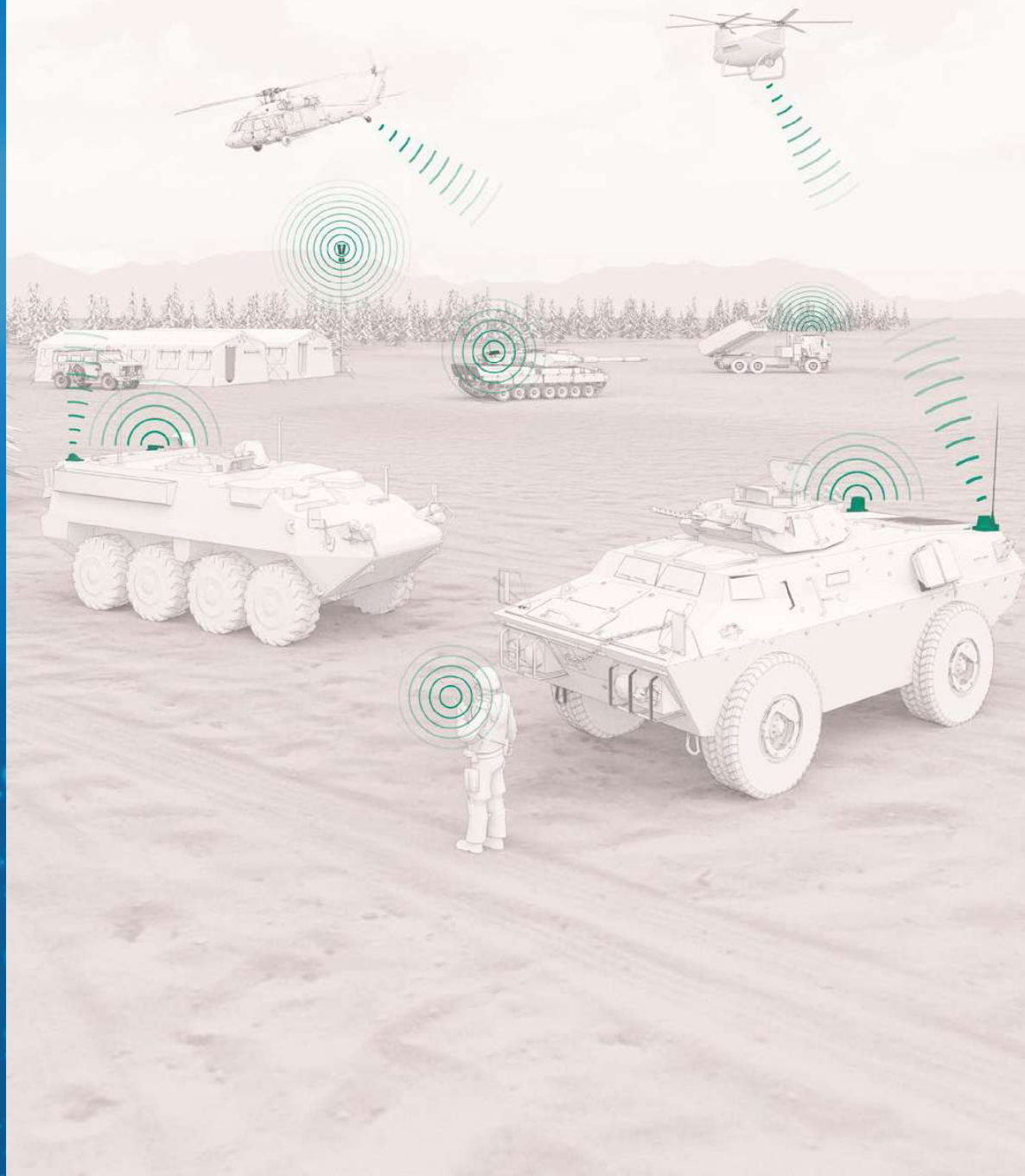


Antennas for defense applications

Edition 04/2025

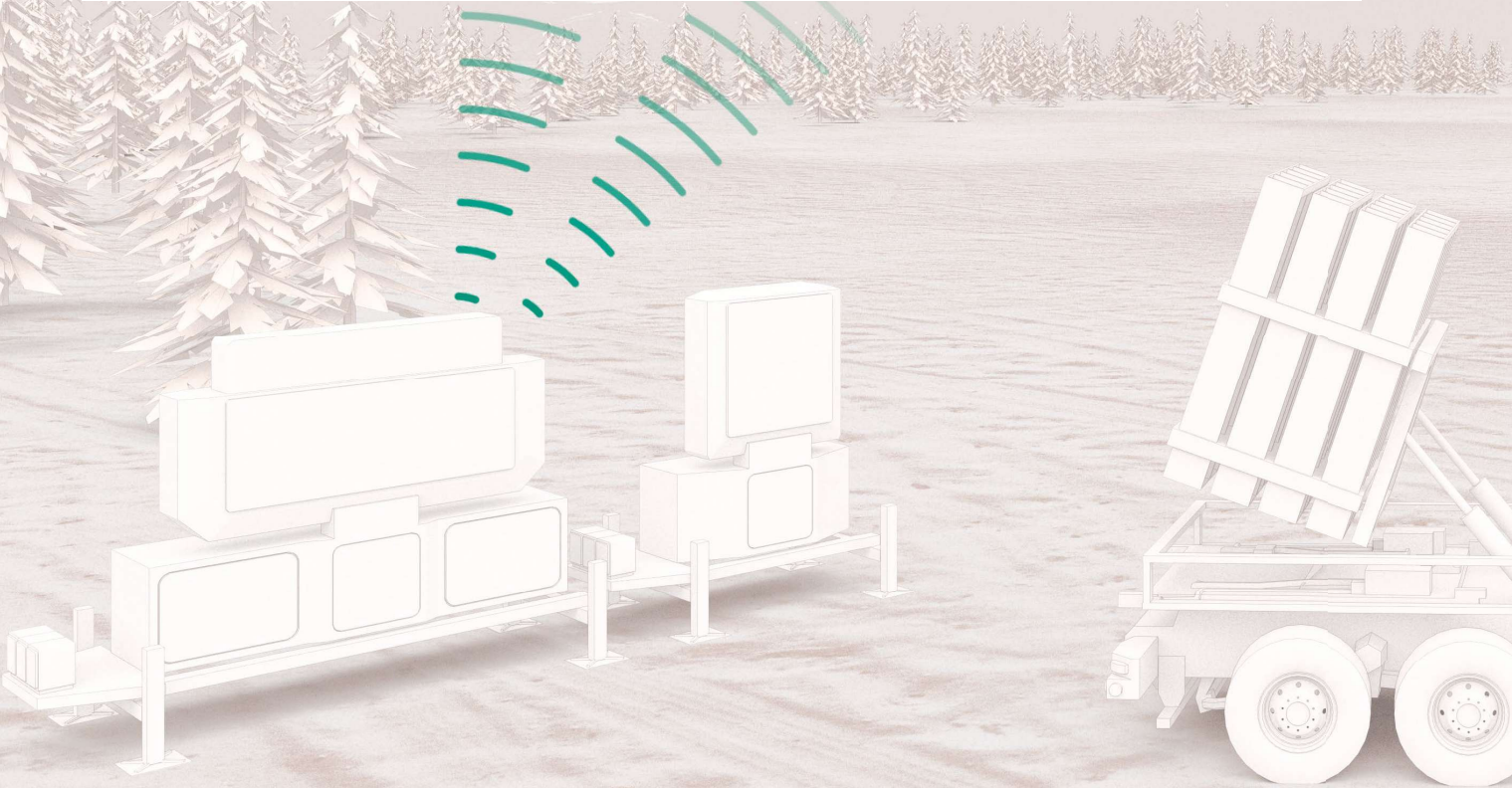
Secure, reliable and continuous coverage for mission-critical networks





The new vehicle antenna family for defense applications

- Vehicle antennas for jamming and communication applications
 - Broadband performances
 - Available as SISO or MIMO
 - Extra round diagrams with newly designed dipoles
 - Available with or without inbuilt GNSS (GPS) antennas
 - High power capabilities
 - Extra rugged design based on decades of experience
 - Conformity to MIL-STD 810H
 - Meet EN50155 standard
- More options on request!**



Environmental data			
Operation temperature	-40 to 85 °C	Flammability rating	EN 45545-2
Storage temperature	-55 to 85 °C	Solar radiation	DIN 75220
Transport temperature	-55 to 85 °C	Standards	MIL-STD 810H
Ingress protection (IP Rating)	Mated / IP67, IP69	CE	

Interface and Material data			
96 hours salt spray test.			



SENCITY® Shield Ultra **400 – 7125 MHz, 3 – 7 dBi**

Type no. 1399.17.0280

p.47

Rugged vehicle antenna
for jamming applications



SENCITY® Shield Low Profile **790 – 6425 MHz, 5 dBi**

Type no. 1399.17.0284

p. 49

Rugged vehicle antenna for jamming
and communication applications



SENCITY® SC Mag.-Mount **Extra hardened vehicle antenna**

TypeNo. 1399.19.0060

p.57

Covering all necessary systems from TETRA, LTE410/
LTE450, Wi-Fi and 2G – 5G for ultimate flexibility

Ruggedized military vehicle antennas



Jamming specialists

Description				Type no.	Height	Input	Page
SENCITY® Shield Ultra	400 – 7125 MHz	3 – 7 dBi	• Extra round pattern • High power • Small bandwidth	1399.17.0280	154 mm	1 × N female	47
SENCITY® Shield MIMO	2400 – 6000 MHz	6.5 – 8 dBi		1399.17.0281	90 mm	1 × N female	48

Jamming and communication

Description				Type no.	Height	Input	Page
SENCITY® Shield Low Profile	790 – 6425 MHz	5 dBi	• «Normal» omni patterns • High Power • Broad bandwidth • One type inkl. MIMO	1399.17.0284	40 mm	1 × N female	49
SENCITY® Shield MIMO	617 – 7125 MHz	5 – 7.5 dBi		1399.17.0286	81.6 mm	2 × N female	50
SENCITY® Shield	694 – 6425 MHz	5 – 8.5 dBi		1399.17.0287	90 mm	1 × N female	51
SENCITY® Shield Ultra	380 – 6425 MHz	3 – 8 dBi		1399.17.0288	154 mm	1 × N female	52

Communication incl. GPS

Description				Type no.	Height	Input	Page
SENCITY® Shield Low Profile	790 – 6425 MHz	5 dBi	• «Normal» Omni patterns • Low Power (80 W) • Broad bandwidth • GPS L1+L2 • One type inkl. MIMO • One type inkl. Mag. Mount	1399.99.0284	40 mm	1 × N female	53
SENCITY® Shield MIMO	617 – 7125 MHz	5 – 7.5 dBi		1399.99.0286	81.6 mm	2 × N female	54
SENCITY® Shield	694 – 6425 MHz	5 – 8.5 dBi		1399.99.0287	90 mm	1 × N female	55
SENCITY® Shield Ultra	380 – 6425 MHz	3 – 8 dBi		1399.99.0288	154 mm	1 × N female	56
SENCITY® special communication antenna	380 – 7125 MHz	4 – 6 dBi		1399.19.0060	130 mm	6 × SMA fem.	57

Jamming specialists

Ordering information	SENCITY® Shield Ultra
Type no.	1399.17.0280
Frequency range	400 – 7125 MHz
Gain	3 – 7 dBi
Height	154 mm
Description · Rugged vehicle antenna for jamming applications · Optimized omnidirectional pattern with low ripple for improved coverage · Ultra broadband performance starting at 400 Mhz up to 7.125 GHz · Supports TETRA, LTE450, 2G/3G/4G/5G cellular, Wifi 2.4/5 GHz, Wifi 6E · High power capabilities · Meets MIL-STD 810H	
Item no.	85179239

Electrical data per band	Band 1	Band 2	Band 3
Frequency	400 – 500 MHz	500 – 960 MHz	960 – 2700 MHz
VSWR	2.5	1.8	1.5
Gain	3 dBi	3.5 dBi	5 dBi
Composite Power max	600 W	600 W	400 W
	Band 4	Band 5	Band 6
Frequency	2700 – 4200 MHz	4200 – 5875 MHz	5875 – 7125 MHz
VSWR	1.5	1.5	1.5
Gain	7 dBi	7 dBi	7 dBi
Composite Power max	360 W	300 W	250 W

Electrical data	
Impedance	50 Ohm
Ambient temperature	25 °C
Remarks	Indicated VSWR values are valid for a metallic ground plane of 0.5 × 0.5 m or larger. Indicated gain values will be achieved on a metallic ground plane of 1 × 1 m or larger.

Ports	Port 1
Connector	N, jack (female)
Polarization	vertical
DC Grounded	Yes

Connections	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6
Port 1	x	x	x	x	x	x

Mechanical data	
Weight	1.5 kg
Dimensions (height × width × depth)	154 mm × 100 mm × 256 mm
Remarks	Low corrosion design according to MIL-F-14072(E).

Interface and material data	
Radome material	PC (Polycarbonate)
Radome colour	black

Jamming specialists

Ordering information	SENCITY® Shield
Type no.	1399.17.0281
Frequency range	2400 – 6000 MHz
Gain	6.5 – 8 dBi
Height	90 mm
Description • Rugged vehicle antenna for Jamming applications • Optimized omnidirectional pattern with low ripple for improved coverage • Covers 2400 MHz to 6000 MHz frequency bands • High power capabilities • Meets MIL-STD 810H • Low profile design	
Item no.	85179247

Electrical data per band	Band 1	Band 2	Band 3
Frequency	2400 – 3300 MHz	3300 – 4900 MHz	4900 – 6000 MHz
Gain	6.5 dBi	7 dBi	8 dBi
Composite Power max	350 W	300 W	300 W

Electrical data	
Impedance	50 Ohm
VSWR	2
Ambient temperature	25 °C
Remarks	Indicated VSWR values are valid for a metallic ground plane of 0.5 × 0.5m or larger. Indicated gain values will be achieved on a metallic ground plane of 1×1 m or larger.

Ports	Port 1
Connector	N, jack (female)
Polarization	vertical
DC grounded	Yes

Connections	Band 1	Band 2	Band 3
Port 1	x	x	x

Mechanical data	
Weight	1 kg
Dimensions (height × width × depth)	90 mm × 100 mm × 256 mm
Remarks	Low corrosion design according to MIL-F-14072(E).

Interface and material data	
Radome material	PC (Polycarbonate)
Radome colour	black

Jamming and communication

Ordering information	SENCITY® Shield
	Low Profile
Type no.	1399.17.0284
Frequency range	790 – 6425 MHz
Gain	5 dBi
Height	40 mm
Description Rugged vehicle antenna for Jamming and Communication applications. Broadband performance starting at 790 MHz up to 6.425 GHz. Supports 2G/3G/4G cellular, Wifi 2.4/5 GHz, Wifi 6E. High power capabilities. Meets MIL-STD 810H. Extremely low profile (40mm).	
Item no.	85243721

Electrical data per band	Band 1	Band 2	Band 3	Band 4	Band 5
Frequency	790 – 806 MHz	806 – 870 MHz	870 – 960 MHz	1359 – 2700 MHz	4900 – 6425 MHz
VSWR	2.2	1.9	1.6	2	2.1
Composite power max	550 W	550 W	550 W	350 W	350 W

Electrical data	
Impedance	50 Ohm
Gain	5 dBi
Ambient temperature	25 °C
Remarks	Indicated VSWR values are valid for a metallic ground plane of 0.2×0.2 m or larger for the 806 – 6425 MHz frequency band. Indicated gain values will be achieved on a metallic ground plane of 1×1 m or larger.

Ports	Port 1
Connector	N, jack (female)
Polarization	vertical
DC Grounded	Yes

Connections	Band 1	Band 2	Band 3	Band 4	Band 5
Port 1	x	x	x	x	x

Mechanical data	
Weight	0.5 kg
Dimensions (height × width × depth)	40 × 100 × 145 mm
Remarks	Low corrosion design according to MIL-F-14072(E).

Interface and material data	
Radome material	PC (Polycarbonate)
Radome colour	black

Jamming and communication

Ordering information	SENCITY® Shield MIMO
Type no.	1399.17.0286
Frequency range	617 – 7125 MHz
Gain	5 – 7.5 dBi
Height	81.6 mm
Description	• Rugged vehicle antenna for Jamming and Communication applications. • Supports 2x2 Cellular MIMO for 3G, 4G and 5G. • Supports 2x2 Wi-Fi MIMO in all Wi-Fi 6E bands. • High power capabilities. • Meets MIL-STD 810H
Item no.	85244554

Electrical data per band	Band 1	Band 2	Band 3	Band 4
Frequency	617 – 694 MHz	694 – 790 MHz	790 – 960 MHz	1350 – 2700 MHz
VSWR	1.7	1.7	1.7	1.8
Gain	6 dBi	5 dBi	6 dBi	7.5 dBi
Composite power max.	250 W	180 W	130 W	130 W
	Band 5	Band 6	Band 7	
Frequency	2700 – 3300 MHz	3300 – 4900 MHz	4900 – 7125 MHz	
VSWR	2	2.1	1.9	
Gain	6.5 dBi	6.5 dBi	7.5 dBi	
Composite power max.	100 W	100 W	100 W	

Electrical data	
Impedance	50 Ohm
Ambient temperature	25 °C
Remarks	Indicated VSWR values are valid for a metallic ground plane of 0.5 × 0.5 m or larger. In the 790 – 7125 MHz band, indicated VSWR values are also valid for installations on non-metallic surfaces (no specific ground plane requirements). Indicated gain values will be achieved on a metallic ground plane of 1 × 1 m or larger.

Ports	Port 1	Port 2
Connector	N, jack (female)	N, jack (female)
Cable type	RADOX_RF_142	RADOX_RF_142
Cable length	0.2 m	0.2 m
Polarization	vertical	vertical
DC Grounded	Yes	Yes

Connections	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7
Port 1	x	x	x	x	x	x	x
Port 2	x	x	x	x	x	x	x

Mechanical data	
Dimensions (height × width × depth)	81.6 mm × 102.5 mm × 352.5 mm
Remarks	Low corrosion design according to MIL-DTL-14072(E).

Interface and material data	
Radome material	PC (Polycarbonate)
Radome colour	black

Jamming and communication

Ordering information	SENCITY® Shield
Type no.	1399.17.0287
Frequency range	694 – 6425 MHz
Gain	5 – 8.5 dBi
Height	90 mm
Description	• Rugged vehicle antenna for Jamming and Communication applications. • Broadband performance starting at 694 MHz up to 6.425 GHz • Supports 2G/3G/4G/5G cellular and Wi-Fi 4/Wi-Fi 6 bands. • High power capabilities. • Meets MIL-STD 810H • Low profile design
Item no.	85244777

Electrical data per band	Band 1	Band 2	Band 3	Band 4
Frequency	694 – 790 MHz	790 – 960 MHz	1350 – 1710 MHz	1710 – 2700 MHz
VSWR	2	1.5	2.2	1.5
Gain	5 dBi	5 dBi	6 dBi	6 dBi
Composite power max.	550 W	550 W	450 W	350 W
	Band 5	Band 6	Band 7	
Frequency	2700 – 3300 MHz	3300 – 4900 MHz	4900 – 6425 MHz	
VSWR	1.5	1.7	1.5	
Gain	8.5 dBi	7 dBi	7.5 dBi	
Composite power max.	350 W	300 W	300 W	

Electrical data	
Impedance	50 Ohm
Ambient temperature	25 °C
Remarks	Indicated VSWR values are valid for a metallic ground plane of 0.5×0.5 m or larger. In the 790 – 5935 MHz band, indicated VSWR values are also valid for installations on non-metallic surfaces (no specific ground plane requirements). Indicated gain values will be achieved on a metallic ground plane of 1×1 m or larger.

Ports	Port 1
Connector	N, jack (female)
Polarization	vertical
DC Grounded	Yes

Connections	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7
Port 1	x	x	x	x	x	x	x

Mechanical data	
Weight	1 kg
Dimensions (height × width × depth)	90 mm × 100 mm × 256 mm
Remarks	Low corrosion design according to MIL-DTL-14072(E).

Interface and material data	
Radome material	PC (Polycarbonate)
Radome colour	black

Jamming and communication



Ordering information	SENCITY® Shield Ultra
Type no.	1399.17.0288
Frequency range	380 – 6425 MHz
Gain	3 – 8 dBi
Height	154 mm
Description	• Rugged vehicle antenna for Jamming and Communication applications. • Ultra broadband performance starting at 380 MHz up to 7.125 GHz. • Supports TETRA, LTE450, 2G/3G/4G/5G cellular, Wifi 2.4/5 GHz, Wifi 6E • High power capabilities. • Meets MIL-STD 810H
Item no.	85245225

Electrical data per band	Band 1	Band 2	Band 3
Frequency	380 – 694 MHz	694 – 960 MHz	1350 – 2700 MHz
VSWR	1.8	1.8	1.5
Gain	3 dBi	4 dBi	7.5 dBi
Composite Power max	600 W	600 W	350 W
	Band 4	Band 5	Band 6
Frequency	2700 – 3300 MHz	3300 – 4900 MHz	4900 – 6425 MHz
VSWR	1.5	1.7	1.5
Gain	6.5 dBi	7 dBi	8 dBi
Composite Power max	350 W	300 W	300 W

Electrical data	
Impedance	50 Ohm
Ambient temperature	25 °C
Remarks	Indicated VSWR values are valid for a metallic ground plane of 0.5 × 0.5 m or larger. Indicated gain values will be achieved on a metallic ground plane of 1 × 1 m or larger.

Ports	Port 1
Connector	N, jack (female)
Polarization	vertical
DC Grounded	Yes

Connections	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6
Port 1	x	x	x	x	x	x

Mechanical data	
Weight	1.5 kg
Dimensions (height × width × depth)	154 mm × 100 mm × 256 mm
Remarks	Low corrosion design according to MIL-F-14072(E).

Interface and material data	
Radome material	PC (Polycarbonate)
Radome colour	black

Ruggedized military vehicle antennas
Communication incl. GPS



Ordering information	SENCITY® Shield
	Low Profile
Type no.	1399.99.0284
Frequency range	790 – 6425 MHz
Gain	5 dBi
Height	40 mm
Description Rugged vehicle antenna for Jamming and Communication applications. Broadband performance starting at 790 MHz up to 6.425 GHz. Supports 2G/3G/4G cellular, Wifi 2.4/5 GHz, Wifi 6E. Embedded GNSS antenna with integrated LNA supports GPS L1, Galileo E1, BeiDou B1 and GLONASS G1. Meets MIL-STD 810H. Extremely low profile (40mm).	
Item no.	85244558

Electrical data per band	Band 1	Band 2	Band 3
Frequency	790 – 806 MHz	806 – 870 MHz	870 – 960 MHz
VSWR	2.2	1.9	1.6
Gain	5 dBi	5 dBi	5 dBi
Ambient Temperature	25 °C	25 °C	25 °C
Composite Power max	80 W	80 W	80 W
	Band 4	Band 5	Band 6
Frequency	1359 – 2700 MHz	4600 – 6425 MHz	1559 – 1610 MHz
VSWR	2	2.1	1.8
Gain	5 dBi	5 dBi	
Ambient Temperature	25 °C	25 °C	
Composite Power max	80 W	80 W	

Electrical data	
Impedance	50 Ohm
Remarks	Indicated VSWR values are valid for a metallic ground plane of 0.2×0.2 m or larger for the 806–6425 MHz frequency band. Indicated gain values will be achieved on a metallic ground plane of 1×1 m or larger.

Ports	Port 1	Port 2
Connector	N, jack (female)	TNC, plug (male)
Cable length		0.21 m
Polarization	vertical	circular right
DC Grounded	Yes	No

Connections	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6
Port 1	x	x	x	x	x	
Port 2						x

Electrical data LNA		Mechanical data	
LNA is connected to	Port 2	Weight	0.6 kg
Input voltage	3 V – 5 V	Dimensions (height × width × depth)	40 mm × 100 mm × 145 mm
Current consumption	20 mA	Remarks	Low corrosion design according to MIL-F-14072(E).
Noise figure	1.6 dB	Interface and material data	
Total gain @90° elevation	30 dBic	Radome material	PC (Polycarbonate)
		Radome colour	black

Ruggedized military vehicle antennas
Communication incl. GPS



Ordering information	SENCITY® Shield MIMO
Type no.	1399.99.0286
Frequency range	617 – 7125 MHz
Gain	5 – 7.5 dBi
Height	81.6 mm
Description • Rugged vehicle antenna for Jamming and Communication applications. • Supports 2x2 Cellular MIMO for 3G, 4G and 5G. • Supports 2x2 Wi-Fi MIMO in all Wi-Fi 6E bands. • Embedded GNSS antenna with integrated LNA supports GPS L1, Galileo E1, BeiDou B1 and GLONASS G1 • Meets MIL-STD 810H	
Item no.	85244560

Electrical data per band	Band 1	Band 2	Band 3	Band 4
Frequency	617 – 694 MHz	694 – 790 MHz	790 – 960 MHz	1350 – 2700 MHz
VSWR	1.7	1.7	1.7	1.8
Gain	6 dBi	5 dBi	6 dBi	7.5 dBi
Ambient Temperature	25 °C	25 °C	25 °C	25 °C
Composite power max.	80 W	80 W	80 W	80 W
	Band 5	Band 6	Band 7	Band 8
Frequency	2700 – 3300 MHz	3300 – 4900 MHz	4900 – 7125 MHz	1559 – 1610 MHz
VSWR	2	2.1	1.9	1.8
Gain	6.5 dBi	6.5 dBi	7.5 dBi	
Ambient Temperature	25 °C	25 °C	25 °C	
Composite power max.	80 W	80 W	80 W	

Electrical data	
Impedance	50 Ohm
Remarks	Indicated VSWR values are valid for a metallic ground plane of 0.5 × 0.5 m or larger. In the 790 – 7125 MHz band, indicated VSWR values are also valid for installations on non-metallic surfaces (no specific ground plane requirements). Indicated gain values will be achieved on a metallic ground plane of 1×1 m or larger.

Ports	Port 1	Port 2	Port 3
Connector	N, jack (female)	N, jack (female)	TNC, plug (male)
Cable type	RADOX_RF_142	RADOX_RF_142	
Cable length	0.24 m	0.12 m	0.17 m
Polarization	vertical	vertical	circular right
DC Grounded	Yes	Yes	

Connections	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8
Port 1	x	x	x	x	x	x	x	
Port 2	x	x	x	x	x	x	x	
Port 3								x

Electrical data LNA		Mechanical data	
LNA is connected to	Port 3	Dimensions (height × width × depth)	81.6 mm × 102.5 mm × 352.5 mm
Input voltage	3 V – 5 V	Remarks	Low corrosion design according to MIL-DTL-14072(E).
Current consumption	20 mA	Interface and material data	
Noise figure	1.6 dB	Radome material	PC (Polycarbonate)
Total gain @90° elevation	30 dBic	Radome colour	black

Ruggedized military vehicle antennas
Communication incl. GPS



Ordering information	SENCITY® Shield
Type no.	1399.99.0287
Frequency range	694 – 960 / 1350 – 6425 MHz
Gain	5 – 8.5 dBi
Height	99 mm
Description • Rugged vehicle antenna for Jamming and Communication applications. • Broadband performance starting at 694 Mhz up to 6.425 GHz • Supports 2G/3G/4G/5G cellular and Wi-Fi 4/Wi-Fi 6 bands. • Embedded GNSS antenna with integrated LNA supports GPS L1, Galileo E1, BeiDou B1 and GLONASS G1 • Meets MIL-STD 810H • Low profile design.	
Item no.	85244779

Electrical data per band	Band 1	Band 2	Band 3	Band 4
Frequency	694 – 790 MHz	790 – 960 MHz	1350 – 1710 MHz	1710 – 2700 MHz
VSWR	2	1.5	2.2	1.5
Gain	5 dBi	5 dBi	6 dBi	6 dBi
Ambient Temperature	25 °C	25 °C	25 °C	25 °C
Composite power max.	80 W	80 W	80 W	80 W
	Band 5	Band 6	Band 7	Band 8
Frequency	2700 – 3300 MHz	3300 – 4900 MHz	4900 – 6425 MHz	1559 – 1610 MHz
VSWR	1.5	1.7	1.5	1.8
Gain	8.5 dBi	7 dBi	7.5 dBi	
Ambient Temperature	25 °C	25 °C	25 °C	
Composite power max.	80 W	80 W	80 W	

Electrical data	
Impedance	50 Ohm
Remarks	Indicated VSWR values are valid for a metallic ground plane of 0.5 × 0.5 m or larger. In the 790 – 7125 MHz band, Indicated VSWR values are also valid for installations on non-metallic surfaces (no specific ground plane requirements). Indicated gain values will be achieved on a metallic ground plane of 1×1 m or larger.

Ports	Port 1	Port 2
Connector	N, jack (female)	TNC, plug (male)
Cable length		0.21 m
Polarization	vertical	circular right
DC Grounded	Yes	No

Connections	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8
Port 1	x	x	x	x	x	x	x	
Port 2								x

Electrical data LNA		Mechanical data	
LNA is connected to	Port 2	Weight	1.1 kg
Input voltage	3 V – 5 V	Dimensions (height × width × depth)	90 mm × 100 mm × 256 mm
Current consumption	20 mA	Remarks	Low corrosion design according to MIL-F-14072(E).
Noise figure	1.6 dB	Interface and material data	
Total gain @90° elevation	30 dBic	Radome material	PC (Polycarbonate)
		Radome colour	black

Ruggedized military vehicle antennas
Communication incl. GPS



Ordering information	SENCITY® Shield Ultra
Type no.	1399.99.0288
Frequency range	380 – 960 / 1350 – 6425 MHz
Gain	3 – 8 dBi
Height	154 mm
Description	• Rugged vehicle antenna for Jamming and Communication applications. • Ultra broadband performance starting at 380 MHz up to 7.125 GHz. • Supports TETRA, LTE450, 2G/3G/4G/5G cellular, Wifi 2.4/5 GHz, Wifi 6E and GNSS (Beidou, Galileo, GPS, Glonass) • Meets MIL-STD 810H
Item no.	85245226

Electrical data per band	Band 1	Band 2	Band 3	Band 4
Frequency	380 – 694 MHz	694 – 960 MHz	1350 – 2700 MHz	2700 – 3300 MHz
VSWR	1.8	1.8	1.5	1.5
Gain	3 dBi	4 dBi	7.5 dBi	6.5 dBi
Ambient Temperature	25 °C	25 °C	25 °C	25 °C
Composite power max.	80 W	80 W	80 W	80 W
	Band 5	Band 6	Band 7	
Frequency	3300 – 4900 MHz	4900 – 6425 MHz	1559 – 1610 MHz	
VSWR	1.7	1.5	1.8	
Gain	7 dBi	8 dBi		
Ambient Temperature	25 °C	25 °C		
Composite power max.	80 W	80 W		

Electrical data	
Impedance	50 Ohm
Remarks	Indicated VSWR values are valid for a metallic ground plane of 0.5 × 0.5 m or larger. Indicated gain values will be achieved on a metallic ground plane of 1 × 1 m or larger.

Ports	Port 1	Port 2
Connector	N, jack (female)	TNC, plug (male)
Cable length		0.21 m
Polarization	vertical	circular right
DC Grounded	Yes	No

Connections	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7
Port 1	x	x	x	x	x	x	
Port 2							x

Electrical data LNA		Mechanical data	
LNA is connected to	Port 2	Weight	1.5 kg
Input voltage	3 V – 5 V	Dimensions (height × width × depth)	154 mm × 100 mm × 256 mm
Current consumption	20 mA	Remarks	Low corrosion design according to MIL-F-14072(E).
Noise figure	1.6 dB	Interface and material data	
Total gain @90° elevation	30 dBic	Radome material	PC (Polycarbonate)
		Radome colour	black

Ruggedized military vehicle antennas
Communication incl. GPS



Ordering information	SENCITY® Mag.-Mount antenna
Type no.	1399.19.0060
Frequency range	380 – 7125 MHz
Gain	4 – 6 dBi
Height	130 mm
Description • Rugged vehicle rooftop multi-band antenna with magnet mount for heavy duty vehicles. • Supports 2G/3G/4G/5G cellular, Wifi 2.4/5 GHz, Wifi 6, TETRA and GNSS (Beidou, Galileo, GPS, Glonass). • 6 separate ports for 2x2 cellular MIMO and 2x2 Wifi MIMO, TETRA plus GNSS.	
Item no.	–

Electrical data per band	Band 1	Band 2	Band 3	Band 4
Frequency	380 – 430 MHz	698 – 960 MHz	1710 – 2690 MHz	2400 – 2500 MHz
VSWR	2	2	2	2
Impedance	50 Ohm	50 Ohm	50 Ohm	50 Ohm
Gain	4 dBi	4 dBi	6 dBi	6 dBi
Ambient Temperature	25 °C	25 °C	25 °C	25 °C
	Band 5	Band 6	Band 7	
Frequency	4900 – 6425 MHz	4900 – 7125 MHz	1559 – 1610 MHz	
VSWR	2	1.6	2	
Impedance	50 Ohm	50 Ohm		
Gain	6 dBi	6 dBi		
Ambient Temperature	25 °C	25 °C		

Ports	Port 1	Port 2	Port 3	Port 4	Port 5	Port 6
Port name	TETRA	LTE	LTE	Wi-Fi	Wi-Fi	GNSS
Connector	SMA, jack (female)	SMA, jack (female)	SMA, jack (female)	SMA, jack (female)	SMA, jack (female)	SMA, jack (female)
Polarization	vertical	vertical	vertical	vertical	vertical	circular right
DC grounded	No	No	No	Yes	Yes	No

Connections	Band 1	Band 2	Band 3	Band 4	Band 5	Band 6
Port 1	x					
Port 2		x	x			
Port 3		x	x			
Port 4				x	x	
Port 5				x	x	
Port 6						x

General data	
	Ground plane: Indicated VSWR values are valid for a metallic ground plane of 0.5 × 0.5 m or larger. Indicated VSWR values are mostly valid for installations on non-metallic surfaces also (no specific ground plane requirements), apart from VSWR 2.5 below 840 MHz and VSWR 3 below 750 MHz.



Electrical data LNA

LNA noise figure	2 dB
LNA current consumption	30 mA
LNA is connected to	Port 6
EMC	EN 50121-3-2
LNA input voltage range	3 – 5V
Total gain @90° elevation	30 dBIC

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

Mechanical data

Dimensions (height × width × depth)	130 × 83 × 250 mm
Weight	2.5 kg
Height of whip antenna	440 mm

Environmental data

Environmental conditions	outdoor	2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
Operation temperature	–40 to 85 °C	REACH 1907/2006/EC	compliant
Storage temperature	–55 to 85 °C	Flammability: ECE-R118, EN 45545-2	
Transport temperature	–40 to 85 °C	Environmental tests: ISO 16750:2010	
IP rating	IP68, IP69	Environmental tests: ISO 50155	
Solar radiation	DIN 75220	Low corrosion designed acc. to MIL-F-14072D	

Material data

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

Additional views

Other vehicle antennas

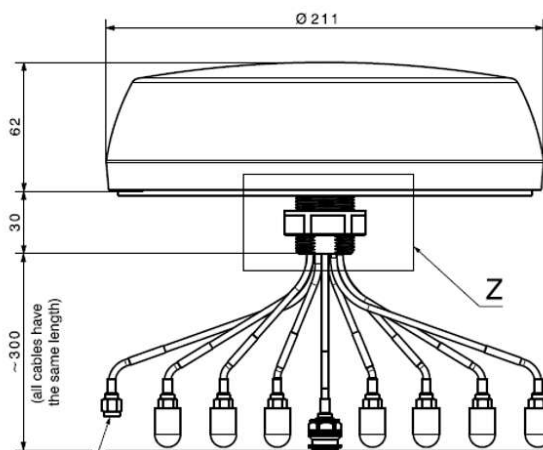
The SENCITY® Tram MULTI portfolio is designed for 4x4 MIMO operation in cellular, 8x8 MIMO in Wi-Fi networks and in addition comes with 2x2 TETRA options. It offers a variety of combinations of up to 9 radiators within one housing and comes with an GNSS option for L1, L2, L5 operation. The standard versions are listed below:

Product ID	Article No.	Cellular	Wi-Fi	TETRA	GNSS
1399.19.0208	85185402	2			
1399.99.0209	85185403	2			L1+L2+L5
1399.99.0208	85185404	2			L1
1399.19.0210	85185371	2	2		
1399.99.0211	85185373	2	2		L1+L2+L5
1399.99.0210	85185374	2	2		L1
1399.19.0212	85185375	2	3		
1399.99.0213	85185379	2	3		L1+L2+L5
1399.99.0212	85185381	2	3		L1
1399.19.0214	85185382	2	4		
1399.99.0215	85185383	2	4		L1+L2+L5
1399.99.0214	85185384	2	4		L1
1399.19.0216	85185385	4			
1399.99.0217	85185386	4			L1+L2+L5
1399.99.0216	85185387	4			L1
1399.19.0218	85185388	4	2		
1399.99.0219	85185389	4	2		L1+L2+L5
1399.99.0218	85185390	4	2		L1
1399.19.0220	85185391	4	3		
1399.99.0221	85185395	4	3		L1+L2+L5
1399.99.0220	85185397	4	3		L1
1399.19.0232	85185406	4	4		
1399.99.0233	85185407	4	4		L1+L2+L5
1399.99.0232	85185408	4	4		L1
1399.19.0234	85185409		6		
1399.99.0235	85185416		6		L1+L2+L5
1399.99.0234	85185417		6		L1

Product ID	Article No.	Cellular	Wi-Fi	TETRA	GNSS
1399.19.0236	85185418		8		
1399.99.0237	85185419		8		L1+L2+L5
1399.99.0236	85185420		8		L1
1399.19.0238	85185512			1	
1399.99.0239	85185513			1	L1+L2+L5
1399.99.0238	85185514			1	L1
1399.19.0240	85185515		2	1	
1399.99.0241	85185516		2	1	L1+L2+L5
1399.99.0240	85185517		2	1	L1
1399.19.0242	85185518		3	1	
1399.99.0243	85185523		3	1	L1+L2+L5
1399.99.0242	85185524		3	1	L1
1399.19.0244	85185525		4	1	
1399.99.0245	85185526		4	1	L1+L2+L5
1399.99.0244	85185527		4	1	L1
1399.19.0246	85185528			2	
1399.99.0247	85185529			2	L1+L2+L5
1399.99.0246	85185533			2	L1
1399.19.0248	85185534		2	2	
1399.99.0249	85185535		2	2	L1+L2+L5
1399.99.0248	85185536		2	2	L1
1399.19.0250	85185038		3	2	
1399.99.0251	85185037		3	2	L1
1399.99.0250	85185036		3	2	L1
1399.19.0252	85185039		4	2	
1399.99.0253	85185041		4	2	L1+L2+L5
1399.99.0252	85185042		4	2	L1

Description	Type no.	Height	Page
SENCITY® Tram MULTI 380 – 7125 MHz 2 – 6 dBi 7 separate ports for 2x2 TETRA/cellular MIMO and 4x4 Wifi MIMO plus GNSS	1399.99.0253	60 mm	60

Outline drawing and mounting instruction are the same for every antenna.



HUBER+SUHNER AG
Radio Frequency
Degersheimerstrasse 14
9100 Herisau
Switzerland
Telefon +41 71 353 41 11
hubersuhner.com

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HUBER+SUHNER is certified according to ISO 9001, ISO 14001, OHSAS 18001, EN(AS) 9100, IATF 16949 and ISO/TS 22163 – IRIS.

Waiver

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