

SENCITY® SC Omni-M 1399.99.0343

Description

Rugged omni-directional antenna for installation on outdoor cabinets.
 Supports TETRA, LTE450, 2G/3G/4G/5G cellular, Wifi 2.4/5 GHz, Wifi 6E and Dual Band GNSS (Beidou, Galileo, GPS, Glonass).
 6 separate ports for 2x2 TETRA/cellular MIMO and 3x3 Wifi MIMO plus GNSS.
 Meets ETSI 300 019-1-4 class 4.1E.
 Low profile housing.
 Single hole mounting, easy cabling feed-through.



Product Configuration

Technical Data

Electrical Data

	Band 1	Band 2	Band 3	Band 4
Band Name	TETRA/LTE450	Cellular	Cellular	Cellular
Frequency (MHz)	380 - 470	694 - 960	1350 - 2700	3300 - 4200
VSWR	2.5	2.0	2.0	2.0
Impedance (Ohm)	50	50	50	50
Gain (dBi)	3	2	4	4
Composite power max (W)	40	40	40	40
Ambient temperature (°C)	25	25	25	25
Port isolation (dB)	3	8	15	20

	Band 5	Band 6	Band 7	Band 8 / Band 9
Band Name	Cellular	WiFi	WiFi	GNSS
Frequency (MHz)	4900 - 7125	2400 - 2500	4900 - 7125	1164 - 1279 / 1559 - 1610
VSWR	2.0	2.0	2.0	1.5 / 1.8
Impedance (Ohm)	50	50	50	50
Gain (dBi)	5	6	6	
Composite power max (W)	40	30	30	
Ambient temperature (°C)	25	25	25	
Port isolation (dB)	20	20	20	

Ports

	Port 1 to 2	Port 3 to 5	Port 6
Port name	Tetra 1-2 (white)	WiFi 1-3 (blue)	GNSS (black)
Connector	N, plug (male)	N, plug (male)	TNC, plug (male)
Cable Type	ENVIROFLEX_316_D	ENVIROFLEX_316_D	ENVIROFLEX_316_D
Cable Length (m)	0.5	0.5	0.5
Polarization	Vertical	Vertical	Circular right
DC Grounded	Yes	Yes	No

Connections

	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8 / 9
Port 1 to 2	X	X	X	X	X			
Port 3 to 5						X	X	
Port 6								X

SENCITY® SC Omni-M 1399.99.0343

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). Indicated gain values will be achieved on a metallic ground plane of 1 x 1 m or larger.

Electrical Data LNA

LNA noise figure dB	2
LNA current consumption (mA)	45
LNA is connected to	Port 6
LNA input voltage range:	3..5V
LNA gain	38 dB
Total gain @90° elevation:	42 dBiC

Mechanical Data

Dimensions (mm)	210 x 60 (Diameter x Height)
Weight (kg)	1.1
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, IP69k
Solar radiation	DIN 75220
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
REACH 1907/2006/EC	compliant

Environmental tests: ETSI 300 019-4-2 class 4.1E
Low corrosion designed acc. to MIL-F-14072D
CE-Mark

Material Data

Radome colour	RAL 7044 (light grey)
Radome material	PC (Polycarbonate)
Back plate/base plate material	Aluminium

Related Products

(Order separately)
9091.99.0250 Metal ground plane foil 0.6x0.6m

Related Documents

Mounting instruction	DOC-0001171917
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-01171893
3D-model	DOC-0001155892