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Huber+Suhner 3G-4G Sencity Rail Multi 5-Port Antenna, 2x2 MIMO + GNSS

SKU: ANT-HS-00004

MPN: 1399.99.0147

Description

The Huber+Suhner Sencity Rail Multi 5-Port Antenna (SKU: ANT-HS-00004) is a robust solution for rail and transportation applications, offering 2x2 MIMO and GNSS capabilities. Designed with a fin/stud/combo format, it features five RF ports to support versatile communication needs. Constructed from ASA plastic and aluminium, the antenna is engineered to withstand extreme conditions, with an IP69K rating and an operational temperature range of -55 °C to 85 °C.

The antenna supports a comprehensive frequency range, enabling seamless connectivity for 3G, 4G, and Wi-Fi networks. It includes two cellular/Wi-Fi elements covering 617 MHz to 2700 MHz, with vertical polarisation and peak gains of up to 7.0 dBi. Additionally, two Wi-Fi elements extend coverage from 2700 MHz to 4900 MHz, ensuring high performance with peak gains of 5.5 dBi. The integrated GNSS element enhances navigation precision with right-hand circular polarisation and an active...

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Huber+Suhner

The global Swiss company HUBER+SUHNER develops and manufactures components and system solutions for electrical and optical transportation of data and energy. The company serves customers in the Communication, Transportation and Industrial markets with cables, connectors, cable systems, antennas and other passive components relying on its expertise in radio frequency, fiber optics and low frequency ...

RF Specification

Cell/Wi-Fi 1

Start Frequency:	617 MHz	Polarisation:	Vertical (V)
Stop Frequency:	960 MHz	Input Impedance:	50
Max. Input Power:	80 W		

RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	N Female	Straight	RG-142	0.24 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	VSWR	Inter-Port Iso.
617 MHz	960 MHz	5 dBi	< 1.7:1	> 15 dB

Cell/Wi-Fi 2

Start Frequency:	1350 MHz	Polarisation:	Vertical (V)
Stop Frequency:	2700 MHz	Input Impedance:	50
Max. Input Power:	80 W		

RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	N Female	Straight	RG-142	0.12 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	VSWR	Inter-Port Iso.
1350 MHz	2700 MHz	7 dBi	< 1.7:1	> 25 dB

Wi-Fi 1

Start Frequency:	2700 MHz	Polarisation:	Vertical (V)
Stop Frequency:	3300 MHz	Input Impedance:	50
Max. Input Power:	80 W		

RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	N Female	Straight	RG-316	0.36 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	VSWR	Inter-Port Iso.
2700 MHz	3300 MHz	5.5 dBi	< 1.7:1	> 25 dB

Wi-Fi 2

Start Frequency:	3300 MHz	Polarisation:	Vertical (V)
Stop Frequency:	4900 MHz	Input Impedance:	50
Max. Input Power:	80 W		

RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	N Female	Straight	RG-316	0.3 mm

Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	VSWR	Inter-Port Iso.
3300 MHz	4900 MHz	5.5 dBi	< 1.8:1	> 45 dB

GNSS

Start Frequency:	1559 MHz	Input Impedance:	50
Stop Frequency:	1610 MHz	Polarisation:	Right Hand Circular (RHCP)

Low Noise Amplifier (LNA)

LNA Gain:	30 dBic	Min. Operating Voltage:	3 V
Noise Figure:	≤ 1.6 dB	Max. Operating Voltage:	5 V
Power Consumption:	< 20 mW		

RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	TNC Male	Straight	RG-316	0.17 mm

Physical Specification

Subtype:	Fin / Stud / Combo	Dimensions:	81.6 x 102.5 x 352.5
Input Ports:	5	Ingress Protection:	IP69K
MIMO:	2x2 MIMO	Materials:	ASA Plastic, Aluminium
Min. Operating Temperature:	-55 °C	Weight:	2.3 kg
Max. Operating Temperature:	85 °C	Compliance/Certifications:	ISO 9001 Quality Management , RoHS
		Mechanical Compliance:	IEC 60068-2-11: Salt Mist

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