

# Huber+Suhner 3G-4G Sencity Road Antenna, 2x2 MIMO + GNSS

SKU: ANT-HS-00002  
 MPN: 1399.99.0129

## Description

The Huber+Suhner Sencity Road Antenna is a versatile solution designed for integration on heavy-duty vehicles such as buses and trucks. This multi-band antenna supports 2G, 3G, and 4G cellular networks through its 2x2 MIMO configuration, enhancing connectivity and data transmission reliability. It includes three input ports for RF connections, enabling comprehensive network coverage. The antenna offers GNSS functionality, integrating GPS and Glonass systems to provide precise location tracking.

Constructed from ASA plastic and aluminium, the antenna is durable and can withstand harsh environmental conditions, as indicated by its IP69 ingress protection rating. It operates effectively across a wide temperature range of -40°C to 85°C, ensuring performance in various climates. Each port is optimized for specific frequency bands, with Port 1 covering 698-790 MHz, Port 2 spanning 790-960 MHz, and Port 3 handling 1710-2170 MHz with right-hand...

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## RF Specification

### Ports 1-2: Cellular

|                   |                         |   |              |
|-------------------|-------------------------|---|--------------|
| Start Frequency:  | Huber+Suhner<br>698 MHz | Polarisation:   | Vertical (V) |
| Stop Frequency:   | 2690 MHz                | Input Impedance:  | 50           |
| Max. Input Power: | 80 W                    | The global Swiss company HUBER+SUHNER develops and manufactures components and system solutions for electrical and optical transportation of data and signals. 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 Connectors

| Ports | RF Interface | Body Shape | Cable Series | Length |
|-------|--------------|------------|--------------|--------|
| 1     | SMA Male     | Straight   | RG-316       | 170 mm |

## Frequency Test Data

| Start Freq. | Stop Freq. | Peak Gain | VSWR    | Inter-Port Iso. |
|-------------|------------|-----------|---------|-----------------|
| 698 MHz     | 790 MHz    | 4 dBi     | < 2.2:1 | > 12 dB         |
| 790 MHz     | 960 MHz    | 4 dBi     | < 2:1   | > 12 dB         |
| 1710 MHz    | 2170 MHz   | 6 dBi     | < 2:1   | > 15 dB         |
| 2400 MHz    | 2690 MHz   | 6 dBi     | < 2:1   | > 15 dB         |

## Port 3: GPS/Glonass

|                  |          |                  |                            |
|------------------|----------|------------------|----------------------------|
| Start Frequency: | 1574 MHz | Input Impedance: | 50                         |
| Stop Frequency:  | 1610 MHz | Polarisation:    | Right Hand Circular (RHCP) |

## Low Noise Amplifier (LNA)

|                    |          |                         |       |
|--------------------|----------|-------------------------|-------|
| LNA Gain:          | 30 dBic  | Min. Operating Voltage: | 3.5 V |
| Noise Figure:      | ≤ 2 dB   | Max. Operating Voltage: | 5 V   |
| Power Consumption: | < 150 mW |                         |       |

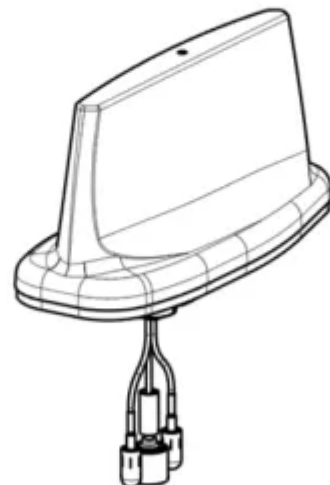
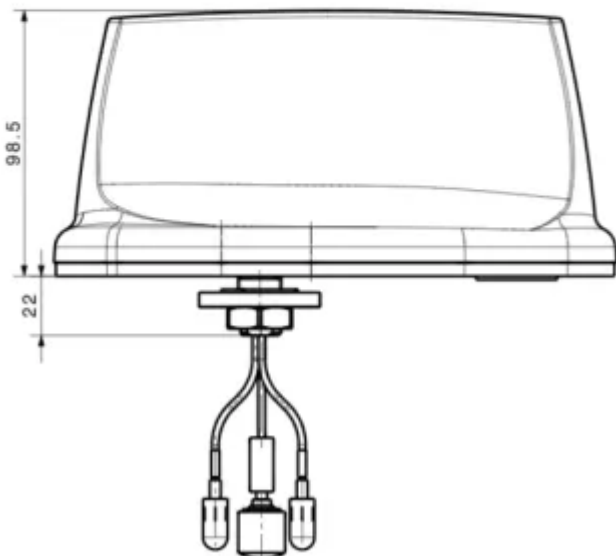
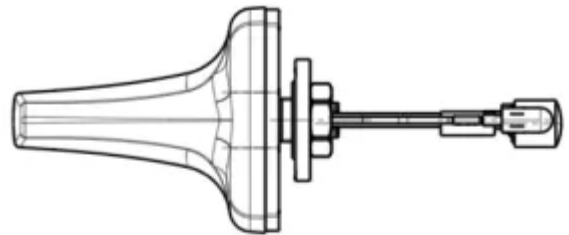
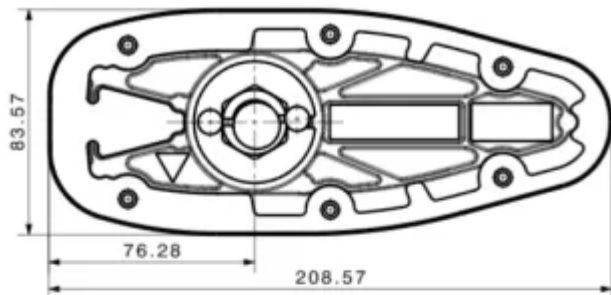
## RF Connectors

| Ports | RF Interface | Body Shape | Cable Series | Length |
|-------|--------------|------------|--------------|--------|
| 1     | TNC Male     | Straight   | RG-316       | 250 mm |

# Physical Specification

|                             |                    |                             |                         |
|-----------------------------|--------------------|-----------------------------|-------------------------|
| Subtype:                    | Fin / Stud / Combo | Dimensions:                 | 88 x 83 x 208           |
| Input Ports:                | 3                  | Ingress Protection:         | IP69                    |
| MIMO:                       | 2x2 MIMO           | Materials:                  | Aluminium, ASA Plastic  |
| Min. Operating Temperature: | -40 °C             | Mounting:                   | Stud / Bulkhead / Panel |
| Max. Operating Temperature: | 85 °C              | Weight:                     | 0.5 kg                  |
|                             |                    | Compliance/Certifications:  | CE                      |
|                             |                    | ISO 9001 Quality Management |                         |
|                             |                    | RoHS                        |                         |

## Drawing



|                               |                                      |
|-------------------------------|--------------------------------------|
| type / Typ: 1399.99.0129      |                                      |
| dimensions in millimeter [mm] | part no. / Teile Nr.: PRO-00273723 A |
| description / Beschreibung    | drawing no. / Zeichnungsnr.          |

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