (female)	TNC, plug (male)	TNC, jack (female)
Cable Type	ENVIROFLEX_316_D -AM	ENVIROFLEX_316_D -AM	ENVIROFLEX_316_D -AM	ENVIROFLEX_316_D -AM
Cable Length (m)	0.23	0.2	0.26	0.3
Polarization	vertical	vertical	circular right	
DC grounded	Yes	No	No	No

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

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General Data

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.

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 (Heigth x Width x Depth)
Weight (kg)	0.41

Stick antenna max. length = 0.5m
Mounting breakthrough Ø30mm

Environmental Data

Environmental conditions	indoor/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
WEEE 2012/19/EU	no special marking needed
ELV 2000/53/EC	compliant
REACH 1907/2006/EC	compliant

ISO 16750:2010 environmental tests
MIL-F-14072D low corrosion design
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

9091.99.0246 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

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Additional Information

This product can be customized within the order process. Available options are: - Different radiator combinations - Different cable pigtail length and RF connector types - Fulfillment of fire safety standards EN 45545, DIN 5510 or ECE-R118 - ...and more. Note: The antenna gain as indicated above will vary for a different cable length. For a gain calculation please consider the cable attenuation per meter for the respective frequency band.

Waiver: Fact and figures herein are for information only and do not represent any warranty of any kind.