



Rail Communications **Wireless connectivity**

Edition 02/2024

Railway rooftop antennas

HUBER+SUHNER offers the world's most complete portfolio of antennas for train rooftops, covering all train-to-ground applications including cellular, Wi-Fi, GSM-R and PTC services, including support as well and multiband GNSS.

SENCITY Rail low profile

p.28 – 37



Omni-directional broadband MIMO and SISO rooftop antennas for all types of trains. Ultra low profile design with a maximum height of only 40 mm. Designed to meet the special requirements of railway applications including high current and high voltage protection.

SENCITY Rail

p.38 – 59



Omni-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 Rail MIMO

p.23 – 27



Omni-directional MIMO broadband railway rooftop antennas for all types of trains. Designed to meet the special requirements of railway applications including high current and high voltage protection.

SENCITY Rail MIMO+

p.12 – 15



Dual-Polarised, Omni-directional Cellular 2x2 and 4x4 MIMO rooftop antennas are designed for wireless applications to meet special requirements of railway applications including high current and high voltage protection.

SENCITY Rail ACTIVE

p.8 – 11



The first-of-its-kind omni-directional, broadband rooftop antenna has an integrated connected compute module, cellular radios, Wi-Fi access point and GNSS receiver. It provides power and data via a single ethernet cable and is designed to meet the special requirements of railway applications, including high current and high voltage protection.

SENCITY Rail MULTI

p.16 – 22



Omni-directional broadband 4x4 MIMO rooftop antennas are designed for wireless applications to meet special requirements of railway applications including high current and high voltage protection.

SENCITY Rail ACTIVE Rooftop

Product name	SENCITY® Rail ACTIVE Rooftop antenna LTE
Product ID.	1499.00.0001
Description	<p>Omnidirectional railway rooftop antenna with integrated connected compute module, cellular radios, Wi-Fi access point & GNSS receiver. Can be used in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop omni-directional antenna for Cellular 4G, Wi-Fi 5 and GNSS train-to-ground services. • Embedded GNSS antenna with integrated low-noise amplifier • Includes integrated connected compute board, Cellular and Wi-Fi radio modules. • Connection provided via a single PoE input LAN M12 X-code female 300mm pigtail. • Supports 4x4 MIMO Cellular 5G sub-6 with 4G/3G fallback and 2x2 MU-MIMO Wi-Fi 5 Dual-band 2.4 / 5 GHz • GNSS receiver supports GPS L1, Galileo E1, BeiDou B1, GLONASS G1
Item no.	85175539

Communication Services

Supported Bands	LTE FDD	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29 (DL Only), B30, B32, B66, B71* (617 – 2360 MHz)
	LTE TDD	B38, B39, B40, B41, B42, B43, B46 (DL Only), B48. (1880 – 5925 MHz)
	WCDMA	FDD B1, FDD B2, FDD B4, FDD B5, FDD B8, FDD B9, FDD B19
	Wi-Fi	802.11ac Wave 2, 2x2 MU-MIMO (5150 – 5850 MHz) 802.11n Wave 1 (2400 – 2500 MHz)
	GNSS	GPS/QZSS L1 C/A, GLONASS L10F, BeiDou B1I, Galileo E1B/C (1559 – 1610 MHz)
Note	Supported bands also valid for installations on non-metallic surfaces (no specific ground plane requirements). For band 71 an additional ground plane of at least 500 × 500mm is recommended. Cellular Radio Module: TELIT® LTE LM960A18	

Electrical data

Processor	2 × ARM Cortex-A72 1.6GHz, 4 × ARM Cortex-A53 1.26GHz, 2 × ARM Cortex-M4F 266MHz
Memory	4GB RAM / 16GB eMMC Storage
Operating System	Embedded Linux Debian 10, Linux 5.4 kernel operating system
Ethernet	1 × LAN M12 X-code female 300mm pigtail, PoE+ Class 4 (802.3at)

Mechanical data

Dimensions (mm) (height × width × depth)	84 × 368 × 425 (Height × Width × Depth)
Weight (kg)	7.5 (without packaging)

Environmental data

Environmental conditions	outdoor
IP rating	IP6X, IPX6, IPX8, IPX9, IP69K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA-130, EN50121-3-2

Material data

Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

**SENCITY Rail ACTIVE
Rooftop**

Product name	SENCITY Rail ACTIVE Rooftop antenna 5G sub-6
Product ID.	1499.00.0002
Description	<p>Omnidirectional railway rooftop antenna with integrated connected compute module, cellular radios, Wi-Fi access point & GNSS receiver. Can be used in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop omni-directional antenna for Cellular 5G, Wi-Fi 5 and GNSS train-to-ground services. • Embedded GNSS antenna with integrated low-noise amplifier • Includes integrated connected compute board, Cellular and Wi-Fi radio modules. • Connection provided via a single PoE input LAN M12 X-code female 300mm pigtail. • Supports 4x4 MIMO Cellular 5G sub-6 with 4G/3G fallback and 2x2 MU-MIMO Wi-Fi 5 Dual-band 2.4 / 5 GHz • GNSS receiver supports GPS L1, Galileo E1, BeiDou B1, GLONASS G1 constellations
Item no.	85175540

Communication Services		
Supported Bands	5G	n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79 (617 – 5000 MHz)
	4x4 MIMO	1, 2, 3, 4, 7, 25, 30, 32, 41, 42, 43, 46, 48, 66 (1710 – 3700 MHz)
	LTE	1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29DL, 30, 32, 34, 38, 39, 40, 41, 42, 43, 46(LAA), 48(CRS), 66, 71*
	Wi-Fi	802.11ac Wave 2, 2x2 MU-MIMO (5150 – 5850 MHz) 802.11n Wave 1 (2400 – 2500 MHz)
	GNSS	GPS/QZSS L1 C/A, GLONASS L10F, BeiDou B1I, Galileo E1B/C (1559 – 1610 MHz)
Note	Supported bands also valid for installations on non-metallic surfaces (no specific ground plane requirements). For band 71 an additional ground plane of at least 500 × 500mm is recommended. Integrated Cellular Module: TELIT® 5G Module FN980	

Electrical data	
Processor	2 × ARM Cortex-A72 1.6GHz, 4 × ARM Cortex-A53 1.26GHz, 2 × ARM Cortex-M4F 266MHz
Memory	4GB RAM / 16GB eMMC Storage
Operating System	Embedded Linux Debian 10, Linux 5.4 kernel operating system
Ethernet	1 × LAN M12 X-code female 300mm pigtail, PoE+ Class 4 (802.3at)

Mechanical data	
Dimensions (mm) (height × width × depth)	84 × 368 × 425 (Height × Width × Depth)
Weight (kg)	7.5 (without packaging)

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6, IPX8, IPX9, IP69K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA-130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

**SENCITY Rail ACTIVE
Rooftop**

Product name	SENCITY Rail ACTIVE Rooftop antenna LTE
Product ID.	1499.00.0004
Description	<p>Omnidirectional railway rooftop antenna with integrated connected compute module, cellular radios, Wi-Fi access point & GNSS receiver. Can be used in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop omni-directional antenna for Cellular 4G, Wi-Fi 5 and GNSS train-to-ground services. • Embedded GNSS antenna with integrated low-noise amplifier • Includes integrated connected compute board, Cellular and Wi-Fi radio modules. • Connection provided via a single PoE input LAN M12 X-code female 300mm pigtail. • Supports 4x4 MIMO Cellular 5G sub-6 with 4G/3G fallback and 2x2 MU-MIMO Wi-Fi 5 Dual-band 2.4 / 5 GHz • GNSS receiver supports GPS L1, Galileo E1, BeiDou B1, GLONASS G1 constellations
Item no.	85175542

Communication Services

Supported Bands	LTE FDD	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30 (DL Only), B32, B34, B66, B71* (617 – 2360 MHz)
	LTE TDD	B38, B39, B40, B41, B42, B46 (DL Only), B48. (1880 – 5925 MHz)
	HSPA+/WCDMA	B1, B2, B3, B4, B5, B6, B8, B9, B19
	Wi-Fi	802.11ac Wave 2, 2x2 MU-MIMO (5150 – 5850 MHz) 802.11n Wave 1 (2400 – 2500 MHz)
	GNSS	GPS/QZSS L1 C/A, GLONASS L10F, BeiDou B1I, Galileo E1B/C (1559 – 1610 MHz)
Note	Supported bands also valid for installations on non-metallic surfaces (no specific ground plane requirements). For band 71 an additional ground plane of at least 500 × 500mm is recommended. Integrated Radio Module: Sierra Wireless® EM7690	

Electrical data

Processor	2 × ARM Cortex-A72 1.6GHz, 4 × ARM Cortex-A53 1.26GHz, 2 × ARM Cortex-M4F 266MHz
Memory	4GB RAM / 16GB eMMC Storage
Operating System	Embedded Linux Debian 10, Linux 5.4 kernel operating system
Ethernet	1 × LAN M12 X-code female 300mm pigtail, PoE+ Class 4 (802.3at)

Mechanical data

Dimensions (mm) (height × width × depth)	84 × 368 × 425 (Height × Width × Depth)
Weight (kg)	7.5 (without packaging)

Environmental data

Environmental conditions	outdoor
IP rating	IP6X, IPX7, IPX9, IP69K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA-130, EN50121-3-2

Material data

Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

**SENCITY Rail ACTIVE
Rooftop**

Product name	SENCITY Rail ACTIVE Rooftop antenna 5G sub-6
Product ID.	1499.00.0005
Description	<p>Omnidirectional railway rooftop antenna with integrated connected compute module, cellular radios, Wi-Fi access point & GNSS receiver. Can be used in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop omni-directional antenna for Cellular 5G, Wi-Fi 5 and GNSS train-to-ground services. • Embedded GNSS antenna with integrated low-noise amplifier • Includes integrated connected compute board, Cellular and Wi-Fi radio modules. • Connection provided via a single PoE input LAN M12 X-code female 300mm pigtail. • Supports 4x4 MIMO Cellular 5G sub-6 with 4G/3G fallback and 2x2 MU-MIMO Wi-Fi 5 Dual-band 2.4 / 5 GHz • GNSS receiver supports GPS L1, Galileo E1, BeiDou B1, GLONASS G1 constellations
Item no.	85160687

Communication Services

Supported Bands	5G	n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79 (617 – 5000 MHz)
	LTE	1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29, 30, 32, 34, 38, 39, 40, 41, 42, 43, 46(LAA), 48, 66, 71*
	HSPA+/WCDMA	1, 2, 3, 4, 5, 6, 8, 9, 19
	Wi-Fi	802.11ac Wave 2, 2x2 MU-MIMO (5150 – 5850 MHz) 802.11n Wave 1 (2400 – 2500 MHz)
	GNSS	GPS/QZSS L1 C/A, GLONASS L10F, BeiDou B1I, Galileo E1B/C (1559 – 1610 MHz)
Note	Supported bands also valid for installations on non-metallic surfaces (no specific ground plane requirements). For band 71 an additional ground plane of at least 500 × 500mm is recommended. Integrated Radio Module: Sierra Wireless® EM9191	

Electrical data

Processor	2 × ARM Cortex-A72 1.6GHz, 4 × ARM Cortex-A53 1.26GHz, 2 × ARM Cortex-M4F 266MHz
Memory	4GB RAM / 16GB eMMC Storage
Operating System	Embedded Linux Debian 10, Linux 5.4 kernel operating system
Ethernet	1 × LAN M12 X-code female 300mm pigtail, PoE+ Class 4 (802.3at)

Mechanical data

Dimensions (mm) (height × width × depth)	84 × 368 × 425 (Height × Width × Depth)
Weight (kg)	7.5 (without packaging)

Environmental data

Environmental conditions	outdoor
IP rating	IP6X, IPX7, IPX9, IP69K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA-130, EN50121-3-2

Material data

Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MIMO+

Product name	SENCITY Rail MIMO+ 2x2 antenna
Product ID.	1399.17.0301
Description	<p>Dual-Polarised Omni-directional 2x2 railway rooftop antenna, developed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Enables 2x2 MIMO with true polarisation diversity for high data throughput • Average combined condition number on the supported cellular bands of <10dB • Supporting 2G/3G/4G/5G bands between 694 – 4200 MHz • Rugged design, meets EN 50155 railway standard and Fire retardant according to EN 45545-2 and NFPA130 • High Voltage and High Current protection for use under catenary lines
Item no.	85150807

Technical Data	Band 1	Band 2	Band 3
Band name	Vertical Polarisation	Vertical Polarisation	Vertical Polarisation
Frequency (MHz)	617 – 960	1425 – 2690	3300 – 4200
VSWR	2.0	2.0	1.9
Gain (dBi)	7	8	9
Port Isolation (dB)	35	29	38
	Band 4	Band 5	Band 6
Band name	Horizontal Polarisation	Horizontal Polarisation	Horizontal Polarisation
Frequency (MHz)	694 – 960	1425 – 2690	3300 – 4200
VSWR	1.9	2.0	2.1
Gain (dBi)	7	9	9
Port Isolation (dB)	35	29	38

Electrical data	
Impedance	50 Ohms
Number of ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (Cellular 1) and Horizontal (Cellular 2)

Mechanical data	
Dimensions (height × width × depth)	90 × 489 × 392 mm
Weight	7.34 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69k
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.



Product name	SENCITY Rail MIMO+ 2x2 antenna with Dualband GNSS/LNA
Product ID.	1399.99.0301
Description	<p>Dual-Polarised Omni-directional 2x2 railway rooftop antenna, developed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Enables 2x2 MIMO with true polarisation diversity for high data throughput • Average combined condition number on the supported cellular bands of <10dB • Supporting 2G/3G/4G/5G bands between 694 – 4200 MHz and additionally includes a GNSS/LNA • Rugged design, meets EN 50155 railway standard and Fire retardant according to EN 45545-2 and NFPA130 • High Voltage and High Current protection for use under catenary lines
Item no.	85150811

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Vertical Polarisation	Vertical Polarisation	Vertical Polarisation	Horizontal Polarisation
Frequency (MHz)	617 – 960	1425 – 2690	3300 – 4200	694 – 960
VSWR	1.9	2.0	1.9	1.9
Gain (dBi)	7	8	9	7
Port Isolation (dB)	35	31	40	35
	Band 5	Band 6	Band 7	Band 8
Band name	Horizontal Polarisation	Horizontal Polarisation	GNSS 1	GNSS 2
Frequency (MHz)	1425 – 2690	3300 – 4200	1164 – 1279	1555 – 1610
VSWR	2.0	1.9	1.7	1.7
Gain (dBi)	9	9		
Port Isolation (dB)	31	40		

Electrical data	
Impedance	50 Ohms
Number of Ports	3
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (Cellular 1), Horizontal (Cellular 2), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	90 × 489 × 392 mm
Weight	7.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MIMO+

Product name	SENCITY Rail MIMO+ 4x4 antenna
Product ID.	1399.17.0303
Description	<p>Dual-Polarised Omni-directional 4x4 railway rooftop antenna, developed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Enables 4x4 MIMO with true polarisation diversity for high data throughput • Average combined condition number on the supported cellular bands of <10dB on the primary antennas • Supporting 2G/3G/4G/5G bands between 694 – 4200 MHz • Rugged design, meets EN 50155 railway standard and Fire retardant according to EN 45545-2 and NFPA130 • High Voltage and High Current protection for use under catenary lines
Item no.	85150809

Technical Data	Band 1	Band 2	Band 3
Band name	Vertical Polarisation	Vertical Polarisation	Vertical Polarisation
Frequency (MHz)	617 – 960	1425 – 2690	3300 – 4200
VSWR	2.0	2.1	2.1
Gain (dBi)	7	8	9
Port Isolation (dB)	35	29	38
	Band 4	Band 5	Band 6
Band name	Horizontal Polarisation	Horizontal Polarisation	Horizontal Polarisation
Frequency (MHz)	694 – 960	1515 – 2700	3300 – 4200
VSWR	1.9	2.1	2.2
Gain (dBi)	7	9	9
Port Isolation (dB)	35	29	38

Electrical data	
Impedance	50 Ohms
Number of Ports	4
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (Cellular 1, 3 and 4), Horizontal (Cellular 2)

Mechanical data	
Dimensions (height × width × depth)	90 × 489 × 392 mm
Weight	8.0 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.



Product name	SENCITY Rail MIMO+ 4x4 antenna
Product ID.	1399.99.0303
Description	<p>Dual-Polarised Omni-directional 4x4 railway rooftop antenna, developed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Enables 4x4 MIMO with true polarisation diversity for high data throughput • Average combined condition number on the supported cellular bands of <10dB on the primary antennas • Supporting 2G/3G/4G/5G bands between 694 – 4200 MHz and additionally includes a GNSS/LNA • Rugged design, meets EN 50155 railway standard and Fire retardant according to EN 45545-2 and NFPA130 • High Voltage and High Current protection for use under catenary lines
Item no.	85150813

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Vertical Polarisation	Vertical Polarisation	Vertical Polarisation	Horizontal Polarisation
Frequency (MHz)	617 – 960	1425 – 2690	3300 – 4200	694 – 960
VSWR	2.0	2.1	2.1	1.8
Gain (dBi)	7	8	9	7
Port Isolation (dB)	35	29	38	35
	Band 5	Band 6	Band 7	Band 8
Band name	Horizontal Polarisation	Horizontal Polarisation	GNSS 1	GNSS 2
Frequency (MHz)	1515 – 2690	3300 – 4200	1164 – 1279	1555 – 1610
VSWR	1.9	2.2	1.5	1.5
Gain (dBi)	9	9		
Port Isolation (dB)	29	38		

Electrical data	
Impedance	50 Ohms
Number of Ports	5
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (Cellular 1, 3 and 4), Horizontal (Cellular 2) and Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	90 × 489 × 392 mm
Weight	8.15 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MULTI

Product name	SENCITY Rail MULTI 4-Port antenna
Product ID.	1399.17.0268
Description	<p>Omnidirectional 4x4 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • 4x4 MIMO with four separate broadband integrated antennas • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • High Voltage and High Current protection for use under catenary lines
Item no.	85159947

Technical Data	Band 1	Band 2	Band 3
Band name	Cellular	Cellular	Cellular
Frequency (MHz)	617 – 694	694 – 960	1350 – 2700
VSWR	1.7	1.6	1.8
Gain (dBi)	3.5	5	6
Port Isolation (dB)	13	13	20
	Band 4	Band 5	Band 6
Band name	Cellular	Cellular	Cellular
Frequency (MHz)	2700 – 3300	3300 – 4900	4900 – 7125
VSWR	1.8	1.9	1.7
Gain (dBi)	6	6	6
Port Isolation (dB)	25	25	25

Electrical data	
Impedance	50 Ohms
Number of Ports	4
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical

Mechanical data	
Dimensions (height × width × depth)	84 × 368 × 425 mm
Weight	8 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69k
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MULTI

Product name	SENCITY Rail MULTI 5-Port antenna
Product ID.	1399.99.0164
Description	<p>Omnidirectional 4x4 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • 4x4 MIMO with four separate broadband integrated antennas • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • GNSS antenna supports GPS L1, Galileo E1, BeiDou B1, GLONASS G1 constellations
Item no.	85159948

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular	Cellular	Cellular	Cellular
Frequency (MHz)	617 – 694	694 – 960	1350 – 2700	2700 – 3300
VSWR	1.7	1.6	1.8	1.8
Gain (dBi)	3.5	5	6	6
Port Isolation (dB)	13	13	20	25
	Band 5	Band 6	Band 7	
Band name	Cellular	Cellular	GNSS	
Frequency (MHz)	3300 – 4900	4900 – 7125	1559 – 1610	
VSWR	1.9	1.7	1.8	
Gain (dBi)	6	6		
Port Isolation (dB)	25	25		

Electrical data	
Impedance	50 Ohms
Number of Ports	5
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical

Mechanical data	
Dimensions (height × width × depth)	84 × 368 × 425 mm
Weight	8 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69k
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MULTI

Product name	SENCITY Rail MULTI 7-Port antenna
Product ID.	1399.99.0153
Description	<p>Omnidirectional 4x4 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • 4x4 MIMO cellular with four separate broadband integrated antennas and 2x2 MIMO Wi-Fi • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • GNSS antenna supports GPS L1, Galileo E1, BeiDou B1, GLONASS G1 constellations
Item no.	85104543

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular	Cellular	Cellular	Cellular
Frequency	617 – 694 MHz	694 – 960 MHz	1350 – 3300 MHz	3300 – 4200 MHz
VSWR	1.7	1.6	1.8	1.9
Gain (dBi)	3.5 dBi	5 dBi	6 dBi	6 dBi
Port Isolation (dB)	13	13	20	25
	Band 5	Band 6	Band 7	Band 8/9
Band name	Cellular	Wi-Fi	Wi-Fi	GNSS
Frequency	4900 – 7125 MHz	2400 – 2500 MHz	4900 – 7125 MHz	1559 – 1610 MHz
VSWR	1.7	1.7	1.5	1.8
Gain	6 dBi	7 dBi	7 dBi	
Port Isolation (dB)	25	22	35	

Electrical data	
Impedance	50 Ohms
Number of Ports	7
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical

Mechanical data	
Dimensions (height × width × depth)	84 × 368 × 425 mm
Weight	8 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69k
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MULTI

Product name	SENCITY Rail MULTI 7-Port antenna with Dualband GNSS/LNA
Product ID.	1399.99.0162
Description	<p>Omnidirectional 4x4 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Cellular 4x4 MIMO with four separate broadband integrated antennas and Wi-Fi 2x2 MIMO with two separate antennas • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Includes dualband GNSS antenna & integrated LNA covering GPS L1+L2+L5/Galileo E1+E5a+E5b/BeiDou B1+B2+B3/GLONASS G1+G2
Item no.	85173739

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular	Cellular	Cellular	Cellular
Frequency	617 – 694 MHz	694 – 960 MHz	1350 – 3300 MHz	3300 – 4200 MHz
VSWR	1.7	1.6	1.8	1.9
Gain (dBi)	3.5 dBi	5 dBi	6 dBi	6 dBi
Port Isolation (dB)	13	13	20	25
	Band 5	Band 6	Band 7	Band 8/9
Band name	Cellular	Wi-Fi	Wi-Fi	GNSS
Frequency	4900 – 7125 MHz	2400 – 2500 MHz	4900 – 7125 MHz	1164 – 1279 MHz 1559 – 1610 MHz
VSWR	1.7	1.7	1.5	1.5
Gain	6 dBi	7 dBi	7 dBi	
Port Isolation (dB)	25	22	35	

Electrical data	
Impedance	50 Ohms
Number of Ports	7
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical

Mechanical data	
Dimensions (height × width × depth)	84 × 368 × 425 mm
Weight	8 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69k
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MULTI

Product name	SENCITY Rail MULTI antenna with DAB+ and GNSS
Product ID.	1399.99.0166
Description	<p>Omnidirectional 4x4 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Supports DAB+ Band III on one port • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • GNSS antenna supports GPS L1, Galileo E1, BeiDou B1, GLONASS G1 constellations
Item no.	85178100

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular	Cellular	Cellular	Cellular
Frequency	617 – 960 MHz	1350 – 3300 MHz	3300 – 49000 MHz	49000 – 7125 MHz
VSWR	2.1	2.1	2.1	2.1
Gain (dBi)	7 dBi	8 dBi	8 dBi	8 dBi
Port Isolation (dB)	15	20	25	25
	Band 5	Band 6	Band 7	Band 8
Band name	Wi-Fi	Wi-Fi	DAB+	GNSS
Frequency	4900 – 7125 MHz	2400 – 2500 MHz	174 – 240 MHz	1559 – 1610 MHz
VSWR	2.0	2.0		1.5
Gain	9 dBi	9 dBi		
Port Isolation (dB)	20	30		

Electrical data	
Impedance	50 Ohms
Number of Ports	8
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (Cellular, Wi-Fi, DAB+), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	84 × 368 × 862 mm
Weight	11 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69k
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MULTI



Product name	SENCITY Rail MULTI 9-Port antenna
Product ID.	1399.99.0165
Description	<p>Omnidirectional 4x4 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Cellular 4x4 MIMO with four separate broadband integrated antennas and Wi-Fi 4x4 MIMO with four separate antennas • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • GNSS antenna supports GPS L1, Galileo E1, BeiDou B1, GLONASS G1 constellations
Item no.	85159949

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular	Cellular	Cellular	Cellular
Frequency	617 – 694 MHz	694 – 960 MHz	1350 – 3300 MHz	3300 – 4900 MHz
VSWR	1.7	1.6	1.8	1.9
Gain (dBi)	3.5 dBi	5 dBi	6 dBi	6 dBi
Port Isolation (dB)	13	13	20	25
	Band 5	Band 6	Band 7	Band 8/9
Band name	Cellular	Wi-Fi	Wi-Fi	GNSS
Frequency	4900 – 7125 MHz	2400 – 2500 MHz	4900 – 7125 MHz	1559 – 1610 MHz
VSWR	2.0	2.0	1.5	1.8
Gain	6 dBi	7 dBi	7 dBi	
Port Isolation (dB)	25	22	35	

Electrical data	
Impedance	50 Ohms
Number of Ports	8
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (Cellular, Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	84 × 368 × 425 mm
Weight	8 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69k
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MULTI

Product name	SENCITY Rail MULTI 13-Port antenna
Product ID.	1399.99.0133
Description	<p>Omnidirectional 2 × 4×4 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of high capacity Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Cellular 4×4 MIMO with eight separate broadband integrated antennas and Wi-Fi 4×4 MIMO with four separate antennas • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • GNSS antenna supports GPS L1, Galileo E1, BeiDou B1, GLONASS G1 constellations
Item no.	85010652

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular	Cellular	Cellular	Cellular
Frequency	617 – 694 MHz	694 – 960 MHz	1350 – 3300 MHz	3300 – 4900 MHz
VSWR	1.7	1.6	1.8	1.9
Gain (dBi)	3.5 dBi	5 dBi	6 dBi	6 dBi
Port Isolation (dB)	13	13	20	25
	Band 5	Band 6	Band 7	Band 8
Band name	Cellular	Wi-Fi	Wi-Fi	GNSS
Frequency	4900 – 7125 MHz	2400 – 2500 MHz	4900 – 7125 MHz	1559 – 1610 MHz
VSWR	2.0	2.0	1.5	1.8
Gain	6 dBi	7 dBi	7 dBi	
Port Isolation (dB)	25	22	35	

Electrical data	
Impedance	50 Ohms
Number of Ports	13
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (Cellular, Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	84 × 368 × 862 mm
Weight	11 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IP69k
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MIMO

Product name	SENCITY Rail MIMO antenna with GNSS/LNA
Product ID.	1399.99.0148
Description	<p>Omnidirectional 2x2 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Embedded GNSS antenna with integrated LNA supports GPS L1, Galileo E1, BeiDou B1 and GLONASS G1 • Dedicated grounding contact and Cable conduit support (sold separately)
Item no.	85085125

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	617 – 694 MHz	694 – 790 MHz	790 – 960 MHz	1350 – 2700 MHz
VSWR	1.7	1.7	1.7	1.8
Gain (dBi)	6 dBi	5 dBi	6 dBi	7.5 dBi
Port Isolation (dB)	15	15	15	25
	Band 5	Band 6	Band 7	Band 8
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	GNSS
Frequency	2700 – 3300 MHz	3300 – 4900 MHz	4900 – 7125 MHz	1559 – 1610 MHz
VSWR	2.0	2.1	1.9	1.8
Gain	6.5 dBi	6.5 dBi	7.5 dBi	
Port Isolation (dB)	25	25	35	

Electrical data	
Impedance	50 Ohms
Number of Ports	3
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	81.6 × 102.5 × 352.5 mm
Weight	2.1 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IP6KX, IPX7, IPX8, IPX9, IPX9K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MIMO

Product name	SENCITY Rail MIMO antenna
Product ID.	1399.17.0221
Description	<p>Omnidirectional 2x2 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Dedicated grounding contact and Cable conduit support (sold separately)
Item no.	85088375

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	617 – 694 MHz	694 – 790 MHz	790 – 960 MHz	1350 – 2700 MHz
VSWR	1.7	1.7	1.7	1.8
Gain (dBi)	6 dBi	5 dBi	6 dBi	7.5 dBi
Port Isolation (dB)	15	15	15	20
	Band 5	Band 6	Band 7	
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	
Frequency	2700 – 3300 MHz	3300 – 4900 MHz	4900 – 7125 MHz	
VSWR	2.0	2.1	1.9	
Gain	6.5 dBi	6.5 dBi	7.5 dBi	
Port Isolation (dB)	25	25	35	

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	100 – 250 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi)

Mechanical data	
Dimensions (height × width × depth)	81.6 × 102.5 × 352.5 mm
Weight	2.0 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IP6KX, IPX7, IPX8, IPX9, IPX9K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information please see the datasheet or scan the QR code.

SENCITY Rail MIMO

Product name	SENCITY Rail MIMO antenna with Dualband GNSS/LNA
Product ID.	1399.99.0152
Description	<p>Omnidirectional 2x2 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • 2x2 MIMO with two separate broadband integrated antennas • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Includes dualband GNSS antenna & integrated LNA covering GPS L1+L2+L5/Galileo E1+E5a+E5b/BeiDou B1+B2+B3/GLONASS G1+G2
Item no.	85141565

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	617 – 694 MHz	694 – 790 MHz	790 – 960 MHz	1350 – 2700 MHz
VSWR	1.7	1.5	1.5	1.8
Gain (dBi)	6 dBi	5 dBi	6 dBi	7.5 dBi
Port Isolation (dB)	15	15	30	25
	Band 5	Band 6	Band 7	Band 8
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	GNSS	GNSS
Frequency	2700 – 4900 MHz	4900 – 7125 MHz	1164 – 1279 MHz	1555 – 1610 MHz
VSWR	1.8	1.6	1.5	1.5
Gain	6.5 dBi	6.5 dBi		
Port Isolation (dB)	35	35		

Electrical data	
Impedance	50 Ohms
Number of Ports	3
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	81.6 × 102.5 × 352.5 mm
Weight	1.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IP6KX, IPX7, IPX8, IPX9, IPX9K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MIMO

Product name	SENCITY Rail MIMO 5-Port antenna with GNSS/LNA
Product ID.	1399.99.0157
Description	<p>Omnidirectional 2x2 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Cellular 2x2 MIMO with two separate broadband integrated antennas and Wi-Fi 2x2 MIMO with two separate antennas • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • GNSS receiver supports GPS L1, Galileo E1, BeiDou B1, GLONASS G1 constellations
Item no.	85137717

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	617 – 960 MHz	1350 – 2700 MHz	2700 – 3300 MHz	3300 – 4900 MHz
VSWR	1.7	1.7	1.7	1.8
Gain (dBi)	5 dBi	7 dBi	5.5 dBi	5.5 dBi
Port Isolation (dB)	15	25	45	35
	Band 5	Band 6	Band 7	Band 8
Band name	Cellular / Wi-Fi	Wi-Fi	Wi-Fi	GNSS
Frequency	4900 – 7125 MHz	2400 – 2500 MHz	4900 – 7125 MHz	1559 – 1610 MHz
VSWR	1.8	1.7	2.3	1.8
Gain	7 dBi	6 dBi	6.5 dBi	
Port Isolation (dB)	40	15	15	

Electrical data	
Impedance	50 Ohms
Number of Ports	5
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	81.6 × 102.5 × 352.5 mm
Weight	2.3 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IP6KX, IPX7, IPX8, IPX9, IPX9K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail MIMO

Product name	SENCITY Rail MIMO 5-Port antenna with Dualband GNSS/LNA
Product ID.	1399.99.0174
Description	<p>Omnidirectional 2×2 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Cellular 2×2 MIMO with two separate broadband integrated antennas and Wi-Fi 2×2 MIMO with two separate antennas • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Includes dualband GNSS antenna & integrated LNA covering GPS L1+L2+L5/Galileo E1+E5a+E5b/BeiDou B1+B2+B3/GLONASS G1+G2
Item no.	85208306

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	617 – 960 MHz	1350 – 2700 MHz	2700 – 3300 MHz	3300 – 4900 MHz
VSWR	1.7	1.7	1.7	1.8
Gain (dBi)	5 dBi	7 dBi	5.5 dBi	5.5 dBi
Port Isolation (dB)	15	25	45	35
	Band 5	Band 6	Band 7	Band 8
Band name	Cellular / Wi-Fi	Wi-Fi	Wi-Fi	GNSS
Frequency	4900 – 7125 MHz	2400 – 2500 MHz	4900 – 7125 MHz	1164 – 1279 MHz 1559 – 1610 MHz
VSWR	1.8	1.7	2.3	1.5
Gain	7 dBi	6 dBi	6.5 dBi	
Port Isolation (dB)	40	15	15	
Port Isolation (dB)				

Electrical data	
Impedance	50 Ohms
Number of Ports	5
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	81.6 × 102.5 × 352.5 mm
Weight	2.3 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IP6KX, IPX7, IPX8, IPX9, IPX9K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail Low Profile

Product name	SENCITY Rail MIMO 2x2 Low Profile antenna
Product ID.	1399.17.0145
Description	<p>Omnidirectional 2x2 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems with tight tunnel gauges</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Extremely low profile (40mm) • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Dedicated grounding contact (sold separately)
Item no.	85106683

Technical Data	Band 1	Band 2	Band 3
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	1350 -1450 MHz	1450 – 2700 MHz
VSWR	1.8	1.9	1.6
Gain (dBi)	5 dBi	7 dBi	6.5 dBi
Port Isolation (dB)	15	16	20
	Band 4	Band 5	Band 6
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	3300 – 4200 MHz	4900 – 5150 MHz	5150 – 7125 MHz
VSWR	1.8	1.8	1.8
Gain	7.5 dBi	9 dBi	8 dBi
Port Isolation (dB)	25	25	25

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi)

Mechanical data	
Dimensions (height × width × depth)	40 × 108 × 474 mm
Weight	1.3 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail Low Profile

Product name	SENCITY Rail MIMO 2x2 Low Profile antenna with GPS
Product ID.	1399.99.0072
Description	<p>Omnidirectional 2x2 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems with tight tunnel gauges</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Extremely low profile (40mm) • Rugged design, meets EN 50155 Railway Standard and Fire retardant according to EN 45545-2 and NFPA-130 • Includes embedded passive GPS antenna (requires separate LNA such as 86010142) • Dedicated grounding contact (sold separately)
Item no.	85106685

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	1350 -1450 MHz	1450 – 2700 MHz	3300 – 4200 MHz
VSWR	1.8	1.9	1.6	1.8
Gain (dBi)	5 dBi	7 dBi	6.5 dBi	7.5 dBi
Port Isolation (dB)	15	16	20	25
	Band 5	Band 6	Band 7	
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	GPS	
Frequency	4900 – 5150 MHz	5150 – 7125 MHz	1574.4 – 1576.4	
VSWR	1.8	1.8	1.8	
Gain	9 dBi	8 dBi		
Port Isolation (dB)	25	25		

Electrical data	
Impedance	50 Ohms
Number of Ports	3
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	40 × 108 × 474 mm
Weight	1.3 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail Low Profile

Product name	SENCITY Rail MIMO 2x2 Low Profile antenna with GNSS/LNA
Product ID.	1399.99.0077
Description	<p>Omnidirectional 2x2 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems with tight tunnel gauges</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Extremely low profile (40mm) • Rugged design, meets EN 50155 Railway Standard and Fire retardant according to EN 45545-2 and NFPA-130 • Includes embedded GNSS antenna with integrated LNA supporting GPS L1, Galileo E1, BeiDou B1 and GLONASS G1 • Dedicated grounding contact (sold separately)
Item no.	85106684

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	1350 -1450 MHz	1450 – 2700 MHz	3300 – 4200 MHz
VSWR	1.8	1.9	1.6	1.8
Gain (dBi)	5 dBi	7 dBi	6.5 dBi	7.5 dBi
Port Isolation (dB)	15	16	20	25
	Band 5	Band 6	Band 7	
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	GNSS	
Frequency	4900 – 5150 MHz	5150 – 7125 MHz	1559 – 1610	
VSWR	1.8	1.8	1.5	
Gain	9 dBi	8 dBi		
Port Isolation (dB)	25	25		

Electrical data	
Impedance	50 Ohms
Number of Ports	3
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	40 × 108 × 474 mm
Weight	1.3 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail Low Profile

Product name	SENCITY Rail MIMO 2x2 Low Profile antenna with Dualband GNSS/LNA
Product ID.	1399.99.0082
Description	<p>Omnidirectional 2x2 MIMO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems with tight tunnel gauges</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Extremely low profile (40mm) • Rugged design, meets EN 50155 Railway Standard and Fire retardant according to EN 45545-2 and NFPA-130 • Includes dualband GNSS antenna & integrated LNA covering GPS L1+L2+L5/Galileo E1+E5a+E5b/BeiDou B1+B2+B3/GLONASS G1+G2 • Dedicated grounding contact (sold separately)
Item no.	85150817

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	1350 -1450 MHz	1450 – 2700 MHz	3300 – 4200 MHz
VSWR	1.8	1.9	1.6	1.8
Gain (dBi)	5 dBi	7 dBi	6.5 dBi	7.5 dBi
Port Isolation (dB)	15	16	20	25
	Band 5	Band 6	Band 7	Band 8
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	GNSS	GNSS
Frequency	4900 – 5150 MHz	5150 – 7125 MHz	1164 – 1279	1555 – 1610
VSWR	1.8	1.8	1.5	1.5
Gain	9 dBi	8 dBi		
Port Isolation (dB)	25	25		

Electrical data	
Impedance	50 Ohms
Number of Ports	3
Composite power max.	40 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	40 × 108 × 474 mm
Weight	1.3 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail Low Profile

Product name	SENCITY Rail Low Profile antenna
Product ID.	1399.17.0126
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems with tight tunnel gauges</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Extremely low profile (40mm) • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Dedicated grounding contact (sold separately)
Item no.	85192297

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	1350 -2700 MHz	2700 – 4200 MHz	4900 – 7125 MHz
VSWR	2.0	2.0	2.0	2.0
Gain (dBi)	4 dBi	5 dBi	8 dBi	8 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Composite power max.	40 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi)

Mechanical data	
Dimensions (height × width × depth)	40 × 100 × 240 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail Low Profile

Product name	SENCITY Rail Low Profile antenna
Product ID.	1399.99.0038
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems with tight tunnel gauges</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 6E bands • Extremely low profile (40mm) • Rugged design, meets EN 50155 Railway Standard and Fire retardant according to EN 45545-2 and NFPA-130 • Includes embedded GNSS antenna with integrated LNA supporting GPS L1, Galileo E1, BeiDou B1 and GLONASS G1 • Dedicated grounding contact (sold separately)
Item no.	85192298

Technical Data	Band 1	Band 2	Band 3
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	1350 -2700 MHz	2700 – 4200 MHz
VSWR	2.0	2.0	2.0
Gain (dBi)	4 dBi	5 dBi	8 dBi
	Band 4	Band 5	
Band name	Cellular / Wi-Fi	GNSS	
Frequency	4900 – 7125 MHz	1559 – 1610 MHz	
VSWR	2.0	1.5	
Gain (dBi)	8 dBi		

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	40 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	40 × 100 × 240 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail Low Profile

Product name	SENCITY Rail Low Profile antenna with Dualband GNSS/LNA
Product ID.	1399.99.0056
Description	<p>Dedicated GNSS railway rooftop antenna for all types of trains. Meets the special railway requirements. Designed to be used as a dedicated Geolocation / Timing onboard antenna in deployment for Rail communication systems with tight tunnel gauges</p> <ul style="list-style-type: none"> • Railway rooftop antenna for GNSS services • Extremely low profile (40mm) • Rugged design, meets EN 50155 Railway Standard and Fire retardant according to EN 45545-2 and NFPA-130 • Includes dualband GNSS antenna & integrated LNA covering GPS L1+L2+L5/Galileo E1+E5a+E5b/BeiDou B1+B2+B3/GLONASS G1+G2 • Dedicated grounding contact (sold separately)
Item no.	85197560

Technical Data	Band 1	Band 2
Band name	GNSS	GNSS
Frequency	1164 – 1279 MHz	1555 -1610 MHz
VSWR	1.5	1.5

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Polarisation	Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	40 × 100 × 240 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX8, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA 130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail Low Profile

Product name	SENCITY Rail Low Profile antenna
Product ID.	1399.17.0125
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems with tight tunnel gauges</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G cellular and Wi-Fi 4/Wi-Fi 6 bands • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 • Multiple Antenna installations support Cellular and Wi-Fi MIMO • Extremely low profile (40mm)
Item no.	84080683

Technical Data	Band 1	Band 2	Band 3
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	790 – 806 MHz	806 – 870 MHz	870 – 960 MHz
VSWR	2.2	1.9	1.6
Gain (dBi)	5 dBi	5 dBi	5 dBi
	Band 4	Band 5	
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	
Frequency	1350 – 2700 MHz	4900 – 6425 MHz	
VSWR	2.0	2.1	
Gain (dBi)	5 dBi	8 dBi	

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Composite power max.	300 – 550 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi)

Mechanical data	
Dimensions (height × width × depth)	40 × 100 × 145 mm
Weight	0.488 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP69K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

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

For more detailed information, please visit our website "Products" section.

SENCITY Rail Low Profile

Product name	SENCITY Rail Low Profile antenna with GPS
Product ID.	1399.99.0032
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems with tight tunnel gauges</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G cellular and Wi-Fi 4/Wi-Fi 6 bands • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 • Includes embedded passive GPS antenna (requires separate LNA such as 86010142) • Extremely low profile (40mm)
Item no.	84076252

Technical Data	Band 1	Band 2	Band 3
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	790 – 806 MHz	806 – 870 MHz	870 – 960 MHz
VSWR	2.2	1.9	1.6
Gain (dBi)	5 dBi	5 dBi	5 dBi
	Band 4	Band 5	Band 6
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	GPS
Frequency	1350 – 2700 MHz	4900 – 6425 MHz	1574.397 – 1576.443
VSWR	2.0	2.1	1.5
Gain (dBi)	5 dBi	8 dBi	

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	40 × 100 × 145 mm
Weight	0.527 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP69K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

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

For more detailed information, please visit our website "Products" section.

SENCITY Rail Low Profile

Product name	SENCITY Rail Low Profile antenna with GNSS / LNA
Product ID.	1399.99.0037
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems with tight tunnel gauges</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G cellular and Wi-Fi 4/Wi-Fi 6 bands • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 • Includes embedded GNSS antenna with integrated LNA supporting GPS L1, Galileo E1, BeiDou B1 and GLONASS G1 • Extremely low profile (40mm)
Item no.	84080682

Technical Data	Band 1	Band 2	Band 3
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	790 – 806 MHz	806 – 870 MHz	870 – 960 MHz
VSWR	2.2	1.9	1.5
Gain (dBi)	5 dBi	5 dBi	5 dBi
	Band 4	Band 5	Band 6
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	GNSS
Frequency	1350 – 2700 MHz	4900 – 6425 MHz	1559 – 1610
VSWR	2.0	2.1	1.8
Gain (dBi)	5 dBi	8 dBi	

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	40 × 100 × 145 mm
Weight	0.535 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP69K
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, EN50121-3-2

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

For more detailed information, please visit our website "Products" section.



Product name	SENCITY Rail antenna with GNSS / LNA
Product ID.	1399.99.0026
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for Tetra, DVB-T, 2G/3G/4G/5G cellular and Wi-Fi 4/Wi-Fi 6 bands • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 • Includes embedded GNSS antenna with integrated LNA supporting GPS L1, Galileo E1, BeiDou B1 and GLONASS G1 • Dedicated grounding contact and Cable conduit support (sold separately)
Item no.	84069929

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	TETRA	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	380 – 694 MHz	694 – 960 MHz	1350 – 1525 MHz	1710 – 2700 MHz
VSWR	1.8	1.8	1.5	1.5
Gain (dBi)	3 dBi	4 dBi	7.5 dBi	7.5 dBi
	Band 5	Band 6	Band 7	Band 8
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	GNSS
Frequency	2700 – 3300 MHz	3300 – 4900 MHz	4900 – 6425 MHz	1559 – 1610 MHz
VSWR	1.5	1.7	1.5	1.8
Gain	6.5 dBi	7 dBi	8 dBi	

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	154 × 100 × 256 mm
Weight	1.6 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX7, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

Railway
SENCITY Rail



Product name	SENCITY Rail antenna
Product ID.	1399.17.0094
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for Tetra, DVB-T, 2G/3G/4G/5G cellular and Wi-Fi 4/Wi-Fi 6 bands • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Multiple Antenna installations support Cellular and Wi-Fi MIMO • Dedicated grounding contact and Cable conduit support (sold separately)
Item no.	84029691

Technical Data	Band 1	Band 2	Band 3
Band name	TETRA	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	380 – 694 MHz	694 – 960 MHz	1350 – 2700 MHz
VSWR	1.8	1.8	1.5
Gain (dBi)	3 dBi	4 dBi	7.5 dBi
	Band 4	Band 5	Band 6
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
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

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Composite power max.	300 – 800 Watts (see datasheet for specific bands)
Polarisation	Vertical (TETRA/cellular / Wi-Fi)

Mechanical data	
Dimensions (height × width × depth)	154 × 100 × 256 mm
Weight	1.6 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX7, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA-130

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail

Product name	SENCITY Rail antenna
Product ID.	1399.99.0120
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for Tetra, DVB-T, 2G/3G/4G/5G cellular and Wi-Fi 4/Wi-Fi 6 bands • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Embedded GNSS antenna with integrated LNA supports GPS L1, Galileo E1, BeiDou B1 and GLONASS G1 • Dedicated grounding contact and Cable conduit support (sold separately)
Item no.	84071811

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 790 MHz	790 – 960 MHz	1350 – 1525 MHz	1710 – 2700 MHz
VSWR	2.0	1.5	2.2	1.5
Gain (dBi)	5 dBi	5 dBi	6 dBi	6 dBi
	Band 5	Band 6	Band 7	Band 8
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	GNSS
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	

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	90 × 100 × 256 mm
Weight	1.0 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX7, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA-130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

Railway
SENCITY Rail



Product name	SENCITY Rail antenna
Product ID.	1399.17.0122
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for Tetra, DVB-T, 2G/3G/4G/5G cellular and Wi-Fi 4/Wi-Fi 6 bands • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Multiple Antenna installations support Cellular and Wi-Fi MIMO • Dedicated grounding contact and Cable conduit support (sold separately)
Item no.	84071876

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 790 MHz	790 – 960 MHz	1350 – 1710 MHz	1710 – 2700 MHz
VSWR	2.0	1.5	2.2	1.5
Gain (dBi)	5 dBi	5 dBi	6 dBi	6 dBi
	Band 5	Band 6	Band 7	
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	
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	

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Composite power max.	300 – 800 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi)

Mechanical data	
Dimensions (height × width × depth)	90 × 100 × 256 mm
Weight	0.8 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX7, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA-130

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.



Product name	SENCITY Rail antenna with GNSS /LNA
Product ID.	87010012
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 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 • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84459559

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	960 – 2200 MHz	2200 – 2700 MHz	2700 – 3300 MHz
VSWR	1.5	2.0	2.0	2.0
Gain (dBi)	5 dBi	6 dBi	7.5 dBi	7 dBi
	Band 5	Band 6	Band 7	
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	GNSS	
Frequency	3300 – 4900 MHz	4900 – 6425 MHz	1559 – 1620 MHz	
VSWR	1.5	1.7	2.0	
Gain (dBi)	6.5 dBi	7.5 dBi		

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	93 × 146 × 86 mm
Weight	0.63 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.



Product name	SENCITY Rail antenna with GNSS /LNA
Product ID.	87010022
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 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 • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84459566

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	960 – 2200 MHz	2200 – 2700 MHz	2700 – 3300 MHz
VSWR	1.5	2.0	2.0	2.0
Gain (dBi)	5 dBi	6 dBi	7.5 dBi	7 dBi
	Band 5	Band 6	Band 7	
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	GNSS	
Frequency	3300 – 4900 MHz	4900 – 6425 MHz	1559 – 1620 MHz	
VSWR	1.5	1.7	2.0	
Gain (dBi)	6.5 dBi	7.5 dBi		

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	93 × 146 × 86 mm
Weight	0.63 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.



Product name	SENCITY Rail antenna with GNSS
Product ID.	87010032
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 2G/3G/4G/5G cellular and Wi-Fi 4/Wi-Fi 6 bands • Embedded GNSS antenna supports GPS L1, Galileo E1, BeiDou B1 and GLONASS G1 (requires separate LNA such as 86010142) • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84459531

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	960 – 2200 MHz	2200 – 2700 MHz	2700 – 3300 MHz
VSWR	1.5	2.0	2.0	2.0
Gain (dBi)	5 dBi	6 dBi	7.5 dBi	7 dBi
	Band 5	Band 6	Band 7	
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	GNSS	
Frequency	3300 – 4900 MHz	4900 – 6425 MHz	1559 – 1620 MHz	
VSWR	1.5	1.7	2.0	
Gain (dBi)	6.5 dBi	7.5 dBi		

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	93 × 146 × 86 mm
Weight	0.63 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

Railway
SENCITY Rail



Product name	SENCITY Rail antenna with GPS
Product ID.	87010023
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for sub-2700 MHz 2G/3G/4G/5G cellular and Wi-Fi 1/ Wi-Fi 3 bands • Embedded GPS antenna (requires separate LNA such as 86010142) • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84459289

Technical Data	Band 1	Band 2	Band 3
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	960 – 1710 MHz	1710 – 2200 MHz
VSWR	1.5	2.0	2.0
Gain (dBi)	4.5 dBi	5.5 dBi	7.5 dBi
	Band 4	Band 5	
Band name	Cellular / Wi-Fi	GPS	
Frequency	2200 – 2700 MHz	1574.4 – 1576.4 MHz	
VSWR	2.0	2.0	
Gain (dBi)	7.5 dBi	8 dBi	

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	81 × 145 × 85 mm
Weight	0.45 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail

Product name	SENCITY Rail antenna
Product ID.	87010007
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for sub-2700 MHz 2G/3G/4G cellular and Wi-Fi 1/ Wi-Fi 3 bands (790 to 2700 MHz) • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84459410

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	694 – 960 MHz	960 – 1710 MHz	1710 – 2200 MHz	2200 – 2700 MHz
VSWR	2.2	1.5	1.5	1.8
Gain (dBi)	4.5 dBi	5.5 dBi	7.5 dBi	7 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi)

Mechanical data	
Dimensions (height × width × depth)	81 × 145 × 85 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

Railway
SENCITY Rail



Product name	SENCITY Rail antenna with GPS
Product ID.	87010011
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 1800/1900/UMTS/LTE/Wi-Fi 1/Wi-Fi 3 bands • Embedded GPS antenna (requires separate LNA such as 86010142) • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460318

Technical Data	Band 1	Band 2	Band 3
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	1710 – 1920 MHz	1920 – 2600 MHz	2600 – 3200 MHz
VSWR	1.7	1.5	1.6
Gain (dBi)	7 dBi	6.5 dBi	5.5 dBi
	Band 4	Band 5	
Band name	Cellular / Wi-Fi	GPS	
Frequency	3200 – 3800 MHz	1174.4 – 1576.4 MHz	
VSWR	1.5	2.0	
Gain (dBi)	7 dBi		

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	81 × 145 × 85 mm
Weight	0.45 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail

Product name	SENCITY Rail antenna
Product ID.	87010010
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Rail communication train-to-ground systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 1800/1900/UMTS/LTE/Wi-Fi 1/Wi-Fi 3 bands • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460316

Technical Data	Band 1	Band 2	Band 3	Band 4
Band name	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi	Cellular / Wi-Fi
Frequency	1710 – 1920 MHz	1920 – 2600 MHz	2600 – 3200 MHz	3200 – 3800 MHz
VSWR	1.7	1.5	1.6	1.5
Gain (dBi)	7 dBi	6.5 dBi	5.5 dBi	7 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (cellular / Wi-Fi), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	81 × 145 × 85 mm
Weight	0.45 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

Railway
SENCITY Rail



Product name	SENCITY Rail antenna with GPS
Product ID.	87010006
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for GSM-R and or TETRA systems</p> <ul style="list-style-type: none"> • Railway rooftop multiband antenna for 430 – 470 MHz and 870 – 960 MHz • Embedded GPS antenna (requires separate LNA such as 86010142) • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460309

Technical Data	Band 1	Band 2	Band 3
Band name	TETRA	GSM-R	GPS
Frequency	430 – 470 MHz	870 – 960 MHz	1574.4 – 1576.4 MHz
VSWR	1.5	1.5	2.0
Gain (dBi)	3.5 dBi	4.5 dBi	6.5 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (TETRA / GSM-R), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	150 × 145 × 85 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail

Product name	SENCITY Rail antenna
Product ID.	87010009
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for GSM-R and or TETRA systems</p> <ul style="list-style-type: none"> • Railway rooftop multiband antenna for 430 – 470 MHz and 870 – 960 MHz • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460314

Technical Data	Band 1	Band 2
Band name	TETRA	GSM-R
Frequency	430 – 470 MHz	870 – 960 MHz
VSWR	1.5	1.5
Gain (dBi)	3.5 dBi	4.5 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (TETRA / GSM-R)

Mechanical data	
Dimensions (height × width × depth)	150 × 145 × 85 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

Railway
SENCITY Rail



Product name	SENCITY Rail antenna with GPS
Product ID.	87010005
Description	<p>Omnidirectional TETRA railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of TETRA systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 380 to 430 MHz • Embedded GPS antenna (requires separate LNA such as 86010142) • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460307

Technical Data	Band 1	Band 2
Band name	TETRA	GPS
Frequency	380 – 430 MHz	1574.4 – 1576.4 MHz
VSWR	1.5	2.0
Gain (dBi)	4 dBi	

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (TETRA)

Mechanical data	
Dimensions (height × width × depth)	150 × 145 × 85 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail

Product name	SENCITY Rail antenna
Product ID.	87010008
Description	<p>Omnidirectional TETRA railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of TETRA systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 380 to 430 MHz • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460312

Technical Data	Band 1
Band name	TETRA
Frequency	380 – 430 MHz
VSWR	1.5
Gain (dBi)	4 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (TETRA)

Mechanical data	
Dimensions (height × width × depth)	150 × 145 × 85 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.



Product name	SENCITY Rail antenna
Product ID.	741009
Description	<p>Omnidirectional GSM-R railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of GSM-R systems</p> <ul style="list-style-type: none"> • Railway rooftop antenna for GSM-R (900 MHz) • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460303

Technical Data	Band 1
Band name	GSM-R
Frequency	870 – 960 MHz
VSWR	1.5
Gain (dBi)	4.5 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (GSM-R)

Mechanical data	
Dimensions (height × width × depth)	95 × 145 × 82 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail

Product name	SENCITY Rail antenna
Product ID.	727313
Description	<p>Omnidirectional FM-broadcast receiving railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna for railway vehicles with an FM radio system</p> <ul style="list-style-type: none"> • Supports the frequency range of 87.5 – 108 MHz as a receive-only antenna • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460301

Technical Data	Band 1
Band name	4M Band
Frequency	87.5 – 108 MHz

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Polarisation	Vertical (4M Band)

Mechanical data	
Dimensions (height × width × depth)	355 × 145 × 80 mm
Weight	0.9 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.



Product name	SENCITY Rail antenna
Product ID.	733707
Description	<p>Omnidirectional 2M band railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna for railway vehicles which require an antenna covering the 2M band</p> <ul style="list-style-type: none"> • Supports the frequency range of 146 – 172 MHz • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84465797

Technical Data	Band 1
Band name	2M Band
Frequency	146 – 172 MHz
VSWR	2.0

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Polarisation	Vertical (2M Band)

Mechanical data	
Dimensions (height × width × depth)	355 × 145 × 80 mm
Weight	0.9 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail

Product name	SENCITY Rail antenna
Product ID.	K702121
Description	<p>Omnidirectional TETRA railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of TETRA systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 450 to 470 MHz • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460329

Technical Data	Band 1
Band name	TETRA
Frequency	450 – 470 MHz
VSWR	1.6
Gain	3 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Polarisation	Vertical (TETRA)

Mechanical data	
Dimensions (height × width × depth)	355 × 145 × 80 mm
Weight	0.8 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.



Product name	SENCITY Rail antenna
Product ID.	K702021
Description	<p>Omnidirectional TETRA railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment of TETRA systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for 410 to 470 MHz • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460324

Technical Data	Band 1
Band name	TETRA
Frequency	410 – 470 MHz
VSWR	1.5
Gain	4 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Polarisation	Vertical (TETRA)

Mechanical data	
Dimensions (height × width × depth)	142 × 145 × 80 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail

Product name	SENCITY Rail antenna
Product ID.	K702061
Description	<p>Omnidirectional multiband railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for GSM-R and or TETRA systems.</p> <ul style="list-style-type: none"> • Railway rooftop multiband antenna for 450 – 470 MHz and 790 – 960 MHz • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	84460326

Technical Data	Band 1	Band 2
Band name	TETRA	GSM-R
Frequency	450 – 470 MHz	790 – 960 MHz
VSWR	1.4	1.5
Gain	4 dBi	3.5 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Polarisation	Vertical (TETRA/GSM-R)

Mechanical data	
Dimensions (height × width × depth)	142 × 145 × 80 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

Railway
SENCITY Rail



Product name	SENCITY Rail antenna
Product ID.	741557
Description	<p>Omnidirectional multiband railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for GSM-R and or TETRA systems.</p> <ul style="list-style-type: none"> • Railway rooftop multiband antenna for 380 – 400 MHz and 790 – 960 MHz • Rugged design, meets EN 50155 railway standard • Fire retardant acc. to EN 45545-2 • Contains a heavy duty fibreglass radome
Item no.	85126129

Technical Data	Band 1	Band 2
Band name	TETRA	GSM-R
Frequency	380 – 400 MHz	790 – 960 MHz
VSWR	1.6	1.5
Gain	3.5 dBi	4 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Polarisation	Vertical (TETRA/GSM-R)

Mechanical data	
Dimensions (height × width × depth)	142 × 145 × 80 mm
Weight	0.5 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX6
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	Fiberglass
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail PTC

Product name	SENCITY Rail PTC antenna
Product ID.	1302.99.0026
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Positive Train Control systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for Positive train control (220 MHz) • Embedded GNSS antenna with integrated LNA supports GPS L1, Galileo E1, BeiDou B1 and GLONASS G1 • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Dedicated grounding contact and Cable conduit support (sold separately)
Item no.	85142011

Technical Data	Band 1	Band 2
Band name	PTC	GNSS
Frequency	219.98 – 220.02 MHz	1559 – 1620 MHz
VSWR	1.5	1.8
Gain (dBi)	1.72 dBi	

Electrical data	
Impedance	50 Ohms
Number of Ports	2
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (PTC), Circular Right (GNSS)

Mechanical data	
Dimensions (height × width × depth)	154 × 100 × 256 mm
Weight	1.6 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX7, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA-130, EN50121-3-2

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

SENCITY Rail PTC

Product name	SENCITY Rail PTC antenna
Product ID.	1302.17.0094
Description	<p>Omnidirectional SISO railway rooftop antenna for all types of trains. Meets the special requirements of railway. Designed to be used as the onboard antenna in deployment for Positive Train Control systems.</p> <ul style="list-style-type: none"> • Railway rooftop antenna for Positive train control (220 MHz) • Rugged design, meets EN 50155 Railway Standard • Fire retardant according to EN 45545-2 and NFPA-130 • Dedicated grounding contact and Cable conduit support (sold separately)
Item no.	85142012

Technical Data	Band 1
Band name	PTC
Frequency	219.98 – 220.02 MHz
VSWR	1.5
Gain (dBi)	1.72 dBi

Electrical data	
Impedance	50 Ohms
Number of Ports	1
Composite power max.	80 Watts (see datasheet for specific bands)
Polarisation	Vertical (PTC)

Mechanical data	
Dimensions (height × width × depth)	154 × 100 × 256 mm
Weight	1.6 kg

Environmental data	
Environmental conditions	outdoor
IP rating	IP6X, IPX7, IPX9
RoHS 2011/65/EU	compliant
Certifications	EN 50155, EN45545, NFPA-130

Material data	
Radome colour	RAL 7043 (dark grey)
Radome material	PC (Polycarbonate)
Back plate / base plate material	Aluminum

For more detailed information, please visit our website "Products" section.

HUBER+SUHNER AG
Wireless connectivity
Degersheimerstrasse 14
9100 Herisau
Switzerland
Phone +41 71 353 41 11
hubersuhner.com

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HUBER+SUHNER is certified to ISO 9001, ISO 14001, ISO 45001, EN/AS 9100, IATF 16949 and ISO/TS 22163-IRIS.

Waiver

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