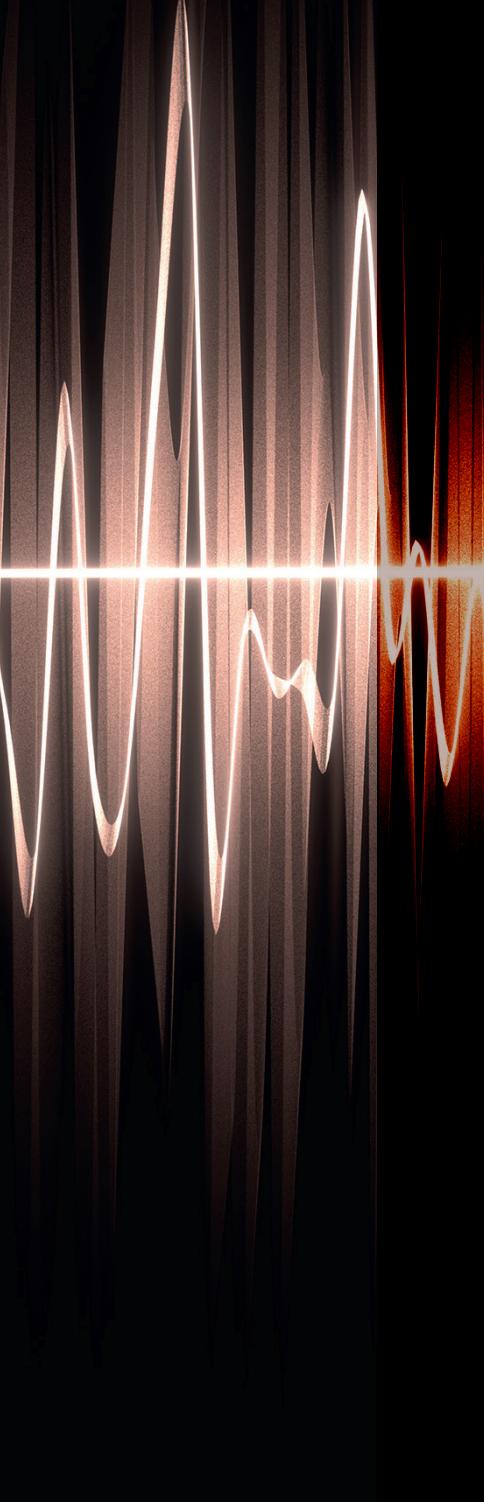


Antennas

Edition 2020/02



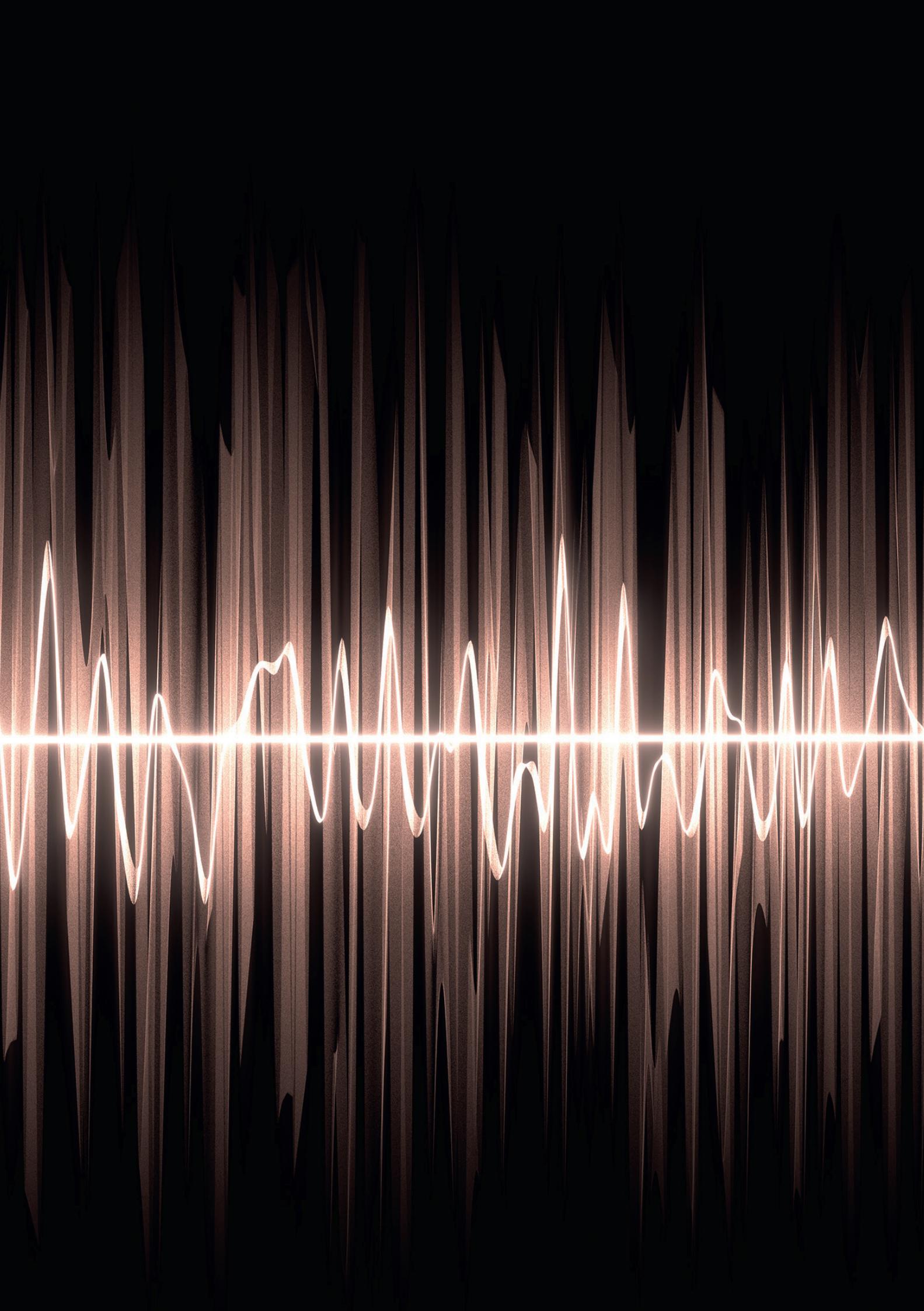


Connecting – today and beyond



HUBER+SUHNER develops and produces since more than twenty years an extensive portfolio of directional and omnidirectional antennas for the wide range of indoor and outdoor wireless connections such as:

- IBC/DAS antennas
- mm-wave antennas
- Vehicles antennas
- WLAN/WiFi antennas



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Accessories and mounting brackets	102

SENCITY® antennas

HUBER+SUHNER antenna families cover various frequency bands from 380 MHz to 90 GHz and have different designs to cope with specific market requirements.



SENCITY® Omni-S

Vandalism-proof omni-directional antenna for outdoor and indoor applications. The product can be configured to specific needs.



SENCITY® Omni Stick

Omni-directional WLAN/WiFi/Cellular/LTE stick antenna for harsh industrial environment or DAS applications.



SENCITY® Optima

Ultra-broadband antenna with low profile for indoor DAS.



SENCITY® Rail

Omnidirectional railway roof-top antenna family for all types of trains. Designed to meet the special requirements of railway applications including high-current and high voltage protection.



SENCITY® Rail Excel

Directional railway roof-top antenna family for all types of trains. Designed to meet the special requirements of railway applications including high-current and high voltage protection.



SENCITY® Road

Vehicle roof-top antenna family for heavy-duty, bus and LRV/Metro. Provides several antenna elements in one compact housing.



SENCITY® Occhio

SENCITY® Occhio MIMO DAS (Distributed Antenna System) or small cell antenna, offers the operator 5G coverage, a simple, time-saving installation process and an attractive industry preferred design with a small form factor. Thanks to its multi-band capability between 1.7-6 GHz and 2x2/4x4 MIMO configurations it supports todays and future wireless applications.



SEN CITY® Rondo

MIMO and SISO antenna with attractive design and five different mounting options for indoor DAS.



SEN CITY® Ultra

Small form factor indoor DAS antenna for private and public security and LTE networks.



SEN CITY® Spot-S

Small, directional medium gain WLAN/WiFi/ISM/Cellular band antenna. Variants available optimized for harsh industrial, railway or indoor environment.



SEN CITY® Embedded

Omni-directional dual-band WLAN/WiFi/Cellular/LTE antenna for wireless device integration.



SEN CITY® Spot-M/L

Directional high gain WLAN/WiFi/ISM-band antenna for indoor and outdoor applications.



SEN CITY® Urban 100

Outdoor MIMO antennas covering the high band for 4G and 5G. Different versions available to cover 360° or sectors.



SEN CITY® Spot-M Yagi

Directional high gain WLAN/WiFi antenna for railway trackside and tunnel applications.



SEN CITY® Urban 200

Outdoor directional MIMO antennas covering the high band for 4G and 5G. Different versions available to cover different ranges.

Antenna overview

		Frequency range															
		TETRA, Public Safety (400 MHz)	ISM (433 MHz)	Cellular (700 MHz)	Cellular (800, 850, 900 MHz)	ISM (866/915 MHz)	Cellular (1.7, 1.8, 1.9, 2.1 GHz)	DECT (1.9 GHz)	Cellular (2.3 GHz)	WiFi (2.4 GHz)	Cellular (2.6 GHz)	Cellular (3.5, 3.7 GHz)	Public Safety (4.9 GHz)	WiFi, Cellular (5 GHz)	GNSS	V-Band (60 GHz)	E-Band (70, 80 GHz)
SENCITY® Omni-SR Dome									X	X	X	X	X	X			
SENCITY® Omni-S (MIMO)			X	X	X	X	X						X	X			
SENCITY® Occhio							X	X	X	X	X	X	X				
SENCITY® Omni-SR MIMO									X	X	X	X	X				
SENCITY® Omni-S Dome and SENCITY® Omni-SR Dome								X		X	X	X	X				
SENCITY® Omni-S Slim and SENCITY® Omni-SR Slim									X	X			X				

This overview includes all possible features inside an antenna group, for details refer to the indicated pages.

	Gain		Configuration				Pattern		Norms								
	from	to	SISO	MiMo 2x2	MiMo 3x3	Mimo 4x4	Configurable	directional	omni-directional	PIM	outdoor	Automotive ISO 16750	Industry EN 60068	Railway EN 50155	Railway EN 45545-2	Railway NFPA130	Page
	6	8	x					x		x	x		x	x	x		14
	1.5	6.5	x	x	x	x	x	x	x	x	x		x				17
																	96
	2.3	6			x			x					x	x	x	x	21
	4	7.5	x					x		-		x		x	x		22
	4	6			x			x		-		x		x	x		27

Antenna overview (continuing)

		Frequency range															
		TETRA, Public Safety (400 MHz)	ISM (433 MHz)	Cellular (700 MHz)	Cellular (800, 850, 900 MHz)	ISM (866/915 MHz)	Cellular (1.7, 1.8, 1.9, 2.1 GHz)	DECT (1.9 GHz)	Cellular (2.3 GHz)	WiFi (2.4 GHz)	Cellular (2.6 GHz)	Cellular (3.5, 3.7 GHz)	Public Safety (4.9 GHz)	WiFi, Cellular (5 GHz)	GNSS	V-Band (60 GHz)	E-Band (70, 80 GHz)
SENCITY® Omni Stick							X	X	X	X	X						
SENCITY® Omni-S Thimble							X	X	X	X	X	X	X	X			
SENCITY® Omni Stick			X	X	X	X		X	X				X	X			
SENCITY® Omni Stick							X										
SENCITY® Optima			X	X	X	X	X	X	X	X	X	X	X	X			
SENCITY® Rail			X	X	X	X	X	X	X	X	X	X	X	X	X		
			X	X	X	X	X	X	X	X	X	X	X	X	X		
				X	X	X	X	X	X	X	X	X	X	X	X		
SENCITY® Rail MIMO				X	X	X	X	X	X	X	X	X	X	X	X		
SENCITY® Rail MULTI			X	X	X	X	X	X	X	X	X	X	X	X	X		
			X	X	X	X	X	X	X	X	X	X	X	X	X		
			X	X	X	X	X	X	X	X	X	X	X	X	X		

This overview includes all possible features inside an antenna group, for details refer to the indicated pages.

Gain		Configuration				Pattern		Norms								
from	to	SISO	MiMo 2x2	MiMo 3x3	Mimo 4x4	Configurable	directional	omni-directional	PIM	outdoor	Automotive ISO 16750	Industry EN 60068	Railway EN 50155	Railway EN 45545-2	Railway NFPAn30	Page
2	3	x					x		-145	x		x				30
1.5	2.5	x					x			x		x	x		x	33
5	6	x					x		-145	x		x				34
7	7	x					x			x		x				38
2	8	x					x		-150	-						39
6	9	x					x			x		x		x		40
4	8	x					x			x		x		x		43
5	7	x					x			x		x		x		44
5	8		x				x			x		x		x		45
5	8.5		x				x			x		x		x	x	46
5	8.5		x				x			x		x		x	x	47
5	7		x		x		x			x		x		x	x	49
5	7		x		x		x			x		x		x	x	49

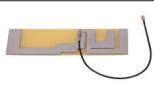
Antenna overview (continuing)

		Frequency range															
		TETRA, Public Safety (400 MHz)	ISM (433 MHz)	Cellular (700 MHz)	Cellular (800, 850, 900 MHz)	ISM (866/915 MHz)	Cellular (1.7, 1.8, 1.9, 2.1 GHz)	DECT (1.9 GHz)	Cellular (2.3 GHz)	WiFi (2.4 GHz)	Cellular (2.6 GHz)	Cellular (3.5, 3.7 GHz)	Public Safety (4.9 GHz)	WiFi, Cellular (5 GHz)	GNSS	V-Band (60 GHz)	E-Band (70, 80 GHz)
SENCITY® Rail Excel													X	X			
									X	X							
SENCITY® Road and SENCITY® Road MIMO		X	X	X	X	X	X	X	X	X	X		X	X	X		
				X	X	X	X	X	X	X	X			X			
SENCITY® Rondo				X	X	X	X	X	X	X	X	X					
SENCITY® Spot-S						X	X	X		X	X		X	X			
SENCITY® Spot-S indoor and SENCITY® Spot-SR									X	X	X		X				
								X	X	X			X				
SENCITY® Spot-M						X			X	X	X			X			

This overview includes all possible features inside an antenna group, for details refer to the indicated pages.

	Gain		Configuration				Pattern		Norms								
	from	to	SISO	MiMo 2x2	MiMo 3x3	Mimo 4x4	Configurable	directional	omni-directional	PIM	outdoor	Automotive ISO 16750	Industry EN 60068	Railway EN 50155	Railway EN 45545-2	Railway NFPA130	Page
	12	12					X			X				X	X		50
	11	14					X				X			X	X		52
	4	7	X					X			X	X					53
	4	6		X				X			X	X					57
	2	7		X				X	-155	-							58
	3.5	14	X	X	X		X			X		X	X	X	X		60
	7.5	11.5	X				X			-			X		X	X	70
	8	9	X				X			-							74
	8	19	X	X			X			X		X					78

Antenna overview (continuing)

		Frequency range															
		TETRA, Public Safety (400 MHz)	ISM (433 MHz)	Cellular (700 MHz)	Cellular (800, 850, 900 MHz)	ISM (866/915 MHz)	Cellular (1.7, 1.8, 1.9, 2.1 GHz)	DECT (1.9 GHz)	Cellular (2.3 GHz)	WiFi (2.4 GHz)	Cellular (2.6 GHz)	Cellular (3.5, 3.7 GHz)	Public Safety (4.9 GHz)	WiFi, Cellular (5 GHz)	GNSS	V-Band (60 GHz)	E-Band (70, 80 GHz)
SENCITY® Spot-L		X							X	X	X		X	X			
SENCITY® Spot-L sector					X								X				
SENCITY® Spot-M Yagi										X							
SENCITY® Ultra		X	X	X	X	X	X	X	X	X	X	X	X				
SENCITY® Urban 100											X	X					
SENCITY® Urban 200								X	X	X		X	X				
SENCITY® Embedded					X	X	X	X	X	X	X		X	X			

This overview includes all possible features inside an antenna group, for details refer to the indicated pages.

	Gain		Configuration				Pattern		Norms								
	from	to	SISO	MiMo 2x2	MiMo 3x3	Mimo 4x4	Configurable	directional	omni-directional	PIM	outdoor	Automotive ISO 16750	Industry EN 60068	Railway EN 50155	Railway EN 45545-2	Railway NFPA130	Page
	9	23	x	x	x			x			x		x				83
	11	17	x					x			—		x				88
	14	14	x					x			x			x	x		90
	3.5	10	x					x		-150	—						91
	2	7		x				x	x	-150	x						92
	4	7.5		x				x		-150	x						94
	1	4	x				x		x		—						98

SENCITY® Omni-SR



Features:

- Small omni-directional outdoor antenna for WiFi applications
- Supports the 2.4 and 5.8 GHz band
- Rugged design
- Single hole mounting
- Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2.

Specifications

Electrical data					
Frequency (MHz)	2400 to 2500	2500 to 2700	3400 to 3700	4900 to 5470	5470 to 5935
VSWR	1.8	2	2	1.8	1.8
Gain (dBi)	6	6	7	8	8
General data					
Nominal impedance (Ω)	50				
Polarisation	vertical				
Composite power max. (W)	75				
Mechanical data					
Dimensions (height \times width \times depth)	50.6 \times 50.6 \times 25 mm (1.99 \times 1.99 \times 1 in)				
Weight	0.3 kg (0.66 lbs)				
Connector	N (female)				
Environmental data					
Environment	outdoor				
Operation temperature (°C)	-40 to 80				
RoHS 2011/65/EU	compliant				
IP rating	IP68				
Material data					
Radome colour	RAL 7043 (dark grey)				
Radome material	ASA (acrylic ester-styrene-acrylonitrile)				
Back/base plate material	Stainless Steel				

Ordering information

Description	Item no.	Version
1399.17.0111	84043908	N (female)
1399.17.0108	84040934	N (female) connector with long neck

SENCITY® Omni-S



Features:

- Omni-directional cellular/4G LTE SISO antenna
- Rugged and low profile cabinet and pole/wall mount antenna
- Supporting mobile bands LTE 698 to 862 MHz, cellular 1710 to 2170 and LTE 2300, 2500, 2600 MHz bands
- Single hole cabinet or wall/pole mounting
- For outdoor and indoor applications
- Ingress protection IP66/IP67 (IP69k)

Specifications

Electrical data			
Frequency (MHz)	698 to 862	1710 to 2170	2300 to 2690
VSWR	1.8	1.8	1.8
Gain (dBi)	2	5	3
General data			
Nominal impedance (Ω)	50		
Polarisation	vertical		
Composite power max. (W)	10		
Mechanical data			
Dimensions (height x diameter)	33.2 x 145 mm (1.31 x 5.7 in)		
Weight	0.3 kg (0.66 lbs)		
Connector	SMA (male)		
Cable type	ENVIROFLEX_316_D		
Environmental data			
Environment	outdoor		
Operation temperature (°C)	−55 to 85		
RoHS 2011/65/EU	compliant		
Material data			
Radome colour	RAL 7044 (grey)		
Radome material	PC (Polycarbonate)		

Ordering information

Description	Item no.	Version
1399.19.0225	85065467	Pigtail with SMA (male)

SENCITY® Omni-S



Features:

- Omni-directional cellular/4G LTE SISO antenna
- Rugged and low profile cabinet and pole/wall mount antenna
- Supporting mobile bands LTE 790 to 960 MHz, Cellular 1710 to 2170 and LTE 2300, 2500, 2600 MHz bands
- Single hole cabinet or wall/pole mounting
- For outdoor and indoor applications
- Ingress protection IP66/IP67 (IP69k)

Specifications

Electrical data				
Frequency (MHz)	790 to 930	930 to 960	1710 to 2170	2300 to 2690
VSWR	1.8	2.5	1.9	1.6
Gain (dBi)	2	2	6	4
General data				
Nominal impedance (Ω)	50			
Polarisation	vertical			
Composite power max. (W)	10			
Mechanical data				
Dimensions (height x diameter)	33.2 x 145 mm (1.31 x 5.7 in)			
Weight	0.3 kg (0.66 lbs)			
Connector	SMA (male) or N (female)			
Cable type	ENVIROFLEX_316_D			
Environmental data				
Environment	outdoor			
Operation temperature (°C)	−55 to 85			
RoHS 2011/65/EU	compliant			
Material data				
Radome colour	RAL 7044 (grey) or RAL9010 (white)			
Radome material	PC (Polycarbonate)			

Ordering information

Description	Item no.	Version
1399.19.0224	85065466	Pigtail with SMA (male), Radome colour RAL 7044 (grey)
1399.17.0245	85084911	Pigtail with N (female), Radome colour RAL 9010 (white)

SEN CITY® Omni-S SISO + 2x2 MIMO



Features:

- Omni-directional Cellular/4G LTE (EUR) SISO and WiFi 2x2 MIMO antenna
- Cellular/LTE 790-960, 1710-2170 and 2300-2690 MHz on one port
- WiFi dual-band 2400-2500, 4900-6000 and 3400-3800 MHz on two further ports
- Rugged and low profile cabinet and pole/wall mount antenna
- Single hole cabinet mounting, for outdoor & indoor applications
- Vandalism proof "IK10" acc. to IEC 62262/2002-02

Specifications

Electrical data	Cellular/LTE SISO		Wifi 2 x 2 MIMO			
Frequency (MHz)	790 to 930	930 to 960	1710 to 2690	2300 to 2690	3400 to 3800	4900 to 5975
VSWR	2.2	2.7	2.0	2.0	1.8	2.0
Gain (dBi)	4	4	5	5	6	6

General data

Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10

Mechanical data

Dimensions (height x diameter)	33.2 x 145 mm (1.31 x 5.7 in)
Weight	0.32 kg (0.70 lbs)
Connector	SMA (male) / SMA-reverse (male)
Cable type	ENVIROFLEX_316_D

Environmental data

Environment	outdoor
Operation temperature (°C)	-55 to 85
RoHS 2011/65/EU	compliant

Material data

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

Ordering information

Description	Item no.	Version
1399.19.0227	85080441	3 x pigtail with SMA (male)

SENCITY® Omni-S SISO + GNSS



Features:

- Omni-directional cellular/LTE and GNSS multi antenna
- Supporting 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 GPS/Glonass antenna with LNA on second port
- Rugged and low profile cabinet and pole/wall mount antenna
- Single hole cabinet mounting, for outdoor & indoor applications
- Vandalism proof "IK10" acc. to IEC 62262/2002-02

Specifications

Electrical data	Band				GPS/Glonass
Frequency (MHz)	790 to 930	930 to 960	1710 to 2170	2300 to 2690	1574 to 1610
VSWR	2	2.5	1.7	1.7	1.8
Gain (dBi)	2	2	6	4	
General data					
Nominal impedance (Ω)	50				
Polarisation	vertical				
Composite power max. (W)	10				
Mechanical data					
Dimensions (height x diameter)	33.2 x 145 mm (1.31 x 5.7 in)				
Weight	0.35 kg (0.77 lbs)				
Connector	SMA (male)				
Cable type	ENVIROFLEX_316_D				
Environmental data					
Environment	outdoor				
Operation temperature (°C)	−55 to 85				
RoHS 2011/65/EU	compliant				
Material data					
Radome colour	RAL 7044 (grey)				
Radome material	PC (Polycarbonate)				

Ordering information

Description	Item no.	Version
1399.19.0006	85016093	2 x pigtail with SMA (male)
1399.26.0053	85102127	2 x pigtail with TNC (female) / TNC-R (female)

SENCITY® Omni-S 3x3 MIMO



Features:

- Omni-directional 3x3 WiFi MIMO and LTE 2300, 2600 and 3500 MHz antenna
- Rugged and low profile cabinet and pole/wall mount antenna
- Supports WiFi dual-band 2.4 to 2.5/4.9 to 6 GHz, IEEE 802.11 b/g/a/h/p/n/ac
- And cellular LTE 2300, 2500, 2600 and 3500 MHz band configurations
- Single hole cabinet mounting, for outdoor and indoor applications
- Vandalism proof "IK10" acc. to IEC 62262/2002-02

Specifications

Electrical data				
Frequency (MHz)	2300 to 2500	2500 to 2690	3400 to 3800	4900 to 5975
VSWR	1.7	1.8	2	1.5
Gain (dBi)	1.5	1.5	2	4
General data				
Nominal impedance (Ω)	50			
Polarisation	vertical			
Composite power max. (W)	10			
Mechanical data				
Dimensions (height x diameter)	33.2 x 145 mm (1.31 x 5.7 in)			
Weight	0.29 kg (0.64 lbs)			
Connector	SMA-reverse (male)			
Cable type	ENVIROFLEX_316_D			
Environmental data				
Environment	outdoor			
Operation temperature (°C)	−55 to 85			
RoHS 2011/65/EU	compliant			
Material data				
Radome colour	RAL 7044 (grey)			
Radome material	PC (Polycarbonate)			

Ordering information

Description	Item no.	Version
1399.59.0003	85016092	3 x pigtail with SMA-reverse (male)

SENCITY® Omni-S 4x4 MIMO



Features:

- Omni-directional 4x4 WiFi MIMO and LTE 2300, 2600 and 3500 MHz antenna
- Rugged and low profile cabinet and pole/wall mount antenna
- Supports WiFi dual-band 2.4 to 2.5/4.9 to 6 GHz, IEEE 802.11 b/g/a/h/p/n/ac
- And cellular LTE 2300, 2500, 2600 and 3500 MHz band configurations
- Single hole cabinet mounting, for outdoor and indoor applications
- Vandalism proof "IK10" acc. to IEC 62262/2002-02

Specifications

Electrical data				
Frequency (MHz)	2300 to 2500	2500 to 2690	3400 to 3800	4900 to 5975
VSWR	1.7	1.8	2	1.5
Gain (dBi)	1.5	1.5	2	3.5
General data				
Nominal impedance (Ω)	50			
Polarisation	vertical			
Composite power max. (W)	10			
Mechanical data				
Dimensions (height x diameter)	33.2 x 145 mm (1.31 x 5.7 in)			
Weight	0.32 kg (0.70 lbs)			
Connector	SMA-reverse (male)			
Cable type	ENVIROFLEX_316_D			
Environmental data				
Environment	outdoor			
Operation temperature (°C)	−55 to 85			
RoHS 2011/65/EU	compliant			
Material data				
Radome colour	RAL 7044 (grey)			
Radome material	PC (Polycarbonate)			

Ordering information

Description	Item no.	Version
1399.59.0005	85031687	4 x pigtail with SMA-reverse (male)

SENCITY® Omni-SR 4x4 MIMO



Features:

- Small omnidirectional 4x4 MIMO cabinet/ceiling mount antenna
- Supports Wifi 2.4/5 GHz and cellular 2.3/2.6/3.5 GHz bands
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to EN 45545-2 and NFPA130
- Single hole mounting

Specifications

Electrical data				
Frequency (MHz)	2300 to 2500	2500 to 2690	3400 to 3800	4900 to 5975
VSWR	1.7	1.8	1.8	1.5
Gain (dBi)	3.5	3.5	5	4.5
General data				
Nominal impedance (Ω)	50			
Polarisation	vertical			
Composite power max. (W)	10			
Mechanical data				
Dimensions (height x diameter)	33.2 x 145 mm			
Weight	0.9 kg			
Connector	N, plug (male)			
Environmental data				
Environment	indoor/outdoor			
Operation temperature (°C)	-44 to 85			
RoHS 2011/65/EU	compliant			
Material data				
Radome colour	RAL 7044 (grey)			
Radome material	PC (Polycarbonate)			

Ordering information

Description	Item no.	Version
1399.17.0240	85078396	4 x pigtail 0.5 m with N (male)
1399.17.0246	85087896	4 x pigtail 1.5 m with N (male), lower gain
1399.35.0010	85097487	4 x pigtail 1.5 m with QMA (male), lower gain

SENCITY® Omni-SR Dome



Features:

- Small omni-directional indoor antenna for WiFi applications
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, EN 45545-2
- Protection against lightning

Specifications

Electrical data					
Frequency (MHz)	2400 to 2500	2500 to 2700	3400 to 3700	4900 to 5470	5470 to 5935
VSWR	1.8	2	2	1.8	1.8
Gain (dBi)	6	6	7	8	8
General data					
Nominal impedance (Ω)	50				
Polarisation	vertical				
Composite power max. (W)	75				
Mechanical data					
Dimensions (height x diameter)	43 x 86 mm (1.69 x 3.4 in)				
Weight	0.3 kg (0.66 lbs)				
Connector	N (female)				
Environmental data					
Environment	indoor				
Operation temperature (°C)	−40 to 80				
RoHS 2011/65/EU	compliant				
Material data					
Radome colour	RAL 7035 (light-grey)				
Radome material	PC (Polycarbonate)				

Ordering information

Description	Item no.	Version
1399.17.0106	84039156	N (female)

SENCITY® Omni-SR Dome



Features:

- Small omni-directional indoor antenna for WiFi applications
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, EN 45545-2
- Single hole mounting

Specifications

Electrical data	
Frequency (MHz)	4900 to 5935
VSWR	1.5
Gain (dBi)	3
3 dB beamwidth (h) (°)	360
3 dB beamwidth (v) (°)	25

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	75

Mechanical data	
Dimensions (height x diameter)	43 x 86 mm (1.69 x 3.39 in)
Weight	0.3 kg (0.66 lbs)
Connector	N (female)

Environmental data	
Environment	indoor
Operation temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant

Material data	
Radome colour	RAL 9010 (white)
Radome material	PC (Polycarbonate)
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1356.17.0043	84027318	N (female)

SENCITY® Omni-S Dome



Features:

- Omni-directional broad-band WiFi antenna
- Dual-band IEEE 802.11 a/b/g/h
- Broad-band 2.4 to 6 GHz
- WLAN, LTE 2.6, WiMax
- For indoor application

Specifications

Electrical data			
Frequency (MHz)	2400 to 2500	2500 to 4900	4900 to 6000
VSWR	1.6	1.5	1.5
Gain (dBi)	4	4	7.5
3 dB beamwidth (h) (°)	360	360	360
General data			
Nominal impedance (Ω)	50		
Polarisation	vertical		
Composite power max. (W)	10		
Mechanical data			
Dimensions (height x diameter)	43 x 86 mm (1.69 x 3.39 in)		
Weight	0.3 kg (0.66 lbs)		
Connector	SMA (female) or N (female)		
Environmental data			
Environment	indoor		
Operation temperature (°C)	−40 to 80		
RoHS 2011/65/EU	compliant		
Material data			
Radome colour	RAL 7035 (light-grey)		
Radome material	ASA (acrylic ester-styrene-acrylonitrile)		
Back/base plate material	Aluminium		

Ordering information

Description	Item no.	Version
1399.19.0024	84000441	SMA (female)
1399.17.0040	84000442	N (female)

SENCITY® Omni-S Dome DECT



Features:

- Planar indoor DECT antenna
- Polarisation: linear vertical
- Working range: 1880 to 1930 MHz
- Half power beamwidth: 100° vertical, 360° horizontal; 2 dBi gain

Specifications

Electrical data	
Frequency (MHz)	1880 to 1930
VSWR	1.5
Gain (dBi)	2
3 dB beamwidth (h) (°)	360
3 dB beamwidth (v) (°)	100

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10

Mechanical data	
Dimensions (height x diameter)	43 x 86 mm (1.69 x 3.39 in)
Weight	0.3 kg (0.66 lbs)
Connector	SMA (female)

Environmental data	
Environment	indoor
Operation temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant

Material data	
Radome colour	RAL 9010 (white)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1319.19.0028	84011462	SMA (female)

SENCITY® Omni-SR Dome



Features:

- SENCITY® Omni-S 2.4 GHz antenna
- 802.11 a/b/g
- Small omni-directional indoor antenna for WiFi applications
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, EN 45545-2
- Single hole mounting

Specifications

Electrical data	
Frequency (MHz)	2400 to 2500
VSWR	1.5
Gain (dBi)	4
General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	75
Mechanical data	
Dimensions (height x diameter)	43 x 86 mm (1.69 x 3.4 in)
Weight	0.3 kg (0.66 lbs)
Connector	N (female)
Environmental data	
Environment	indoor
Operation temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant
Material data	
Radome colour	RAL 9010 (white)
Radome material	PC (Polycarbonate)

Ordering information

Description	Item no.	Version
1324.17.0071	84027317	N (female)

SENCITY® Omni-SR Slim 3x3 MIMO



Features:

- Small omni-directional MIMO indoor antenna for WiFi applications
- Supports the 2.4 GHz and 5 GHz bands
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, EN 45545-2

Specifications

Electrical data		
Frequency (MHz)	2400 to 2690	5150 to 5935
VSWR	1.5	1.5
Gain (dBi)	4	6
Isolation (dB)	20	20
3 dB beamwidth (h) (°)	360	360
General data		
Nominal impedance (Ω)	50	
Polarisation	vertical	
Composite power max. (W)	10	
Mechanical data		
Dimensions (height x width x depth)	31 x 91.8 x 281.8 mm (1.22 x 3.61 x 11.09 in)	
Weight	0.32 kg (0.70 lbs)	
Connector	QMA (female)	
Environmental data		
Environment	indoor	
Operation temperature (°C)	−40 to 85	
RoHS 2011/65/EU	compliant	
Material data		
Radome colour	RAL 7044 (grey)	
Radome material	PC (Polycarbonate)	
Back/base plate material	Aluminium	

Ordering information

Description	Item no.	Version
1399.35.0002	84123697	3 x QMA (female)

SENCITY® Omni-S Slim 3x3 MIMO



Features:

- Small omni-directional MIMO antenna for WiFi + LTE 2600 applications
- Dual band WiFi / WLAN and LTE 2600 3x3 MIMO antenna
- Supports the 2.4 GHz and 5 GHz and LTE 2.5 to 2.7 GHz bands
- Three ports each with broad-band antenna radiator technology
- IEEE 802.11 b/g/a/h/p and 802.11 n/ac
- For industrial indoor environment - IP65 protected
- 3x3 WiFi dual-band MIMO antenna with three ports QMA (female)

Specifications

Electrical data		
Frequency (MHz)	2400 to 2690	5150 to 5935
VSWR	1.7	1.7
Gain (dBi)	4	6
General data		
Nominal impedance (Ω)	50	
Polarisation	vertical	
Composite power max. (W)	10	
Mechanical data		
Dimensions (height x width x depth)	32 x 282 x 92 mm (1.26 x 11.10 x 3.62 in)	
Weight	0.32 kg (0.70 lbs)	
Connector	QMA (female)	
Environmental data		
Environment	indoor	
Operation temperature (°C)	-40 to 85	
RoHS 2011/65/EU	compliant	
Material data		
Radome colour	RAL 7044 (grey)	
Radome material	PC (Polycarbonate)	

Ordering information

Description	Item no.	Version
1399.35.0004	85013265	3 x QMA (female)

SENCITY® Omni-S Slim 3x3 MIMO



Features:

- Small omni-directional MIMO antenna for WiFi + LTE 2600 applications
- Dual band WiFi/WLAN and LTE 2600 3x3 MIMO antenna
- Supports the 2.4 GHz and 5 GHz and LTE 2.5 to 2.7 GHz bands
- Three ports each with broad-band antenna radiator technology
- IEEE 802.11 b/g/a/h/p and 802.11 n/ac
- For industrial indoor environment – IP65 protected
- 3x3 WiFi dual-band MIMO antenna with three pigtail ports N (male)

Specifications

Electrical data		
Frequency (MHz)	2400 to 2690	5150 to 5935
VSWR	1.7	1.7
Gain (dBi)	5	6
Isolation (dB)	20	20
3 dB beamwidth (h) (°)	360	360
3 dB beamwidth (v) (°)	65	65
General data		
Nominal impedance (Ω)	50	
Polarisation	vertical	
Composite power max. (W)	10	
Mechanical data		
Dimensions (height x width x depth)	32 x 282 x 92 mm (1.26 x 11.10 x 3.62 in)	
Weight	0.6 kg (1.32 lbs)	
Connector	N (male) or SMA reverse (male)	
Cable type	S_04262_D-09	
Environmental data		
Environment	indoor	
Operation temperature (°C)	-40 to 85	
RoHS 2011/65/EU	compliant	
IP rating	IP65	
Material data		
Radome colour	RAL 9010 (white)	

Ordering information

Description	Item no.	Version
1399.17.0208	84076853	3 pigtailed N (male)
1399.99.0125	84127107	3 pigtailed SMA reverse (male)

SENCITY® Omni Stick



Features:

- Omni-directional WiFi antenna
- IEEE 802.11 a/h, frequency band: 5.15 to 5.875 GHz
- Wireless LAN/Wi-Fi WLAN
- In- and outdoor applications – IP67
- Pole/mast and wall mount

Specifications

Electrical data	
Frequency (MHz)	5150 to 5875
VSWR	1.7
Gain (dBi)	5
3 dB beamwidth (h) (°)	360
3 dB beamwidth (v) (°)	25

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	6

Mechanical data	
Dimensions (height x diameter)	191 x 16 mm (7.52 x 0.63 in)
Weight	0.1 kg (0.22 lbs)
Connector	N (female)

Environmental data	
Environment	outdoor
Operation temperature (°C)	-45 to 70
RoHS 2011/65/EU	compliant
IP rating	IP67

Material data	
Radome colour	RAL 9002 (grey-white)
Radome material	PP (Polypropylene)

Ordering information

Description	Item no.	Version
1356.17.0067	84066836	N (female)

SENCITY® Omni Stick



Features:

- Omni-directional multiband antenna for GSM 1800, GSM/PCS 1900, UMTS, LTE 2300, 2500 and 2600, also WLAN IEEE 802.11 b/g WiFi 2400 to 2500 MHz
- Gain 2 dBi, vertical polarized antenna
- Ingress protection IP67 (IEC 60529)
- For outdoor and indoor applications
- Pole or wall mount

Specifications

Electrical data	
Frequency (MHz)	1710 to 2690
VSWR	1.8
Gain (dBi)	2
3 dB beamwidth (h) (°)	360
3 dB beamwidth (v) (°)	65

General data	
Nominal impedance (Ω)	50
IMD level (dBc)	-145 at 2 × 30 dBm
Polarisation	vertical
Composite power max. (W)	25

Mechanical data	
Dimensions (height × diameter)	120 × 22 mm (4.72 × 0.87 in)
Weight	0.3 kg (0.66 lbs)
Connector	N (female)

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant
IP rating	IP67

Material data	
Radome colour	RAL 9003 (signal white)
Radome material	glass fiber

Ordering information

Description	Item no.	Version
1399.17.0232	85026688	N (female)

SENCITY® Omni Stick



Features:

- Omni-directional multiband antenna for GSM 1800, GSM/PCS 1900, UMTS, LTE 2300, 2500 and 2600, also WLAN IEEE 802.11 b/g WiFi 2400 to 2500 MHz
- Gain 2 dBi, vertical polarized antenna
- Ingress protection IP67 (IEC 60529)
- For outdoor and indoor applications
- Pole or wall mount

Specifications

Electrical data	
Frequency (MHz)	1710 to 2690
VSWR	1.8
Gain (dBi)	2
3 dB beamwidth (h) (°)	360
3 dB beamwidth (v) (°)	65

General data	
Nominal impedance (Ω)	50
IMD level (dBc)	-145 at 2 × 30 dBm
Polarisation	vertical
Composite power max. (W)	25

Mechanical data	
Dimensions (height × diameter)	120 × 22 mm (4.72 × 0.87 in)
Weight	0.3 kg (0.66 lbs)
Connector	N (male)

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant
IP rating	IP67

Material data	
Radome colour	RAL 9003 (signal white)
Radome material	glass fiber

Ordering information

Description	Item no.	Version
1399.17.0237	85065352	N (male)

SENCITY® Omni-S Thimble



Features:

- Broad band omni-directional WiFi and mobile antenna for 1710 up to 6000 MHz
- WLAN 2400 to 2500 MHz and 5150 to 6000 MHz; WiFi IEEE 802.11 a/b/g/h/p and n
- Mobile/cellular 1710 to 2200 MHz
- LTE 2300, LTE 2500 and LTE 2700 MHz/WiMax 3400 to 3800 MHz
- Small and robust outdoor stick antenna IP66/IP68/IP69K
- Direct mount on N type connector of wireless access points or clients

Specifications

Electrical data					
Frequency (MHz)	1710 to 2000	2000 to 2700	2700 to 3800	4900 to 5150	5150 to 6000
VSWR	2	2	2	2	2
Gain (dBi)	1.5	2	1.5	2.5	2
3 dB beamwidth (h) (°)	360	360	360	360	360
General data					
Nominal impedance (Ω)	50				
Polarisation	vertical				
Composite power max. (W)	10				
Mechanical data					
Dimensions (height x diameter)	55 x 21 mm (2.17 x 0.83 in)				
Weight	0.05 kg (0.11 lbs)				
Connector	N (male)				
Environmental data					
Environment	outdoor				
Operation temperature (°C)	−40 to 85				
RoHS 2011/65/EU	compliant				
IP rating	IP69K				
Material data					
Radome colour	RAL 7043 (dark grey)				
Radome material	ASA (acrylic ester-styrene-acrylonitrile)				

Ordering information

Description	Item no.	Version
1399.17.0224	85012283	N (male)

SENCITY® Omni Stick



Features:

- Omni-directional multiband antenna for LTE 800, GSM 900, GSM 1800, GSM/PCS 1900, UMTS, LTE 2300 and 2600; WLAN 802.11 b/g WiFi 2400 MHz band
- Gain 2/3 dBi, vertical polarized antenna
- Ingress protection IP67 (IEC 60529)
- For outdoor and indoor applications
- L-bracket (AISI 316L) for pole or wall mounting scenario included

Specifications

Electrical data		
Frequency (MHz)	790 to 960	1710 to 2690
VSWR	2	1.9
Gain (dBi)	2	3
General data		
Nominal impedance (Ω)	50	
IMD level (dBc)	-143 at 2 × 30 dBm	
Polarisation	vertical	
Composite power max. (W)	25	
Mechanical data		
Dimensions (height × diameter)	263 × 32 mm (10.35 × 1.25 in)	
Weight	0.4 kg (0.88 lbs)	
Connector	N (female)	
Environmental data		
Environment	outdoor	
Operation temperature (°C)	−40 to 85	
RoHS 2011/65/EU	compliant	
IP rating	IP67	
Material data		
Radome colour	RAL 9003 (signal white)	
Radome material	Glass Fibre	

Ordering information

Description	Item no.	Version
1399.17.0231	85027954	N (female)

SENCITY® Omni Stick



Features:

- Omni-directional dual-band WiFi stick antenna
- IEEE 802.11 b/g/a/h/p for 2.3 to 2.5 GHz and 4.8 to 6.1 GHz
- WiFi wireless LAN/ WLAN
- Gain 6 dBi, vertical polarized antenna
- Ingress protection IP67 (IEC 60529)
- For outdoor and indoor applications
- Direct WiFi access-point mount on female N connector

Specifications

Electrical data			
Frequency (MHz)	2300 to 2500	4800 to 5150	5150 to 6100
VSWR	1.5	1.7	1.7
Gain (dBi)	6	5	6
3 dB beamwidth (h) (°)	360	360	360
3 dB beamwidth (v) (°)	20	12	12

General data			
Nominal impedance (Ω)	50		
Polarisation	vertical		
Composite power max. (W)	25		

Mechanical data			
Dimensions (height x diameter)	250 x 25 mm (9.84 x 0.98 in)		
Weight	0.15 kg (0.33 lbs)		
Connector	N (male)		

Environmental data			
Environment	outdoor		
Operation temperature (°C)	-40 to 85		
RoHS 2011/65/EU	compliant		
IP rating	IP67		

Material data			
Radome colour	RAL 9003 (signal white)		
Radome material	Glass Fibre		

Ordering information

Description	Item no.	Version
1355.17.0002	85027480	N (male)

SENCITY® Omni Stick



Features:

- Omni-directional dual-band WiFi stick antenna
- IEEE 802.11 b/g/a/h/p for 2.3 to 2.5 GHz and 4.8 to 6 GHz
- WiFi wireless LAN/ WLAN
- Gain 6 dBi, vertical polarized antenna
- Ingress protection IP67 (IEC 60529)
- For outdoor and indoor applications
- Wall- or pole mount with L-bracket

Specifications

Electrical data			
Frequency (MHz)	2300 to 2500	4800 to 5150	5150 to 6000
VSWR	1.5	1.7	1.7
Gain (dBi)	6	5	6
3 dB beamwidth (h) (°)	360	360	360
3 dB beamwidth (v) (°)	20	12	12
General data			
Nominal impedance (Ω)	50		
Polarisation	vertical		
Composite power max. (W)	25		
Mechanical data			
Dimensions (height x diameter)	240 x 25 mm (9.45 x 0.98 in)		
Weight	0.3 kg (0.66 lbs)		
Connector	N (female)		
Environmental data			
Environment	outdoor		
Operation temperature (°C)	-40 to 85		
RoHS 2011/65/EU	compliant		
IP rating	IP67		
Material data			
Radome colour	RAL 9003 (signal white)		
Radome material	Glass Fibre		

Ordering information

Description	Item no.	Version
1355.17.0003	85031665	N (female)

SENCITY® Omni Stick



Features:

- Omni-directional WiFi stick antenna
- IEEE 802.11 b/g, frequency band 2.4 to 2.5 GHz
- WiFi wireless LAN/ WLAN
- Gain 6 dBi, vertical polarized antenna
- Ingress protection IP67 (IEC 60529)
- For outdoor and indoor applications
- Pole or wall mount

Specifications

Electrical data	
Frequency (MHz)	2400 to 2500
VSWR	1.8
Gain (dBi)	6
3 dB beamwidth (h) (°)	360
3 dB beamwidth (v) (°)	30

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	25

Mechanical data	
Dimensions (height x diameter)	250 x 19 mm (9.84 x 0.75 in)
Weight	0.3 kg (0.66 lbs)
Connector	N (female)

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant
IP rating	IP67

Material data	
Radome colour	RAL 9003 (signal white)
Radome material	Glass Fibre

Ordering information

Description	Item no.	Version
1324.17.0114	85026220	N (female)

SENCITY® Omni Stick



Features:

- Omni-directional stick antenna for DECT applications
- 1880 to 1930 MHz
- Gain 7 dBi, vertical polarized antenna
- Ingress protection IP67 (IEC 60529)
- For outdoor and indoor applications
- Pole or wall mount

Specifications

Electrical data	
Frequency (MHz)	1880 to 1930
VSWR	1.5
Gain (dBi)	7
3 dB beamwidth (h) (°)	360
3 dB beamwidth (v) (°)	20

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	25

Mechanical data	
Dimensions (height x diameter)	500 x 20 mm (19.69 x 0.79 in)
Weight	0.4 kg (0.88 lbs)
Connector	N (female)

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant
IP rating	IP67

Material data	
Radome colour	RAL 9003 (signal white)
Radome material	Glass Fibre

Ordering information

Description	Item no.	Version
1319.17.0121	85027403	N (female)

SENCITY® Optima



Features:

- Indoor DAS omni-directional antenna for in-building coverage
- Ultra broad band, multi band
- 6 dBi gain
- 690 to 6400 MHz
- AMPS, GSM, PCS, CDMA, UMTS, WiFi, WLAN 2.4 and 5.6 GHz, WiMAX, LTE

Specifications

Electrical data						
Frequency (MHz)	690 to 1100	1100 to 1710	1710 to 2700	2700 to 3800	3800 to 5150	5150 to 6400
VSWR	2	1.5	1.7	1.6	1.8	1.8
Gain (dBi)	2	6	6	6	7	8
General data						
Nominal impedance (Ω)	50					
IMD level (dBc)	-150 at 2 × 30 dBm					
Polarisation	vertical					
Composite power max. (W)	50					
Mechanical data						
Dimensions (height × diameter)	69 × 321 mm (2.72 × × in)					
Weight	1 kg (2.20 lbs)					
Connector	N (female) or 4.3-10 (female)					
Environmental data						
Environment	indoor					
Operation temperature (°C)	0 to 55					
RoHS 2011/65/EU	compliant					
Material data						
Radome colour	RAL 9010 (white)					
Radome material	ABS (Acrylonitrile butadiene styrene)					
Back/base plate material	Aluminium					

Ordering information

Description	Item no.	Version
1399.17.0114	84048165	N (female)
1399.17.0144	85024300	Plenum pigtail, N (female)
1399.31.0006	85077731	Plenum pigtail, 4.3-10 (female)

SENCITY® Rail



Features:

- Railway rooftop antenna for GSM 900, GSM 1800, GSM 1900, UMTS, WiFi and WiMAX 2.4, 3.5, 5.3 and 5.8 GHz bands
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2.
- Works also on non-metallic surfaces

Specifications

Electrical data					
Frequency (MHz)	870 to 960	1710 to 2170	2400 to 2700	3400 to 3700	5150 to 5875
VSWR	1.5	1.5	1.5	1.5	1.8
Gain (dBi)	6	8.5	9.5	9.5	8.5
General data					
Nominal impedance (Ω)	50				
Polarisation	vertical				
Composite power max. (W)	100				
Mechanical data					
Dimensions (height x width x depth)	90 x 100 x 260 mm (3.54 x 3.94 x 10.24 in)				
Weight	1.1 kg (2.42 lbs)				
Connector	N (female)				
Environmental data					
Environment	outdoor				
Operation temperature (°C)	−40 to 85				
RoHS 2011/65/EU	compliant				
IP rating	IP68				
Material data					
Radome colour	RAL 7043 (dark grey)				
Radome material	ASA (acrylic ester-styrene-acrylonitrile)				
Back/base plate colour	RAL 7043 (dark grey)				
Back/base plate material	Aluminium				

Ordering information

Description	Item no.	Version
1399.17.0039	23041568	as above
1399.17.0043	84002817	additional embedded GPS
1399.17.0044	84002818	additional embedded GPS & LNA

SENCITY® Rail



Features:

- Railway rooftop antenna for GSM-R 900
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2
- Works also on non-metallic surfaces

Specifications

Electrical data	
Frequency (MHz)	806 to 960
VSWR	1.5
Gain (dBi)	6
General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	100
Mechanical data	
Dimensions (height \times width \times depth)	90 \times 100 \times 260 mm (3.54 \times 3.94 \times 10.24 in)
Weight	1.1 kg (2.42 lbs)
Connector	N (female)
Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant
IP rating	IP68
Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1309.17.0093	84065220	N (female)

SEN CITY® Rail



Features:

- Railway rooftop antenna for GSM 900, GSM 1800, GSM 1900, UMTS, LTE, WiFi and WiMAX 2.4, 3.5, 5.3 and 5.8 GHz bands
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2
- Works also on non-metallic surfaces
- Split installation support
- Versional grounding kit available
- Versional conduit support kit available to protect the cabling

Specifications

Electrical data						
Frequency (MHz)	694 to 790	790 to 960	1350 to 1710	1710 to 2700	2700 to 3300	3300 to 4900
VSWR	2.0	1.5	2.2	1.5	1.5	1.7
Gain (dBi)	5	5	76	6	8.5	7
General data						
Nominal impedance (Ω)	50					
Polarisation	vertical					
Composite power max. (W)	100					
Mechanical data						
Dimensions (height x width x depth)	90 x 100 x 256 mm (3.54 x 3.94 x 10.08 in)					
Weight	0.8 kg (1.76 lbs)					
Connector	N (female)					
Environmental data						
Environment	outdoor					
Operation temperature (°C)	−45 to 85					
RoHS 2011/65/EU	compliant					
IP rating	IP66/IP68					
Material data						
Radome colour	RAL 7043 (dark grey)					
Radome material	ASA (acrylic ester-styrene-acrylonitrile)					
Back/base plate material	Aluminium					

Ordering information

Description	Item no.	Version
1399.17.0122	84071876	as above
1399.99.0120	84071811	with additional embedded GPS & LNA
1399.99.0121	84071812	with additional embedded GPS & LNA, lower temperature limit −55 °C

SENCITY® Rail



Features:

- Railway rooftop antenna for Tetra, DVB-T, GSM 900, GSM 1800, GSM 1900, UMTS, LTE, WiFi and WiMAX 2.4, 3.5, 5.3 and 5.8 GHz bands
- Rugged design, meets EN 50155 railway standard
- Split installation support
- Versional grounding kit available
- Versional conduit support kit available to protect the cabling
- Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2

Specifications

Electrical data						
Frequency (MHz)	380 to 694	694 to 960	1350 to 2700	2700 to 3300	3300 to 4900	4900 to 6425
VSWR	1.8	1.8	1.5	1.5	1.7	1.5
Gain (dBi)	3	4	7.5	6.5	7.0	8.0
General data						
Nominal impedance (Ω)	50					
Polarisation	vertical					
Composite power max. (W)	100					
Mechanical data						
Dimensions (height \times width \times depth)	153 \times 100 \times 256 mm (6.02 \times 3.94 \times 10.08 in)					
Weight	1.6 kg (3.52 lbs)					
Connector	N (female)					
Environmental data						
Environment	outdoor					
Operation temperature (°C)	−40 to 85					
RoHS 2011/65/EU	compliant					
IP rating	IP69K					
Material data						
Radome colour	RAL 7043 (dark grey)					
Radome material	ASA (acrylic ester-styrene-acrylonitrile)					
Back/base plate material	Aluminium					

Ordering information

Description	Item no.	Version
1399.17.0094	84029691	N (female)
1399.99.0026	84069929	with additional embedded GPS & LNA

SENCITY® Rail



Features:

- Railway rooftop antenna for GSM 900, GSM 1800, GSM 1900, UMTS, LTE and WiFi 2.4 GHz Band communication
- Rugged design, meets EN 50155 railway standard
- Extremely low profile (40 mm)
- Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2

Specifications

Electrical data					
Frequency (MHz)	790 to 806	806 to 870	870 to 960	1350 to 2700	4900 to 6425
VSWR	2.2	1.9	1.6	2.0	2.1
Gain (dBi)	5	5	5	5	8
General data					
Nominal impedance (Ω)	50				
Polarisation	vertical				
Composite power max. (W)	100				
Mechanical data					
Dimensions (height x width x depth)	40 x 100 x 145 mm (1.57 x 3.94 x 5.71 in)				
Weight	0.488 kg (1.07 lbs)				
Connector	N (female)				
Environmental data					
Environment	outdoor				
Operation temperature (°C)	−40 to 85				
RoHS 2011/65/EU	compliant				
IP rating	IP69K				
Material data					
Radome colour	RAL 7043 (dark grey)				
Radome material	ASA (acrylic ester-styrene-acrylonitrile)				
Back/base plate material	Aluminium				

Ordering information

Description	Item no.	Version
1399.17.0125	84080683	as above
1399.99.0032	84076252	with additional embedded GNSS
1399.99.0037	84080682	with additional embedded GNSS & LNA

SENCITY® Rail MIMO



Features:

- Railway rooftop antenna for 2G/3G/4G cellular and WiFi 2.4 and 5 GHz bands
- Supports 2x2 cellular MIMO for UMTS and LTE
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2
- Extremely low profile (40 mm)

Specifications

Electrical data					
Frequency (MHz)	790 to 806	806 to 870	870 to 960	1350 to 2700	4900 to 6425
VSWR	2.2	1.9	1.5	1.9	2.0
Gain (dBi)	5	5	5	6	7.5
Isolation (dB)	18	18	18	18	30

General data					
Nominal impedance (Ω)	50				
Polarisation	vertical				
Composite power max. (W)	10				

Mechanical data					
Dimensions (height x width x depth)	40 x 100 x 465 mm (1.57 x 3.94 x 18.31 in)				
Weight	1.2 kg (2.64 lbs)				
Connector	2 x N (female)				
Cable type	ENVIROFLEX_316_D				

Environmental data					
Environment	outdoor				
Operation temperature (°C)	-40 to 85				
RoHS 2011/65/EU	compliant				
IP rating	IP69K				

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

Ordering information

Description	Item no.	Version
1399.17.0135	85022993	as above
1399.99.0057	85022991	with additional embedded GNSS & LNA
1399.99.0052	85022992	with additional embedded GNSS

SEN CITY® Rail MIMO



Features:

- Railway rooftop antenna for 2G/3G/4G cellular and WiFi 2.4 and 5 GHz bands
- Supports 2x2 cellular MIMO for UMTS and LTE
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to BS 6853, NF F16-101/102, EN 45545-2
- Works also on non-metallic surfaces

Specifications

Electrical data						
Frequency (MHz)	694 to 790	790 to 960	1350 to 2700	2700 to 3300	3300 to 4900	4900 to 6425
VSWR	1.7	1.7	1.8	2.0	2.1	1.8
Gain (dBi)	5	6.0	7.5	6.5	6.5	8.0
Isolation (dB)	15	15	20	25	25	35

General data						
Nominal impedance (Ω)	50					
Polarisation	vertical					
Composite power max. (W)	10					

Mechanical data						
Dimensions (height x width x depth)	81.6 x 102.5 x 352.5 mm (3.21 x 4.04 x 13.88 in)					
Weight	1.5 kg (3.30 lbs)					
Connector	2 x N (female)					
Cable type	ENVIROFLEX_142					

Environmental data						
Environment	outdoor					
Operation temperature (°C)	-40 to 85					
RoHS 2011/65/EU	compliant					
IP rating	IP69K					

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

Ordering information

Description	Item no.	Version
1399.17.0222	85004646	as above
1399.99.0130	85002237	with additional embedded GNSS & LNA
1399.17.0221	85088375	NFPA130 compliant
1399.99.0147	85082476	two separate WiFi ports with additional embedded GNSS & LNA
1399.99.0148	85085125	correct out swap with additional embedded GNSS & LNA (Rail MULTI)

SEN CITY® Rail MULTI 5-port



Features:

- Railway rooftop antenna for 2G/3G/4G/5G cellular, WiFi 2.4 and 5 GHz bands
- 4 separate ports for 2x2 cellular MIMO and 2x2 WiFi MIMO
- Rugged design, meets EN 50155 railway standard
- Embedded combined GPS+GLONASS antenna with integrated LNA
- Fire retardant acc. to EN 45545-2
- Works also on non-metallic surfaces
- Dedicated grounding contact (optional)
- Cable conduit support (optional)

Specifications

Electrical data	Cellular			
Frequency (MHz)	694 to 790	790 to 960	1350 to 2700	2700 to 3300
VSWR	1.7	1.8	1.9	2.0
Gain (dBi)	5	6	7.5	6.5
Isolation (dB)	15	15	20	25

Electrical data (cont.)	Cellular	WiFi	GNSS
Frequency (MHz)	3300 to 4900	2400 to 2690	4900 to 6425
VSWR	2.0	2.1	2.0
Gain (dBi)	7.5	7.0	8
Isolation (dB)	20	15	35

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	130

Mechanical data	
Dimensions (height × width × depth)	81.6 102.5 × 352.5 mm (3.21 × 4.04 × 13.88 in)
Weight	1.5 kg (3.30 lbs)
Connector	4 × N (female), 1 × TNC (male)
Cable type	RADOX_RF_142, RADOX_RF_316_D

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant
IP rating	IP69K

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

Ordering information

Description	Item no.	Version
1399.99.0147	85082476	4 × N (female), 1 × TNC (male)

SEN CITY® Rail MULTI 7-port



Features:

- Railway rooftop antenna
- Covers 2G/3G/4G/5G cellular and WiFi 2.4/5 GHz bands
- Supports multiple MIMO configurations
- 4 radiators for cellular bands in 2x2/4x4 MIMO configurations
- 2 radiators for WiFi/WiMAX band in 2x2 MIMO configurations
- Embedded GPS+Glonass antenna with integrated LNA
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to EN 45545-2 and NFPA130

Specifications

Electrical data		Cellular			
Frequency (MHz)	694 to 960	1350 to 2700	2700 to 3300	3300 to 4900	
VSWR	1.8	1.8	1.8	1.9	
Gain (dBi)	5.0	6.0	6.0	6.0	
Isolation (dB)	13	20	20	20	

Electrical data (cont.)		Cellular	WiFi		GNSS
Frequency (MHz)	4900 to 5975	2400 to 2500	4900 to 5975	1574 to 1610	
VSWR	1.8	1.7	1.7	1.8	
Gain (dBi)	6.0	7.0	7.0		
Isolation (dB)	20	20	20		

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10

Mechanical data	
Dimensions (height x width x depth)	84 x 368 x 425 mm (3.31 x 14.49 x 16.73 in)
Weight	6 kg (13.23 lbs)
Connector	6 x N (female), 1 x TNC (male)
Cable type	ENVIROFLEX_316_D

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant
IP rating	IP69K

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

Ordering information

Description	Item no.	Version
1399.99.0153	85104543	6 x N (female), 1 x TNC (male)

SEN CITY® Rail MULTI 13-port



Features:

- Railway rooftop antenna
- Covers 2G/3G/4G/5G cellular and WiFi 2.4/5 GHz bands
- Supports multiple MIMO configurations
- 8 radiators for cellular bands in 2x2/4x4 MIMO configurations
- 4 radiators for WiFi/WiMAX band in 4x4 MIMO configurations
- Embedded GPS+Glonass antenna with integrated LNA
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to EN 45545-2 and NFPA130

Specifications

Electrical data		Cellular							
Electrical data		Cellular	WiFi		GNSS				
Frequency (MHz)	694 to 690	1350 to 2700	2700 to 3300	3300 to 4900					
VSWR	1.8	1.8	1.8	1.9					
Gain (dBi)	5.0	6.0	6.0	6.0					
Isolation (dB)	13	20	20	20					
General data									
Nominal impedance (Ω)	50								
Polarisation	vertical								
Composite power max. (W)	10								
Mechanical data									
Dimensions (height x width x depth)	84 x 368 x 862 mm (3.30 x 14.49 x 33.94 in)								
Weight	11 kg (24.25 lbs)								
Connector	12 x N (female), 1 x TNC (male)								
Cable type	RADOX_RF_316_D								
Environmental data									
Environment	outdoor								
Operation temperature (°C)	−40 to 85								
RoHS 2011/65/EU	compliant								
IP rating	IP69K								
Material data									
Radome colour	RAL 7043 (dark grey)								
Radome material	ASA (acrylic ester-styrene-acrylonitrile)								
Back/base plate material	Aluminium								

Ordering information

Description	Item no.	Version
1399.99.0133	85010652	12 x N (female), 1 x TNC (male)

SEN CITY® Rail Excel



Features:

- Railway rooftop directional antenna for WiFi and WiMAX bands
- High gain
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2
- Works also on non-metallic surfaces

Specifications

Electrical data		
Frequency (MHz)	4900 to 5150	5150 to 5975
VSWR	1.6	1.7
Gain (dBi)	12	12
3 dB beamwidth (h) (°)	48	48
3 dB beamwidth (v) (°)	17	16

General data		
Nominal impedance (Ω)	50	
Polarisation	vertical	
Composite power max. (W)	100	

Mechanical data		
Dimensions (height x width x depth)	90 x 100 x 260 mm (3.54 x 3.94 x 10.24 in)	
Weight	1.4 kg (3.08 lbs)	
Connector	N (female)	

Environmental data		
Environment	outdoor	
Operation temperature (°C)	-40 to 85	
RoHS 2011/65/EU	compliant	
IP rating	IP66	

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

Ordering information

Description	Item no.	Version
1356.17.0010	84012128	N (female)

SEN CITY® Rail Excel



Features:

- Railway rooftop 2 ports bi-directional antenna for WiFi and WiMAX bands
- High gain
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, NF F16-101/102, EN 45545-2
- Works also on non-metallic surfaces

Specifications

Electrical data				
Frequency (MHz)	4900 to 5150	5150 to 5470	5470 to 5725	5725 to 5935
VSWR	1.7	1.6	1.6	1.6
Gain (dBi)	11.5	11.5	11.5	11.5
3 dB beamwidth (h) (°)	47	43	36	35
3 dB beamwidth (v) (°)	20	17	17	19

General data				
Nominal impedance (Ω)	50			
Polarisation	vertical			
Composite power max. (W)	50			

Mechanical data				
Dimensions (height x width x depth)	90 x 260 x 100 mm (3.54 x 10.24 x 3.94 in)			
Weight	1.4 kg (3.08 lbs)			
Connector	2 x N (female)			

Environmental data				
Environment	outdoor			
Operation temperature (°C)	-40 to 85			
RoHS 2011/65/EU	compliant			
IP rating	IP66/IP68			

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

Ordering information

Description	Item no.	Version
1356.17.0042	84027010	2 x N (female)

SENCITY® Rail Excel



Features:

- Railway rooftop directional antenna for WiFi and WiMAX bands
- High gain
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to BS 6853, EN 45545-2
- Works also on non-metallic surfaces

Specifications

Electrical data				
Frequency (MHz)	2400 to 2550	2550 to 2590	2590 to 2630	2630 to 2650
VSWR	1.5	1.5	1.5	1.5
Gain (dBi)	14.5	13.5	12.5	11.5
3 dB beamwidth (h) (°)	40	33	32	31
3 dB beamwidth (v) (°)	22	21	21	21

General data				
Nominal impedance (Ω)	50			
Polarisation	vertical			
Composite power max. (W)	50			

Mechanical data				
Dimensions (height x width x depth)	85 x 100 x 510 mm (3.35 x 3.94 x 20.08 in)			
Weight	2.2 kg (4.84 lbs)			
Connector	N (female)			

Environmental data				
Environment	outdoor			
Operation temperature (°C)	-40 to 85			
RoHS 2011/65/EU	compliant			
IP rating	IP65/IP67			

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

Ordering information

Description	Item no.	Version
1324.17.0089	84035488	N (female)

SENCITY® Road



Features:

- 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 separate connector for each application
- Single hole mounting, easy cabling feed-through
- Works also on non-metallic surfaces

Specifications

Electrical data	Band					GPS/Glonass
Frequency (MHz)	698 to 790	790 to 960	1710 to 2690	1710 to 2690	4900 to 5935	1574 to 1610
VSWR	2.1	1.8	2	1.8	1.8	2
Gain (dBi)	5	5	4	6	7	
Isolation (dB)			20	20		
General data						
Nominal impedance (Ω)	50					
Polarisation	vertical, vertical, circular right					
Composite power max. (W)	10					
Mechanical data						
Dimensions (height x width x depth)	82 x 83 x 208 mm (3.23 x 3.27 x 8.19 in)					
Weight	0.38 kg (0.84 lbs)					
Connector	SMA (male), SMA (female), TNC (male)					
Cable type	ENVIROFLEX_316					
Environmental data						
Environment	outdoor					
Operation temperature (°C)	-40 to 85					
RoHS 2011/65/EU	compliant					
IP rating	IP68/IP69K					
Material data						
Radome colour	RAL 7043 (dark grey)					
Radome material	ASA (acrylic ester-styrene-acrylonitrile)					
Back/base plate material	Aluminium					

Ordering information

Description	Item no.	Version
1399.99.0126	84145275	SMA (male), SMA (female), TNC (male)

SENCITY® Road



Features:

- 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

Specifications

Electrical data	Band					GPS/Glonass
Frequency (MHz)	698 to 790	790 to 960	1710 to 2690	1710 to 2690	4900 to 5935	1574 to 1610
VSWR	2.1	1.8	2	1.8	1.8	2
Gain (dBi)	5	5	4	6	7	
Isolation (dB)			20	20	30	

General data

Nominal impedance (Ω)	50
Polarisation	vertical, vertical, circular right
Composite power max. (W)	10

Mechanical data

Dimensions (height x width x depth)	82 x 83 x 208 mm (3.23 x 3.27 x 8.19 in)
Weight	0.41 kg (0.90 lbs)
Connector	SMA (male), SMA (female), TNC (male)
Cable type	ENVIROFLEX_316

Environmental data

Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant
IP rating	IP68/IP69K

Material data

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

Ordering information

Description	Item no.	Version
1399.99.0039	84089087	SMA (male), SMA (female), TNC (male)

SEN CITY® Road



Features:

- Rugged vehicle rooftop multi-band antenna for heavy duty vehicles like bus and truck
- Supports TETRA, 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.

Specifications

Electrical data	Band			GPS/Glonass
Frequency (MHz)	410 to 430	2400 to 2690	4900 to 5935	1574 to 1610
VSWR	2	1.8	1.8	2
Gain (dBi)	4	7	7	
Isolation (dB)	20	20	20	

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10

Mechanical data	
Dimensions (height × width × depth)	82 × 83 × 208 mm (3.23 × 3.27 × 8.19 in)
Weight	0.41 kg (0.90 lbs)
Connector	SMA (male) or (female), TNC (male), TNC (female)
Cable type	ENVIROFLEX_316

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant
IP rating	IP68/IP69K

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

Ordering information

Description	Item no.	Version
1399.99.0127	84145481	SMA (male) or (female), TNC (male), TNC (female)

SEN CITY® Road MIMO



Features:

- Rugged vehicle rooftop multi-band antenna for heavy duty vehicles like bus and truck
- Supports WiFi 2.4, 5 GHz and IEEE 802.11p in 3x3 MIMO configurations
- Single hole mounting, easy cabling feed-through
- Works also on non-metallic surfaces

Specifications

Electrical data		
Frequency (MHz)	2400 to 2690	4900 to 5935
VSWR	1.8	1.8
Gain (dBi)	6	7
Isolation (dB)	14	22

General data		
Nominal impedance (Ω)	50	
Polarisation	vertical	
Composite power max. (W)	10	

Mechanical data		
Dimensions (height x width x depth)	82 x 83 x 208 mm (3.23 x 3.27 x 8.19 in)	
Weight	0.41 kg (0.90 lbs)	
Connector	3 x SMA (female)	
Cable type	ENVIROFLEX_316_D	

Environmental data		
Environment	outdoor	
Operation temperature (°C)	-40 to 85	
RoHS 2011/65/EU	compliant	
IP rating	IP68/IP69K	

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

Ordering information

Description	Item no.	Version
1399.99.0128	85004617	3 x SMA (female)

SENCITY® Road MIMO



Features:

- Rugged vehicle rooftop multi-band antenna for heavy duty vehicles like bus and truck
- Supports 2G/3G/4G cellular bands in 2x2 MIMO configurations
- Single hole mounting, easy cabling feed-through

Specifications

Electrical data				
Frequency (MHz)	698 to 790	790 to 960	1710 to 2170	2400 to 2690
VSWR	2.2	2	2	2
Gain (dBi)	4	4	6	6
Isolation (dB)	12	12	15	15

General data				
Nominal impedance (Ω)	50			
Polarisation	vertical			
Composite power max. (W)	10			

Mechanical data				
Dimensions (height x width x depth)	88 x 83 x 208 mm (3.46 x 3.27 x 8.19 in)			
Weight	0.4 kg (0.88 lbs)			
Connector	2 x SMA (male)			
Cable type	ENVIROFLEX_316			

Environmental data				
Environment	outdoor			
Operation temperature (°C)	-40 to 85			
RoHS 2011/65/EU	compliant			
IP rating	IP68/IP69K			

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

Ordering information

Description	Item no.	Version
1399.99.0119	85021510	as above
1399.99.0129	85004616	with additional embedded GNSS & LNA

SENCITY® Rondo 600



Features:

- Indoor DAS omni-directional antenna for In-building coverage
- 617 to 4200 MHz
- AMPS, GSM, PCS, CDMA, UMTS, WiFi, WLAN 2.4, LTE
- ETL tested for Plenum space (UL 2043)
- Design patent DM/088510
- MIMO 2x2

Specifications

Electrical data							
Frequency (MHz)	617 to 698	698 to 790	790 to 960	1695 to 2180	2180 to 2400	2400 to 2690	3300 to 4200
VSWR	1.8	1.9	2	1.6	1.6	1.5	2
Gain (dBi)	2.5	3.5	4.5	5	6	6.5	5.5
Isolation (dB)	13	15	17	20	18	18	21
General data							
Nominal impedance (Ω)	50						
IMD level (dBc)	-155 at 2 × 43 dBm						
Polarisation	vertical						
Composite power max. (W)	50						
Mechanical data							
Dimensions (height × diameter)	87 × 238 mm (3.42 × 9.37 in)						
Weight	0.82 kg (1.8 lbs)						
Connector	4.3-10 (female)						
Cable type	SUCOFORM_141 CU_CMP						
Environmental data							
Environment	indoor						
Operation temperature (°C)	0 to 55						
RoHS 2011/65/EU	compliant						
Material data							
Radome colour	white						
Radome material	PC (Polycarbonate)						
Back/base plate material	PCB_1						

Ordering information

Description	Item no.	Version
1399.31.0007	85086028	4.3-10 (female)

SENCITY® Rondo 700



Features:

- Indoor DAS omni-directional antenna for In-building coverage
- 698 to 3800 MHz
- AMPS, GSM, PCS, CDMA, UMTS, WiFi, WLAN 2.4, LTE
- ETL tested for Plenum space (UL 2043)
- Design patent DM/088510
- MIMO 2x2

Specifications

Electrical data							
Frequency (MHz)	698 to 790	790 to 960	1447 to 1660.5	1695 to 2170	2170 to 2700	3400 to 3600	3600 to 3800
VSWR	1.5	1.5	1.7	1.5	1.5	1.5	1.5
Gain (dBi)	2	2	4	6	7	6	6
Isolation (dB)	20	20	20	23	20	23	30
General data							
Nominal impedance (Ω)	50						
IMD level (dBc)	-155 at 2 × 43 dBm						
Polarisation	vertical						
Composite power max. (W)	50						
Mechanical data							
Dimensions (height × diameter)	87 × 238 mm (3.42 × 9.37 in)						
Weight	0.6 kg (1.32 lbs)						
Connector	N (female) or 4.3-10 (female)						
Cable type	SUCOFORM_141 CU_CMP						
Environmental data							
Environment	indoor						
Operation temperature (°C)	0 to 55						
RoHS 2011/65/EU	compliant						
Material data							
Radome colour	white						
Radome material	PC (Polycarbonate)						
Back/base plate material	PCB_1						

Ordering information

Description	Item no.	Version
1399.31.0010	85080511	4.3-10 (female)

SENCITY® Spot-S



Features:

- UHF RFID or mobile communication small band antenna
- Polarization circular – right hand
- Frequency-band: 865 to 870 MHz
- Indoor/outdoor mounting IP66/IP67

Specifications

Electrical data	
Frequency (MHz)	865 to 870
VSWR	2
Gain (dBi)	3.5
3 dB beamwidth (h) (°)	135
3 dB beamwidth (v) (°)	90

General data	
Nominal impedance (Ω)	50
Polarisation	circular right
Composite power max. (W)	10

Mechanical data	
Dimensions (height x width x depth)	101 x 81 x 36 mm (3.98 x 3.19 x 1.42 in)
Weight	0.18 kg (0.40 lbs)
Connector	SMA (female)

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant

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

Ordering information

Description	Item no.	Version
1308.99.0004	84075241	SMA (female)

SENCITY® Spot-S



Features:

- Directional, planar, linear vertical polarized WiFi antenna with 8.5 dBi gain
- WLAN IEEE 802.11 b/g – WiFi band 2.4 to 2.485 GHz
- Approved acc. to EN 50155 (2007) and EN 45545-2 (2012) for railway rolling stock and EN 50125-3 (2003) for railway signalling and telecommunications on track-side
- For outdoor and indoor applications
- Ingress protection IP66 and IP67
- Wall mounting material included

Specifications

Electrical data	
Frequency (MHz)	2400 to 2485
VSWR	1.5
Gain (dBi)	8.5
3 dB beamwidth (h) (°)	75
3 dB beamwidth (v) (°)	75
Front to back ratio (dB)	12
General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10
Mechanical data	
Dimensions (height × width × depth)	101 × 81 × 36 mm (3.98 × 3.19 × 1.42 in)
Weight	0.11 kg (0.24 lbs)
Connector	N (female) or SMA (female) or QMA (female)
Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant
Material data	
Radome colour	RAL 7044 (grey)
Radome material	PC (Polycarbonate)

Ordering information

Description	Item no.	Version
1324.17.0098	84073579	N (female)
1324.19.0057	84059620	SMA (female)
1324.35.0006	84062352	QMA (female)

SEN CITY® Spot-S



Features:

- Directional, planar, linear vertical polarized WiFi antenna with 8 dBi gain
- Cellular and DECT bands between 1710 and 1950 MHz
- Approved acc. to EN 50155 (2007) and EN 45545-2 (2012) for railway rolling stock and EN 50125-3 (2003) for railway signalling and telecommunications on track-side
- For outdoor and indoor applications
- Ingress protection IP66 and IP67
- Wall mounting material included

Specifications

Electrical data				
Frequency (MHz)	1710 to 1755	1755 to 1880	1880 to 1930	1930 to 1950
VSWR	2	1.5	2	2.5
Gain (dBi)	6.5	8	7	6.5
3 dB beamwidth (h) (°)	87	85	90	90
3 dB beamwidth (v) (°)	72	70	65	67
Front to back ratio (dB)	15	15	15	15
General data				
Nominal impedance (Ω)	50			
Polarisation	vertical			
Composite power max. (W)	10			
Mechanical data				
Dimensions (height × width × depth)	101 × 81 × 36 mm (3.98 × 3.19 × 1.42 in)			
Weight	0.11 kg (0.24 lbs)			
Connector	N (female)			
Environmental data				
Environment	outdoor			
Operation temperature (°C)	−40 to 85			
RoHS 2011/65/EU	compliant			
Material data				
Radome colour	RAL 7044 (grey)			
Radome material	PC (Polycarbonate)			

Ordering information

Description	Item no.	Version
1318.17.0015	85088775	N (female)

SENCITY® Spot-S



Features:

- Directional, planar, linear vertical polarized WiFi antenna with 14 dBi gain
- WLAN IEEE 802.11 a/h/p – WiFi bands 5.15 to 5.975 GHz
- Approved acc. to EN 50155 (2007) and EN 45545-2 (2012) for railway rolling stock and EN 50125-3 (2003) for railway signalling and telecommunications on track-side
- For outdoor and indoor applications
- Ingress protection IP66 and IP67
- Wall mounting material included

Specifications

Electrical data	
Frequency (MHz)	5150 to 5975
VSWR	1.5
Gain (dBi)	14
3 dB beamwidth (h) (°)	40
3 dB beamwidth (v) (°)	35
Front to back ratio (dB)	20

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10

Mechanical data	
Dimensions (height × width × depth)	101 × 81 × 36 mm (3.98 × 3.19 × 1.42 in)
Weight	0.11 kg (0.24 lbs)
Connector	N (female) or SMA (female) or TNC (female)

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant

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

Ordering information

Description	Item no.	Version
1356.17.0077	84078981	N (female)
1356.19.0022	84059621	SMA (female)

SEN CITY® Spot-S



Features:

- Directional, planar, linear vertical polarized WiFi antenna with 13.5 dBi gain
- 4.9 up to 5.3 GHz for public safety wireless-networks
- WLAN/WiFi IEEE 802.11 a/h for Japan, Israel
- Approved acc. to EN 50155 (2007) and EN 45545-2 (2012) for railway rolling stock and EN 50125-3 (2003) for railway signalling and telecommunications on track-side
- For outdoor applications IP66/67
- Wall mounting material included

Specifications

Electrical data

Frequency (MHz)	4900 to 4940	4940 to 5350
VSWR	1.5	1.5
Gain (dBi)	13	13.5
3 dB beamwidth (h) (°)	40	40
3 dB beamwidth (v) (°)	35	35
Front to back ratio (dB)	20	20
Sidelobes (v)	15	

General data

Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10

Mechanical data

Dimensions (height x width x depth)	101 x 81 x 36 mm (3.98 x 3.19 x 1.42 in)
Weight	0.11 kg (0.24 lbs)
Connector	N (female) or QN (female)

Environmental data

Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant

Material data

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

Ordering information

Description	Item no.	Version
1351.17.0001	84088544	N (female)

SEN CITY® Spot-S



Features:

- Directional, planar, linear polarized dual-band WiFi antenna with 9 dBi gain
- WiFi bands 2.4 to 2.5 GHz and 5.150 to 5.975 GHz on one single port
- WLAN IEEE 802.11 a/b/g/h/p
- Approved acc. to EN 50155 (2007) and EN 45545-2 (2012) for railway rolling stock
- For outdoor and indoor applications
- Ingress protection IP66 and IP67
- Wall mounting material included

Specifications

Electrical data		
Frequency (MHz)	2400 to 2500	5150 to 5935
VSWR	2	2
Gain (dBi)	9	9
Isolation (dB)	25	30
3 dB beamwidth (h) (°)	75	55
3 dB beamwidth (v) (°)	55	55
Front to back ratio (dB)	15	15
General data		
Nominal impedance (Ω)	50	
Polarisation	vertical	
Composite power max. (W)	10	
Mechanical data		
Dimensions (height x width x depth)	101 x 81 x 36 mm (3.98 x 3.19 x 1.42 in)	
Weight	0.11 kg (0.24 lbs)	
Connector	N (female)	
Environmental data		
Environment	outdoor	
Operation temperature (°C)	−40 to 85	
RoHS 2011/65/EU	compliant	
Material data		
Radome colour	RAL 7044 (grey)	
Radome material	PC (Polycarbonate)	

Ordering information

Description	Item no.	Version
1399.17.0210	84087864	N (female)

SEN CITY® Spot-S



Features:

- Directional, planar, linear polarized dual-band WiFi antenna with 9 dBi gain
- WLAN bands 2.4 to 2.5 GHz (port 1) and 5.150 to 5.975 GHz (port 2)
- WLAN IEEE 802.11 a/b/g/h/p
- Cellular/LTE 2600 band included at port 1
- Approved acc. to EN 50155 (2007) and EN 45545-2 (2012) for railway rolling stock and EN 50125-3 (2003) for railway signalling and telecommunications on track-side
- For outdoor and indoor applications
- Ingress protection IP66 and IP67
- Wall mounting material included

Specifications

Electrical data	Band 1	Band 2
Frequency (MHz)	2400 to 2700	5150 to 5975
VSWR	2	2
Gain (dBi)	9	9
Isolation (dB)	25	35
3 dB beamwidth (h) (°)	80	47
3 dB beamwidth (v) (°)	55	30
Front to back ratio (dB)	18	18

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10

Mechanical data	
Dimensions (height × width × depth)	101 × 81 × 36 mm (3.98 × 3.19 × 1.42 in)
Weight	0.13 kg (0.29 lbs)
Connector	SMA (female) for port 1 (band 1) and port 2 (band 2)

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant

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

Ordering information

Description	Item no.	Version
1399.19.0221	85007705	SMA (female)

SEN CITY® Spot-S 2x2 MIMO



Features:

- Directional, planar, linear polarized WiFi antenna with 8 dBi gain
- Dual-slant ± 45° for 2x2 WiFi MIMO antenna configuration
- WLAN IEEE 802.11 b/g/n WiFi band 2.4 to 2.485 GHz
- Approved acc. to EN 50155 (2007) and EN 45545-2 (2012) for railway rolling stock and EN 50125-3 (2003) for railway signalling and telecommunications on track-side
- For outdoor and indoor applications
- Ingress protection IP66 and IP67
- Wall mounting material included

Specifications

Electrical data	
Frequency (MHz)	2400 to 2485
VSWR	1.5
Gain (dBi)	8
Isolation (dB)	25
3 dB beamwidth (h) (°)	75
3 dB beamwidth (v) (°)	70
Front to back ratio (dB)	14

General data	
Nominal impedance (Ω)	50
Polarisation	±45° slant
Composite power max. (W)	10

Mechanical data	
Dimensions (height × width × depth)	100 × 81 × 36 mm (3.94 × 3.19 × 1.42 in)
Weight	0.11 kg (0.24 lbs)
Connector	N (female) or SMA (female)

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant

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

Ordering information

Description	Item no.	Version
1324.17.0099	84078979	2 × N (female)
1324.19.0056	84059618	2 × SMA (female)

SEN CITY® Spot-S 2x2 MIMO



Features:

- Directional, planar, linear polarized WiFi antenna with 9 dBi gain
- Dual-slant $\pm 45^\circ$ for 2x2 WiFi MIMO antenna configuration
- WLAN IEEE 802.11 a/h/p/n – WiFi band 5.15 to 5.935 GHz
- Approved acc. to EN 50155 (2007) and EN 45545-2 (2012) for railway rolling stock and EN 50125-3 (2003) for railway signalling and telecommunications on track-side
- For outdoor and indoor applications
- Ingress protection IP66 and IP67
- Wall mounting material included

Specifications

Electrical data	
Frequency (MHz)	5150 to 5935
VSWR	2
Gain (dBi)	9
Isolation (dB)	20
3 dB beamwidth (h) ($^\circ$)	70
3 dB beamwidth (v) ($^\circ$)	60
Front to back ratio (dB)	20
General data	
Nominal impedance (Ω)	50
Polarisation	$\pm 45^\circ$ slant
Composite power max. (W)	10
Mechanical data	
Dimensions (height \times width \times depth)	101 \times 81 \times 36 mm (3.98 \times 3.19 \times 1.42 in)
Weight	0.11 kg (0.24 lbs)
Connector	N (female) or SMA (female)
Environmental data	
Environment	outdoor
Operation temperature ($^\circ$ C)	-40 to 85
RoHS 2011/65/EU	compliant
Material data	
Radome colour	RAL 7044 (grey)
Radome material	PC (Polycarbonate)

Ordering information

Description	Item no.	Version
1356.17.0076	84078980	2 x N (female)
1356.19.0023	84059684	2 x SMA (female)

SEN CITY® Spot-S 3x3 MIMO



Features:

- Directional, planar, linear polarized WiFi MIMO antenna
- WLAN IEEE 802.11 a/h/n/p/ac, 3x3 MIMO with three ports
- WiFi 5 GHz bands 5.15 to 5.935 GHz
- For outdoor and indoor applications
- Ingress protection IP66 and IP67
- Wall mounting material included

Specifications

Electrical data	
Frequency (MHz)	5150 to 5935
VSWR	1.7
Gain (dBi)	8
Isolation (dB)	17
3 dB beamwidth (h) (°)	65
3 dB beamwidth (v) (°)	65

General data	
Nominal impedance (Ω)	50
Polarisation	-45°/vertical/+45°
Composite power max. (W)	2

Mechanical data	
Dimensions (height × width × depth)	101 × 81 × 36 mm (3.98 × 3.19 × 1.42 in)
Weight	0.27 kg (0.59 lbs)
Connector	QMA (female) or N (male)

Environmental data	
Environment	outdoor
Operation temperature (°C)	-40 to 85
RoHS 2011/65/EU	compliant

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

Ordering information

Description	Item no.	Version
1356.35.0003	84125104	3 x QMA (female)
1356.17.0078	84076862	3 pigtails N (male)

SEN CITY® Spot-S



Features:

- Planar indoor antenna
- Polarisation: linear vertical
- IEEE 802.16, IEEE 802.11 b/g
- Working range: 2300 to 2800 MHz WiFi/WLAN
- Half power beamwidth: 70°/75° (vert./hor.); 7.5 dBi gain
- Wall and mast mounting material included, supports mast diameter 40 to 60 mm

Specifications

Electrical data

Frequency (MHz)	2300 to 2800
VSWR	1.5
Gain (dBi)	7.5
3 dB beamwidth (h) (°)	75
3 dB beamwidth (v) (°)	70
Front to back ratio (dB)	20

General data

Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10

Mechanical data

Dimensions (height × width × depth)	101 × 80 × 20 mm (3.98 × 3.15 × 0.79 in)
Weight	0.13 kg (0.29 lbs)
Connector	SMA (female)

Environmental data

Environment	indoor
Operation temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant

Material data

Radome colour	RAL 7035 (light-grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)

Ordering information

Description	Item no.	Version
1324.19.0032	23019483	SMA (female)

SEN CITY® Spot-S



Features:

- Planar indoor antenna
- Directive antenna for GSM 1800 and UMTS, 1710 to 2170 MHz, 8 dBi, 80° HPBW, vertical polarisation

Specifications

Electrical data	
Frequency (MHz)	1710 to 2170
VSWR	1.8
Gain (dBi)	8
3 dB beamwidth (h) (°)	80
3 dB beamwidth (v) (°)	75
Front to back ratio (dB)	18

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10

Mechanical data	
Dimensions (height × width × depth)	101 × 80 × 20 mm (3.98 × 3.15 × 0.79 in)
Weight	0.13 kg (0.29 lbs)
Connector	SMA (female)

Environmental data	
Environment	indoor
Operation temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant

Material data	
Radome colour	RAL 7035 (light-grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)

Ordering information

Description	Item no.	Version
1320.19.0001	23005585	SMA (female)

SEN CITY® Spot-SR



Features:

- Small directional indoor antenna for WiFi applications
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, EN 45545-2

Specifications

Electrical data	
Frequency (MHz)	2300 to 2500
VSWR	1.5
Gain (dBi)	8.5
3 dB beamwidth (h) (°)	75
3 dB beamwidth (v) (°)	60
Front to back ratio (dB)	20

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	75

Mechanical data	
Dimensions (height × width × depth)	101 × 95 × 32 mm (3.98 × 3.74 × 1.26 in)
Weight	0.11 kg (0.24 lbs)
Connector	TNC (female)

Environmental data	
Environment	indoor
Operation temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant

Material data	
Radome colour	RAL 7035 (light-grey)
Radome material	PC (Polycarbonate)
Back/base plate colour	RAL 7035 (light-grey)
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1324.26.0049	84026271	TNC (female)

SEN CITY® Spot-SR



Features:

- Small directional indoor antenna for WiFi applications
- Rugged design, meets EN 50155 railway standard
- Fire retardant acc. to DIN 5510-2, BS 6853, EN 45545-2

Specifications

Electrical data		
Frequency (MHz)	5150 to 5250	5250 to 5875
VSWR	1.7	1.5
Gain (dBi)	9.5	9.5
3 dB beamwidth (h) (°)	60	60
3 dB beamwidth (v) (°)	55	55
Front to back ratio (dB)	18	18
General data		
Nominal impedance (Ω)	50	
Polarisation	vertical	
Composite power max. (W)	10	
Mechanical data		
Dimensions (height \times width \times depth)	101 \times 80 \times 20 mm (3.98 \times 3.15 \times 0.79 in)	
Weight	0.13 kg (0.29 lbs)	
Connector	TNC (female)	
Environmental data		
Environment	indoor	
Operation temperature (°C)	−40 to 80	
RoHS 2011/65/EU	compliant	
Material data		
Radome colour	RAL 7035 (light-grey)	
Radome material	PC (Polycarbonate)	
Back/base plate colour	RAL 7035 (light-grey)	

Ordering information

Description	Item no.	Version
1356.26.0013	84026274	TNC (female)

SENCITY® Spot-S



Features:

- Planar indoor DECT antenna
- Polarisation: linear vertical
- Working range: 1850 to 1990 MHz
- Half power beamwidth: 65°/85° (vert./ hor.); 8 dBi gain
- Wall mounting socket included

Specifications

Electrical data	
Frequency (MHz)	1850 to 1990
VSWR	1.5
Gain (dBi)	8
3 dB beamwidth (h) (°)	85
3 dB beamwidth (v) (°)	65
Front to back ratio (dB)	15

General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	10

Mechanical data	
Dimensions (height × width × depth)	101 × 95 × 32 mm (3.98 × 3.74 × 1.26 in)
Weight	0.115 kg (0.25 lbs)
Connector	SMA (female)

Environmental data	
Environment	indoor
Operation temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant

Material data	
Radome colour	RAL 7035 (light-grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
Back/base plate colour	RAL 7042 (dark-grey)
Back/base plate material	ASA (acrylic ester-styrene-acrylonitrile)

Ordering information

Description	Item no.	Version
1319.19.0003	22649572	SMA (female)

SENCITY® Spot-S



Features:

- Planar indoor DECT antenna
- Polarisation: circular polarised
- Working range: 1850 to 1990 MHz
- Half power beamwidth: 70 °/70 ° (vert./hor.); 8 dBi gain
- Wall mounting socket included

Specifications

Electrical data	
Frequency (MHz)	1850 to 1990
VSWR	1.5
Gain (dBi)	8
3 dB beamwidth (h) (°)	70
3 dB beamwidth (v) (°)	70
Front to back ratio (dB)	20

General data	
Nominal impedance (Ω)	50
Polarisation	circular left
Composite power max. (W)	10

Mechanical data	
Dimensions (height × width × depth)	101 × 95 × 32 mm (3.98 × 3.74 × 1.26 in)
Weight	0.115 kg (0.25 lbs)
Connector	SMA (female)

Environmental data	
Environment	indoor
Operation temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant

Material data	
Radome colour	RAL 7035 (light-grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
Back/base plate colour	RAL 7042 (dark-grey)
Back/base plate material	ASA (acrylic ester-styrene-acrylonitrile)

Ordering information

Description	Item no.	Version
1319.19.0004	22650455	SMA (female) polarisation LHCP circular left-hand
1319.19.0005	22650451	SMA (female) polarisation RHCP circular right-hand

SEN CITY® Spot-S



Features:

- RHCP planar indoor antenna
- Polarization: circular – right hand
- IEEE 802.16 and IEEE 802.11 b/g
- Working range: 2300 to 2500 MHz WiFi/WLAN
- Half power beamwidth: 65°/70° (vert./hor.); 8.5 dBi gain
- Wall mounting socket included

Specifications

Electrical data	
Frequency (MHz)	2300 to 2500
VSWR	1.5
Gain (dBi)	8.5
3 dB beamwidth (h) (°)	70
3 dB beamwidth (v) (°)	65
Front to back ratio (dB)	20

General data	
Nominal impedance (Ω)	50
Polarisation	circular right
Composite power max. (W)	10

Mechanical data	
Dimensions (height × width × depth)	101 × 95 × 32 mm (3.98 × 3.74 × 1.26 in)
Weight	0.11 kg (0.24 lbs)
Connector	SMA (female)

Environmental data	
Environment	indoor
Operation temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant

Material data	
Radome colour	RAL 7035 (light-grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
Back/base plate colour	RAL 7042 (dark-grey)
Back/base plate material	ASA (acrylic ester-styrene-acrylonitrile)

Ordering information

Description	Item no.	Version
1324.19.0008	22650442	SMA (female)

SENCITY® Spot-S



Features:

- Planar indoor DECT antenna
- Polarisation: dual linear, $\pm 45^\circ$ slant
- Working range: 1880 to 1930 MHz
- Half power beamwidth: $75^\circ/85^\circ$ (vert./hor.); 8 dBi gain
- Wall mounting socket included

Specifications

Electrical data	
Frequency (MHz)	1880 to 1930
VSWR	1.5
Gain (dBi)	8
Isolation (dB)	30
3 dB beamwidth (h) (°)	85
3 dB beamwidth (v) (°)	75
Front to back ratio (dB)	12
General data	
Nominal impedance (Ω)	50
Polarisation	$\pm 45^\circ$ slant
Composite power max. (W)	10
Mechanical data	
Dimensions (height \times width \times depth)	101 \times 95 \times 32 mm (3.98 \times 3.74 \times 1.26 in)
Weight	0.11 kg (0.24 lbs)
Connector	TNC (female)
Environmental data	
Environment	indoor
Operation temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant
Material data	
Radome colour	RAL 7035 (light-grey)
Radome material	ASA (acrylic ester-styrene-acrylonitrile)
Back/base plate colour	RAL 7042 (dark-grey)
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1319.26.0027	22659404	2 x TNC (female)

SENCYITY® Spot-M



Features:

- Linear polarised directional WiFi antenna
- IEEE 802.11 b/g WLAN
- Frequency band 2.3 to 2.7 GHz
- For outdoor applications IP67

Specifications

Electrical data			
Frequency (MHz)	2300 to 2400	2400 to 2500	2500 to 2700
VSWR	1.9	1.9	1.9
Gain (dBi)	14	14.5	15
3 dB beamwidth (h) (°)	32	32	32
3 dB beamwidth (v) (°)	32	32	32
Front to back ratio (dB)	26	26	26
Sidelobes (h)	ETSI EN 301 525 V1.1.1 (2000-06)		
Sidelobes (v)	ETSI EN 301 525 V1.1.1 (2000-06)		
General data			
Nominal impedance (Ω)	50		
Polarisation	vertical		
Composite power max. (W)	6		
Mechanical data			
Dimensions (height × width × depth)	190 × 190 × 30 mm (7.48 × 7.48 × 1.18 in)		
Weight	0.5 kg (1.10 lbs)		
Connector	N (female)		
Environmental data			
Environment	outdoor		
Operation temperature (°C)	−45 to 71		
RoHS 2011/65/EU	compliant		
IP rating	IP67		
Material data			
Radome colour	RAL 9002 (grey-white)		
Radome material	Plastic		
Back/base plate material	Aluminium		

Ordering information

Description	Item no.	Version
1324.17.0051	84018384	N (female)

SEN CITY® Spot-M 2x2 MIMO



Features:

- Directional, planar, dual linear vertical and horizontal polarized WiFi antenna
- For 2x2 WiFi MIMO configuration - WLAN WiFi IEEE 802.11 b/g/n/ac
- Frequency bands for 2.3 to 2.7 GHz per each port, high gain 14 dBi
- For outdoor or indoor applications
- Ingress protection IP67

Specifications

Electrical data	
Frequency (MHz)	2300 to 2700
VSWR	2
Gain (dBi)	14
3 dB beamwidth (h) (°)	35
3 dB beamwidth (v) (°)	35
Front to back ratio (dB)	25
Isolation (dB)	30
General data	
Nominal impedance (Ω)	50
Polarisation	horizontal and vertical
Composite power max. (W)	6
Mechanical data	
Dimensions (height x width x depth)	190 x 190 x 30 mm (7.48 x 7.48 x 1.18 in)
Weight	0.5 kg (1.10 lbs)
Connector	N (female)
Environmental data	
Environment	outdoor
Operation temperature (°C)	-45 to 71
RoHS 2011/65/EU	compliant
IP rating	IP67
Material data	
Radome colour	RAL 9002 (grey-white)
Radome material	Plastic
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1324.17.0117	85104342	N (female)

SENCITY® Spot-M



Features:

- Linear vertical polarised, directional WiFi antenna
- WiFi IEEE 802.11 a/h; WLAN
- Frequency band 5.15 to 5.95 GHz
- High gain annenna 18 to 19 dBi
- Ingress protection IP67 (IEC 60529)
- For outdoor and indoor applications

Specifications

Electrical data					
Frequency (MHz)	5150 to 5250	5250 to 5350	5350 to 5725	5725 to 5875	5875 to 5950
VSWR	1.9	1.9	1.9	1.9	2
Gain (dBi)	18	19	18.5	18	17.5
3 dB beamwidth (h) (°)	18	18	18	18	18
3 dB beamwidth (v) (°)	18	18	18	18	18
Front to back ratio (dB)	30	30	30	30	30
General data					
Nominal impedance (Ω)	50				
Polarisation	vertical				
Composite power max. (W)	6				
Mechanical data					
Dimensions (height × width × depth)	190 × 190 × 30 mm (7.48 × 7.48 × 1.18 in)				
Weight	0.7 kg (1.54 lbs)				
Connector	N (female)				
Environmental data					
Environment	outdoor				
Operation temperature (°C)	−45 to 70				
RoHS 2011/65/EU	compliant				
IP rating	IP67				
Material data					
Radome colour	RAL 9002 (grey-white)				
Radome material	Plastic				
Back/base plate material	Aluminium				

Ordering information

Description	Item no.	Version
1356.17.0024	84018716	N (female)

SEN CITY® Spot-M



Features:

- Planar antenna for 866 MHz ISM bands
- Gain: 8 dBi
- Polarisation: linear vertical
- Frequency range: 860 to 870 MHz
- Half power beamwidth: 65 ° / 70 ° (vert./hor.)

Specifications

Electrical data	
Frequency (MHz)	865 to 870
VSWR	1.3
Gain (dBi)	8
3 dB beamwidth (h) (°)	70
3 dB beamwidth (v) (°)	65
Front to back ratio (dB)	-20
Sidelobes (v)	20
General data	
Nominal impedance (Ω)	50
Polarisation	vertical
Composite power max. (W)	6
Mechanical data	
Dimensions (height × width × depth)	190 × 190 × 30 mm (7.48 × 7.48 × 1.18 in)
Weight	0.8 kg (1.76 lbs)
Connector	N (female)
Environmental data	
Environment	outdoor
Operation temperature (°C)	-55 to 71
RoHS 2011/65/EU	compliant
IP rating	IP67
Material data	
Radome colour	RAL 9002 (grey-white)
Radome material	PP (Polypropylene)
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1308.17.0071	84044175	N (female)

SEN CITY® Spot-M 2x2 MIMO



Features:

- Directional, planar, dual linear vertical and horizontal polarized WiFi antenna
- For 2x2 WiFi MIMO configuration – WLAN WiFi IEEE 802.11 a/h/n
- Frequency bands for 5.15 to 5.875 GHz per each port, high gain 19 dBi
- For outdoor or indoor applications
- Ingress protection IP67

Specifications

Electrical data	
Frequency (MHz)	5150 to 5875
VSWR	1.7
Gain (dBi)	19
Isolation (dB)	30
3 dB beamwidth (h) (°)	17
3 dB beamwidth (v) (°)	17
Front to back ratio (dB)	30
Co/Crosspolar ratio (dB)	20
Sidelobes (v)	ETSI EN 302 217-4-2 V1.5.1 CLASS 2
General data	
Nominal impedance (Ω)	50
Polarisation	horizontal and vertical
Composite power max. (W)	6
Mechanical data	
Dimensions (height x width x depth)	190 x 190 x 30 mm (7.48 x 7.48 x 1.18 in)
Weight	0.7 kg (1.54 lbs)
Connector	N (female)
Environmental data	
Environment	outdoor
Operation temperature (°C)	-55 to 70
RoHS 2011/65/EU	compliant
IP rating	IP67
Material data	
Radome colour	RAL 9002 (grey-white)
Radome material	PC (Polycarbonate)
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1356.17.0023	84018715	2 x N (female)
1356.17.0093	85094773	2 x N (female) – with 45 ° turned mounting option

SEN CITY® Spot-L



Features:

- Linear vertical or horizontal polarised directional WiFi antenna
- High gain 17.5 dBi with HPBW 20°
- IEEE 802.11 b/g WLAN
- Frequency band 2.3 to 2.7 GHz
- Mobile and LTE 2.7 GHz band
- For outdoor applications IP67 (IEC 60529)

Specifications

Electrical data				
Frequency (MHz)	2300 to 2400	2400 to 2500	2500 to 2600	2600 to 2700
VSWR	1.7	1.7	1.7	1.7
Gain (dBi)	15.5	17	17.5	18
3 dB beamwidth (h) (°)	20	20	20	20
3 dB beamwidth (v) (°)	20	20	20	20
Front to back ratio (dB)	28	28	28	28
Co/Crosspolar ratio (dB)	20	20	20	20
General data				
Nominal impedance (Ω)	50			
Polarisation	vertical			
Composite power max. (W)	6			
Mechanical data				
Dimensions (height × width × depth)	305 × 305 × 25 mm (12.01 × 12.01 × 0.98 in)			
Weight	1.2 kg (2.64 lbs)			
Connector	N (female)			
Environmental data				
Environment	outdoor			
Operation temperature (°C)	−45 to 70			
RoHS 2011/65/EU	compliant			
IP rating	IP67			
Material data				
Radome colour	RAL 9002 (grey-white)			
Radome material	Plastic			
Back/base plate material	Aluminium			

Ordering information

Description	Item no.	Version
1324.17.0112	85017308	N (female)

SEN CITY® Spot-L



Features:

- Planar antenna for 433 MHz ISM bands
- Gain: 9 dBi
- Polarisation: left circular
- Frequency range: 430 to 437 MHz
- Half power beamwidth: 68°/ 70° (vert./hor.)

Specifications

Electrical data	
Frequency (MHz)	430 to 437
VSWR	1.5
Gain (dBi)	9
3 dB beamwidth (h) (°)	68
3 dB beamwidth (v) (°)	70
Front to back ratio (dB)	10.5
Sidelobes (v)	ETSI EN 301 525 V1.1.1 (2000-06) TS1, TS2
General data	
Nominal impedance (Ω)	50
Polarisation	circular left
Composite power max. (W)	6
Mechanical data	
Dimensions (height × width × depth)	371 × 371 × 40 mm (14.61 × 14.61 × 1.57 in)
Weight	2 kg (4.40 lbs)
Connector	N (female)
Environmental data	
Environment	outdoor
Operation temperature (°C)	-55 to 71
RoHS 2011/65/EU	compliant
IP rating	IP67
Material data	
Radome colour	RAL 9002 (grey-white)
Radome material	PC (Polycarbonate)
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1304.17.0008	84019339	N (female)

SEN CITY® Spot-L 2x2 MIMO



Features:

- Directional, planar, dual linear vertical + horizontal polarized WiFi antenna
- WLAN IEEE 802.11 a/h/n/p
- Frequency band 4.9 to 6.1 GHz, 23 dBi high gain
- Including wireless access in vehicular environments IEEE 802.11p (5.85-5.925 GHz)
- Also for public safety wireless networks and WiFi band IEEE 802.11 a/h/n for Japan (4.9 GHz band)
- For outdoor applications
- Ingress protection IP67

Specifications

Electrical data		
Frequency (MHz)	4900 to 5150	5150 to 6100
VSWR	2	2
Gain (dBi)	22	23
Isolation (dB)	35	35
3 dB beamwidth (h) (°)	10	10
3 dB beamwidth (v) (°)	10	10
Front to back ratio (dB)	30	30
General data		
Nominal impedance (Ω)	50	
Polarisation	horizontal and vertical	
Composite power max. (W)	6	
Mechanical data		
Dimensions (height x width x depth)	305 x 305 x 15 mm (12.01 x 12.01 x 0.59 in)	
Weight	1.2 kg (2.64 lbs)	
Connector	N (female)	
Environmental data		
Environment	outdoor	
Operation temperature (°C)	-45 to 70	
RoHS 2011/65/EU	compliant	
IP rating	IP67	
Material data		
Radome colour	RAL 9002 (grey-white)	
Radome material	Plastic	
Back/base plate material	Aluminium	

Ordering information

Description	Item no.	Version
1355.17.0001	85017310	2 x N (female)

SENCITY® Spot-L



Features:

- Linear vertical or horizontal polarized WiFi antenna
- Frequency band 4.9 to 5.875 GHz, 23 dBi, WLAN
- WiFi IEEE 802.11a/h/p standard
- High gain directional antenna
- For outdoor applications
- Ingress protection IP67 (IEC 60529)

Specifications

Electrical data		
Frequency (MHz)	4900 to 5150	5150 to 5875
VSWR	1.7	1.7
Gain (dBi)	22	23
3 dB beamwidth (h) (°)	9	9
3 dB beamwidth (v) (°)	9	9
Front to back ratio (dB)	35	35
General data		
Nominal impedance (Ω)	50	
Polarisation	vertical	
Composite power max. (W)	6	
Mechanical data		
Dimensions (height × width × depth)	305 × 305 × 15 mm (12.01 × 12.01 × 0.59 in)	
Weight	1.2 kg (2.64 lbs)	
Connector	N (female)	
Environmental data		
Environment	outdoor	
Operation temperature (°C)	−45 to 70	
RoHS 2011/65/EU	compliant	
IP rating	IP67	
Material data		
Radome colour	RAL 9002 (grey-white)	
Radome material	Plastic	
Back/base plate material	Aluminium	

Ordering information

Description	Item no.	Version
1354.17.0001	85017309	N (female)

SEN CITY® Spot-L 3x3 MIMO



Features:

- Directional, planar, triple slant 3x3 WiFi MIMO antenna
- Frequency band 4.9 to 6.1 GHz, 18 dBi, WLAN
- WiFi IEEE 802.11a/h/n/p/ac standard
- For outdoor or indoor applications
- Ingress protection IP67

Specifications

Electrical data			
Frequency (MHz)	4900 to 5150	5150 to 6000	6000 to 6100
VSWR	1.8	1.8	1.8
Gain (dBi)	17	18	16
Isolation (dB)	35	35	30
3 dB beamwidth (h) (°)	20	20	15
3 dB beamwidth (v) (°)	20	20	12
Front to back ratio (dB)	30	30	30
General data			
Nominal impedance (Ω)	50		
Polarisation	-45°/vertical/+45°		
Composite power max. (W)	6		
Mechanical data			
Dimensions (height x width x depth)	305 x 305 x 15 mm (12.01 x 12.01 x 0.59 in)		
Weight	1.5 kg (3.30 lbs)		
Connector	N (female)		
Environmental data			
Environment	outdoor		
Operation temperature (°C)	-45 to 70		
RoHS 2011/65/EU	compliant		
IP rating	IP67		
Material data			
Radome colour	RAL 9002 (grey-white)		
Radome material	Plastic		
Back/base plate material	Aluminium		

Ordering information

Description	Item no.	Version
1356.17.0090	85004909	3 x N (female)

SENCITY® Spot-L



Features:

- UHF RFID tag reader antenna
- RHCP right-hand circular polarized
- Frequency range: 865 to 870 MHz for ETSI applications
- Ruggedized conveyor belt portal antenna
- Ingress protection IP54 (IEC 60529)

Specifications

Electrical data	
Frequency (MHz)	865 to 870
VSWR	1.5
Gain (dBi)	12
3 dB beamwidth (h) (°)	62
3 dB beamwidth (v) (°)	30
Front to back ratio (dB)	20

General data	
Nominal impedance (Ω)	50
Polarisation	circular right
Composite power max. (W)	6

Mechanical data	
Dimensions (height × width × depth)	650 × 320 × 32 mm (25.59 × 12.60 × 1.26 in)
Weight	2.8 kg (6.16 lbs)
Connector	N (female)

Environmental data	
Operation temperature (°C)	-55 to 71
RoHS 2011/65/EU	compliant
IP rating	IP54

Material data	
Radome colour	RAL 9002 (grey-white)
Radome material	Plastic
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1308.17.0069	84039144	N (female)

SENCITY® Spot-L



Features:

- UHF RFID tag reader antenna
- RHCP right-hand circular polarized
- Frequency range: 902 to 928 MHz for FCC applications
- Ruggedized conveyor belt portal antenna
- Ingress protection IP54 (IEC 60529)

Specifications

Electrical data	
Frequency (MHz)	902 to 928
VSWR	1.5
Gain (dBi)	11
3 dB beamwidth (h) (°)	63
3 dB beamwidth (v) (°)	30
Front to back ratio (dB)	-20

General data	
Nominal impedance (Ω)	50
Polarisation	circular right
Composite power max. (W)	6

Mechanical data	
Dimensions (height × width × depth)	650 × 320 × 32 mm (25.59 × 12.60 × 1.26 in)
Weight	2.8 kg (6.16 lbs)
Connector	N (female)

Environmental data	
Operation temperature (°C)	-55 to 71
RoHS 2011/65/EU	compliant
IP rating	IP54

Material data	
Radome colour	RAL 9002 (grey-white)
Radome material	Plastic
Back/base plate material	Aluminium

Ordering information

Description	Item no.	Version
1309.17.0111	85018546	N (female)

SENCITY® Spot-M Yagi



Features:

- SENCITY® Spot-M linear polarised directional Yagi antenna
- Supports WLAN/WiFi acc. to IEEE 802.11 b/g
- 14 dBi high gain version
- Railway approved acc. to EN50125-3 and EN 45545-2
- Wall and mast mounting; bracket included
- No DC contact of outer connector to bracket

Specifications

Electrical data

Frequency (MHz)	2400 to 2484
VSWR	1.7
Gain (dBi)	14
3 dB beamwidth (h) (°)	30
3 dB beamwidth (v) (°)	30

General data

Nominal impedance (Ω)	50
Polarisation	vertical

Mechanical data

Dimensions (height × width × depth)	80 × 420 × 80 mm (3.15 × 16.54 × 3.15 in)
Weight	0.85 kg (1.87 lbs)
Connector	N (female), N (male)
Cable type	SX_04172_B-60

Environmental data

Environment	outdoor
Operation temperature (°C)	-40 to 70
RoHS 2011/65/EU	compliant
IP rating	IP65

Material data

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

Ordering information

Description	Item no.	Version
1324.17.0113	85023217	N (female)
1324.17.0116	85070104	N (male)

SEN CITY® Ultra



Features:

- Indoor DAS omni-directional antenna for in-building coverage
- Ultra broad band, multi band supporting AMPS, GSM, PCS, CDMA, UMTS, WiFi, WLAN 2.4 and 5.6 GHz, WiMAX, LTE, 4.9 GHz Homeland Security, Tetra, Tetrapol, DVB-T, DVB-H
- Ceiling mount
- High gain
- 380 to 5875 MHz

Specifications

Electrical data				
Frequency (MHz)	380 to 560	560 to 960	1710 to 5500	5500 to 5875
VSWR	2	2	1.5	1.5
Gain (dBi)	3.5	5	8	10
General data				
Nominal impedance (Ω)	50			
IMD level (dBc)	-150, 2 × 43 dBm			
Polarisation	vertical			
Composite power max. (W)	100			
Mechanical data				
Dimensions (height × width × depth)	153.6 × 78.6 × 255 mm (6.05 × 3.09 × 10.04 in)			
Weight	0.8 kg (1.76 lbs)			
Connector	N (female)			
Environmental data				
Environment	indoor			
Operation temperature (°C)	0 to 55			
RoHS 2011/65/EU	compliant			
Material data				
Radome colour	RAL 9010 (white)			
Radome material	ASA (acrylic ester-styrene-acrylonitrile)			
Back/base plate colour	RAL 9010 (white)			
Back/base plate material	Aluminium			

Ordering information

Description	Item no.	Version
1399.17.0120	84078635	N (female)

SENCITY® Urban 100



Features:

- Outdoor MIMO 2x2 omnidirectional antenna for 4G and 5G frequency bands
- 2500-2690, 3300-3800, 3800-4200MHz
- Compact solution with very high isolation between ports to maximize MIMO performances
- Very low PIM

Specifications

Electrical data			
Frequency (MHz)	2500 to 2690	3300 to 3800	3800 to 4200
VSWR	2.0	2.0	2.0
Gain (dBi)	2	2.5	2.5
3 dB beamwidth (v) (°)	65	55	55
Isolation	30	30	30

General data			
Nominal impedance (Ω)	50		
IMD level (dBc)	-150 at 2 x 43 dBm		
Polarisation	port 1: vertical, port 2: horizontal		

Mechanical data			
Dimensions (height x diameter)	96 x 117 mm (3.78 x 4.6 in)		
Weight	0.45 kg (0.99 lbs)		

Environmental data			
Environment	outdoor		
Operation temperature (°C)	-40 to 70		
RoHS 2011/65/EU	compliant		

Material data			
Radome colour	RAL 7035 (light-grey)		

Ordering information

Description	Item no.	Version
1399.32.0004	85113723	Nex10 connectors
1399.17.0253	85106726	low loss pigtail and N connectors

SEN CITY® Urban 100



Features:

- Outdoor MIMO 2x2 directional antenna for 4G and 5G frequency bands
- 2500-2690, 3300-3800, 3800-4200 MHz
- Dual slant polarization.
- Very low PIM

Specifications

Electrical data			
Frequency (MHz)	2500 to 2690	3300 to 3800	3800 to 4200
VSWR	2.0	2.0	2.0
Gain (dBi)	4	7	7.5
3 dB beamwidth (h) (°)	65	65	55
3 dB beamwidth (v) (°)	65	65	58
Front to back ration (dB)	8	13	14
Isolation	20	20	20
General data			
Nominal impedance (Ω)	50		
IMD level (dBc)	-150, at 2 x 43 dBm		
Polarisation	$\pm 45^\circ$ dual slant		
Mechanical data			
Dimensions (height x diameter)	96 x 117 mm (3.78 x 4.6 in)		
Weight	0.45 kg (0.99 lbs)		
Environmental data			
Environment	outdoor		
Operation temperature (°C)	-40 to 70		
IP rating	IP66		
RoHS 2011/65/EU	compliant		
Material data			
Radome colour	RAL 7035 (light-grey)		

Ordering information

Description	Item no.	Version
1399.32.0003	85121225	Nex10 connectors
1399.17.0255	85106948	low loss pigtail and N connectors

SENCITY® Urban 200



Features:

- Outdoor MIMO 2x2 directional antenna (1695-2690 and 3300-4200MHz) with:
H-HPBW
110° (1.7-2.7 GHz)
110° (3.3-4.2 GHz)
- Low PIM

Specifications

Electrical data					
Frequency (MHz)	1695 to 1920	1920 to 2180	2300 to 2690	3300 to 3800	3800 to 4200
VSWR	2.0	2.0	2.0	2.0	2.0
Gain (dBi)	5.7	4.8	5.0	5.9	4.9
3 dB beamwidth (h) (°)	100	120	100	110	120
3 dB beamwidth (v) (°)	105	120	95	95	85
Isolation	20	20	18	20	20
Composite power max. (W)	125	125	110	95	90
Front to back ratio (dB)	10	11	11	15	12
Co/crosspolar ratio	27	22	14	15	19
General data					
Nominal impedance (Ω)	50				
IMD level (dBc)	-150 at 2 × 43 dBm				
Polarisation	$\pm 45^\circ$ dual slant				
Mechanical data					
Dimensions (height × width × depth)	184.8 × 164.6 × 84.2 mm (7.27 × 6.48 × 3.3 in)				
Weight	0.5 kg (1.1 lbs)				
Environmental data					
Environment	indoor/outdoor				
Operation temperature (°C)	-40 to 70				
RoHS 2011/65/EU	compliant				
IP rating	IP66				
Material data					
Radome colour	RAL 7035 (light-grey)				
Radome material	PC (Polycarbonate)				

Ordering information

Description	Item no.	Version
1399.32.0002	85117565	Nex10 connectors
1399.17.0250	85110147	N connectors

SENCITY® Urban 200



Features:

- Outdoor MIMO 2x2 directional antenna (1695-2690 and 3300-4200MHz) with:
H-HPBW
70 (1.7-2.7 GHz)
65 (3.3-4.2 GHz)
- Low PIM

Specifications

Electrical data					
Frequency (MHz)	1695 to 1920	1920 to 2180	2300 to 2690	3300 to 3800	3800 to 4200
VSWR	2.0	2.0	2.0	2.0	2.0
Gain (dBi)	7.4	7.3	7.4	7.2	8.4
3 dB beamwidth (h) (°)	75	75	70	60	65
3 dB beamwidth (v) (°)	80	90	70	60	50
Isolation	18	20	20	17	19
Composite power max. (W)	125	125	110	95	90
Front to back ratio (dB)	16	15	14	20	20
Co/crosspolar ratio	19	15	15	15	17
General data					
Nominal impedance (Ω)	50				
IMD level (dBc)	-150, at 2 x 43 dBm				
Polarisation	$\pm 45^\circ$ dual slant				
Mechanical data					
Dimensions (height x width x depth)	184.8 x 164.6 x 84.2 mm (7.27 x 6.48 x 3.3 in)				
Weight	0.5 kg (1.1 lbs)				
Environmental data					
Environment	indoor/outdoor				
Operation temperature (°C)	-40 to 70				
RoHS 2011/65/EU	compliant				
IP rating	IP66				
Material data					
Radome colour	RAL 7035 (light-grey)				
Radome material	PC (Polycarbonate)				

Ordering information

Description	Item no.	Version
1399.32.0001	85117564	Nex10 connectors
1399.17.0248	85110146	N connectors

SENCITY® Occhio MIMO 2x2



Features:

- 1.7-6 GHz
- Offers 5G coverage
- Simple, time-saving installation process, with included clip bracket
- Attractive industry preferred design with a small form factor

Specifications

Electrical data						
Ports	Port 1	Port 2				
Connector	NEX10, jack (female)	NEX10, jack (female)				
Cable Length (m)	0.5	0.5				
Polarisation	vertical	vertical				
DC grounded	no	no				
General data						
Nominal impedance (Ω)	50					
IMD level (dBc)	-153 at 2 x 43 dBm					
Mechanical data						
Dimensions (height x diameter)	32 x 200 mm (1.26 x 7.87 in)					
Environmental data						
Environment	indoor					
Operation temperature (°C)	0 to 55					
RoHS 2011/65/EU	compliant					
Material data						
Radome colour	white					
Back plate/base plate colour	black					

Ordering information

Description	Item no.	Version
1399.32.0013	85115709	includes cable assemblies: SUCOFORM_122_LA Plenum cable with NEX10 male (antenna side) and 4.3-10 male (network connection side)
1399.32.0015	85138318	no cable included

SENCITY® Occhio MIMO 4x4



Features:

- 1.7-6 GHz
- Offers 5G coverage
- Simple, time-saving installation process, with included clip bracket
- Attractive industry preferred design with a small form factor

Specifications

Electrical data				
Ports	Port 1	Port 2	Port 3	Port 4
Connector	NEX10, jack (female)	NEX10, jack (female)	NEX10, jack (female)	NEX10, jack (female)
Polarisation	vertical	vertical	vertical	vertical
DC grounded	no	no	no	no

General data	
Nominal impedance (Ω)	50
IMD level (dBc)	-153 at 2×43 dBm

Mechanical data	
Dimensions (height x diameter)	32 x 200 mm (1.26 x 7.87 in)

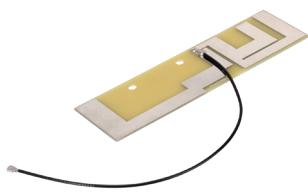
Environmental data	
Environment	indoor
Operation temperature (°C)	0 to 55
RoHS 2011/65/EU	compliant

Material data	
Radome colour	white
Back plate/base plate colour	black

Ordering information

Description	Item no.	Version
1399.32.0014	85114460	includes cable assemblies: SUCOFORM_122_LA Plenum cable with NEX10 male (antenna side) and 4.3-10 male (network connection side)
1399.32.0016	85137888	no cable included

SENCITY® Embedded



Features:

- SENCITY® Embedded cellular/LTE multi-band antenna
- Linear vertical polarized omni-directional PCB antenna
- Cellular/LTE (EUR) bands 790 to 960 Mhz and 1710 to 2700 MHz
- Working without any extra ground plane
- Gain 1 to 4 dBi
- Two antennas are packed into a common ESD bag

Specifications

Electrical data				
Frequency (MHz)	790 to 960	1710 to 1880	1880 to 2170	2170 to 2690
VSWR	2.2	2.5	2.5	2.2
Gain (dBi)	2.5	2	1	4
3 dB beamwidth (h) (°)	360	360	360	360

General data				
Nominal impedance (Ω)	50			
Polarisation	vertical			
Composite power max. (W)	2			

Mechanical data				
Dimensions (height x width x depth)	98 x 29 x 0.9 mm (3.86 x 1.14 x 0.04 in)			
Weight	0.005 kg (0.01 lbs)			

Environmental data				
Environment	indoor			
Operation temperature (°C)	−40 to 70			
RoHS 2011/65/EU	compliant			

Ordering information

Description	Item no.	Version
1399.99.0140	85071797	Pigtail with U.FL

SENCITY® Embedded



Features:

- SENCITY® Embedded WiFi WLAN dual-band antenna
- Linear vertical polarized omni-directional PCB antenna
- Wireless bands 2.4 to 2.5 and 4.9 to 5.9 GHz
- Working without any extra ground plane
- Gain 3/4 dBi
- Two antennas are packed into a common ESD bag

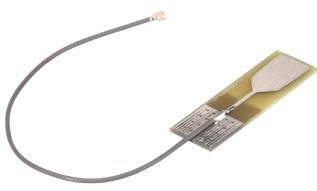
Specifications

Electrical data			
Frequency (MHz)	2400 to 2500	2500 to 2700	4900 to 6000
VSWR	2.1	2.1	2.1
Gain (dBi)	2	2	5
3 dB beamwidth (h) (°)	360	360	360
General data			
Nominal impedance (Ω)	50		
Polarisation	vertical		
Composite power max. (W)	2		
Mechanical data			
Dimensions (height x width x depth)	41 x 18 x 1 mm (1.61 x 0.71 x 0.04 in)		
Weight	0.003 kg (0.01 lbs)		
Environmental data			
Environment	indoor		
Operation temperature (°C)	−40 to 70		
RoHS 2011/65/EU	compliant		

Ordering information

Description	Item no.	Version
1399.99.0144	85077727	Pigtail with U.FL

SENCITY® Embedded



Features:

- SENCITY® Embedded WiFi WLAN dual-band antenna
- Linear vertical polarized omni-directional PCB antenna
- Wireless bands 2.4 to 2.5 and 4.9 to 5.9 GHz
- Working without any extra ground plane
- Gain 3/4 dBi
- Two antennas are packed into a common ESD bag

Specifications

Electrical data			
Frequency (MHz)	2400 to 2500	2500 to 2700	4900 to 6000
VSWR	2	2	2
Gain (dBi)	2	2	4
3 dB beamwidth (h) (°)	360	360	360
General data			
Nominal impedance (Ω)	50		
Composite power max. (W)	2		
Mechanical data			
Dimensions (height x width x depth)	44 x 15 x 1 mm (1.73 x 0.59 x 0.04 in)		
Weight	0.003 kg (0.01 lbs)		
Environmental data			
Environment	indoor		
Operation temperature (°C)	−40 to 70		
RoHS 2011/65/EU	compliant		

Ordering information

Description	Item no.	Version
1399.99.0145	85077742	Pigtail with U.FL

Accessories and mounting brackets

Description	Item no.	Type description	Picture
DAS			
Metal ground plane foil 0.6 × 0.6 m	84124410	9091.99.0250	
Multi function bracket for SENCITY® Rondo	85067690	9091.99.0258	
Bus			
FM radio stick antenna 88 to 108 MHz	84112255	9091.99.0246	
TETRA stick antenna 380 to 430 MHz	84112256	9091.99.0247	
TETRA stick antenna 450 to 470 MHz	84112257	9091.99.0248	
TETRA stick antenna 410 to 430 MHz	85007967	9091.99.0254	
mm-Wave			
Test adaptor SENCITY® Matrix, type 1360.99.0013	85026210	73_Z-0-0-1022/-1-_NE	
Test adaptor SENCITY® Matrix, type 1378.99.0001	85026843	73_Z-0-0-1023/-1-_NE	
Railway			
SENCITY® Rail antenna grounding kit	84079030	9091.99.0235	
SENCITY® Rail conduit support kit	84079593	9091.99.0236	
SENCITY® Rail mounting plate	84098894	9090.99.0062	
Adaptor plate for SENCITY® Rail antenna	84148131	9091.99.0252	

Description	Item no.	Type description	Picture
12 mm adapter plate for SENCITY® Rail antenna	84008192	9091.99.0189	
SENCITY® Rail mounting plate	85079842	9091.99.0261	
Miscellaneous			
Planar antenna wall bracket	84011560	9091.99.0191	
Planar antenna downtilt bracket	84018626	9091.99.0201	
Planar antenna downtilt bracket	84007205	9091.99.0183	
Omni antenna ceiling bracket	84044085	9091.99.0221	
Spot-S antenna down- and sidetilt bracket	84084452	9091.99.0238	
Spot-S antenna 3D adjustment bracket	85100336	9091.99.0267	
L-bracket for Spot-S antennas	84083026	9091.99.0237	
L-bracket for omni stick antennas	23035942	9091.99.0173	

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HUBER+SUHNER is certified according to EN(AS) 9100, ISO 9001, ISO 14001, ISO/TS 16949 and IRIS.

Waiver

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