

SENCITY® Omni-S LTE 800 + GNSS Antenna 1399.19.0006

Description

Omnidirectional Cellular/LTE and GNSS antenna
 Supports 2G, 3G, 4G LTE 800 MHz up to LTE 2600 MHz
 Cellular/LTE (EUR) vertical polarized radiator for SISO scenario on one port
 Circular polarized GNSS antenna with LNA on second port
 Single hole cabinet mounting,
 For outdoor & indoor applications
 Vandalism proof "IK10" acc. to IEC 62262/2002-02



Product Configuration

Technical Data

Electrical Data

	Band 1	Band 2	Band 3	Band 4
Frequency (MHz)	790 - 930	930 - 960	1710 - 2170	2300 - 2690
VSWR	2	2.5	1.7	1.7
Impedance (Ohm)	50	50	50	50
Gain (dBi)	2	2	6	4
Composite power max (W)	60	60	50	40
Ambient temperature (°C)	25	25	25	25

Band 5

Band Name	GNSS
Frequency (MHz)	1559 - 1610
VSWR	1.8
Impedance (Ohm)	50

Ports

	Port 1	Port 2
Port name	Cellular/LTE	GNSS
Connector	SMA, plug (male)	SMA, plug (male)
Cable Type	ENVIROFLEX_316_D	ENVIROFLEX_316_D
Cable Length (m)	1	1
Min. radius static (mm)	5	5
Min. radius dynamic (mm)	30	30
Polarization	vertical	circular right
DC grounded	No	No

Connections

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

General Data

GROUND PLANE: Antenna works on metallic as well as on non-metallic ground plane. VSWR is valid for both mounting options
 GAIN VALUES: Indicated gain values are valid for non-metallic ground plane. Gain of this antenna on metallic surface is higher for 790 to 960 MHz: 3.5 dBi (instead of 2 dBi)

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INGRESS PROTECTION:

- IP 66, IP67 AND IP 69K when mounted on cabinet's flat surface or roof
- IP 66 and IP67 when mounted on bracket with sealed cable conduit

Electrical Data LNA

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

LNA INPUT VOLTAGE RANGE: 3..5 V

TOTAL GAIN @90° ELEVATION: 30 dBiC

NOTE:

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)	33.2 x 145 (Height x Diameter)
Weight (kg)	0.35

Environmental Data

Environmental conditions	outdoor
Operation temperature (°C)	-55 to 85
Storage temperature (°C)	-55 to 85
Transport temperature (°C)	-55 to 85
Flammability rating	UL 94-V0
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 RANGE: EN 60068-2-1 (2007), test Ab, -55°C, 16h and EN-60068-2-2 (2007), test Bb, +85°C, 16h

THERMAL SHOCK: IEC 60068-2-14 (2009), test Na, -55°C to +85°C, 3h, 5 cycles

SOLAR RADIATION: EN 60068-2-5, test Sa, procedure B, 1200 W/m², 3 x 24h

RELATIVE HUMIDITY: EN 60068-2-78 (2012), test Cb, RH 95%, 21d (damp heat, steady state)

RELATIVE HUMIDITY: EN 60068-2-30 (2005), RH 97%, 6 cycles (damp heat, cyclic)

SALT SPRAY: EN 60068-2-11 (2002), test Ka, 96h

MECHANICAL VIBRATION / SHOCK: IEC 61373 (1999), § 9 and § 10, category 2

VANDALISM: EN 60068-2-75 (1997), IEC 62262 (2002) IK10, test Ehc

CORROSION: MIL-F-14072 E type 1 "exposed"

Material Data

Radome colour	RAL 7044 (grey)
Radome material	PC (Polycarbonate)

Related Products

9091.99.0259 Bracket kit for SENCITY® Omni-S MIMO antenna

Accessory kit 9091.99.0259 is available via H+S customizing process, no item number as extra deliverable assigned yet.

Related Documents

Mounting instruction	DOC-0000711826
Painting instruction	DOC-0000256180
Security instruction	DOC-0000278984
Outline drawing	DOU-00303589
3D-model	DOC-0000721414
CE compliancy	DOC-0000785726

Additional Information

This product can be customized alternatively in the following way: - Cable length from 300 to 5000 mm - Choice of RF connector (SMA, R-SMA, QMA, TNC, R-TNC, N) - Customer specific port labeling on pigtails - Further wireless bands, e.g. dual-band WiFi MIMO or Cellular/LTE SISO

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