



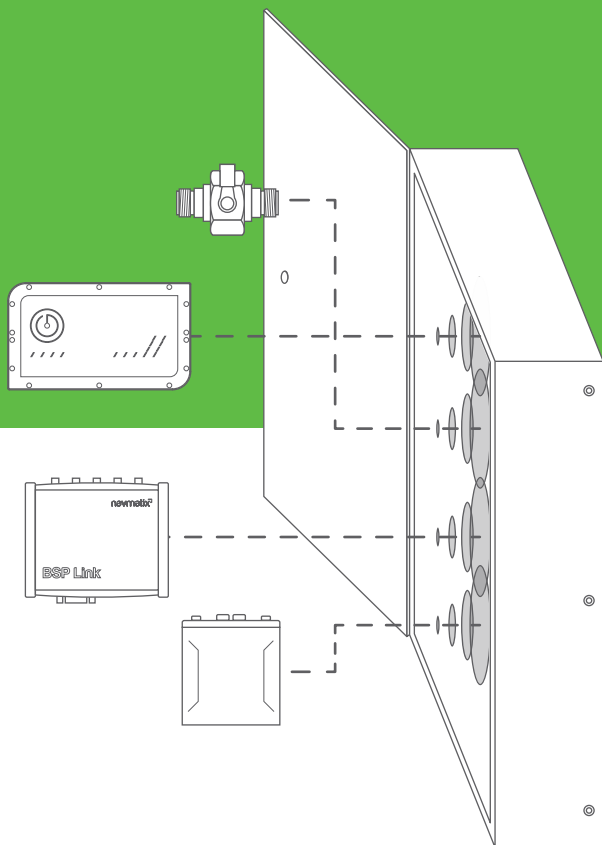
GNSS / IoT hardware



BSP BoX

Base reference station

Item number:
1111005-1000



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Description

— Cabinet

Indoor rack - 550 x 550 x 150 mm
IP20

— BSP Link

page 6 - 7

— Lightning arrester

Bandwidth of protection: 0 kHz - 3,5GHz

Test current impulse IZPR: 2,5 kA for impulse of 10/350 μ s

Connector: N/F-M

Attenuation/reflection coefficient in the working bandwidth:
better than -0.4 dB/-20 dB

Max. residual voltage on the protected output with IZRP applied:
< ± 100 Vp-p, for tZRP >250ns

— Power supply battery

AGM 12V/12Ah

Backup time (without GNSS receiver) ~ 20 hours

Operating temperature: 0° - 50° C

— Gigabit ethernet overvoltage protection

Maximum discharge current (8/20 μ s) line-line: 30 A

Maximum discharge current (8/20 μ s) line-PE: 10 kA

Response time line-line: 1 ns

Response time line-PE: 100 ns

Voltage protection level line-line: < 15 V

Voltage protection level line-PE (1kV/ μ s): < 600 V

Notice

This box is recommended for indoor solution.

The batteries need ventilation of the air.

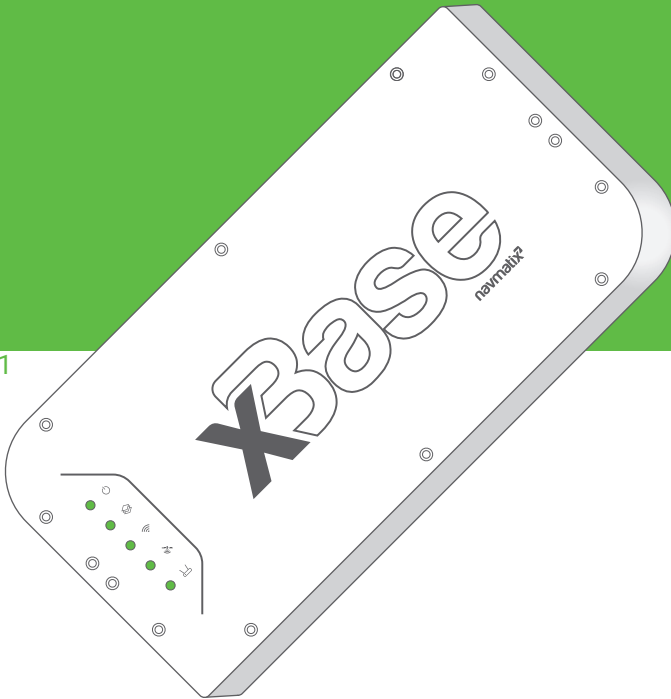
BSP Box supplied without GNSS receiver.

Integrated GNSS receiver is optional.

xBase

GNSS receiver with advanced functionality

Item number:
1101007-1001



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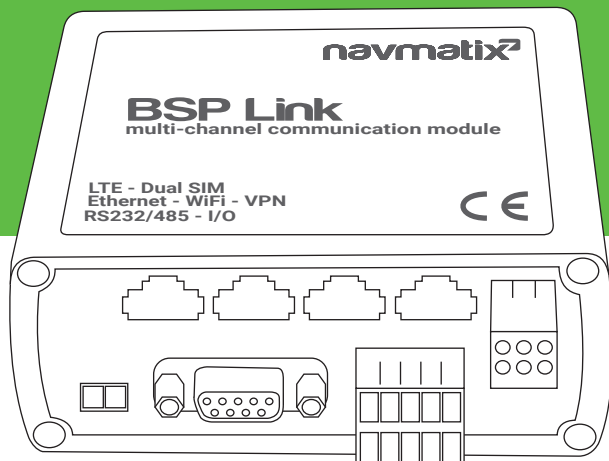
Description

- **Connectivity:**
Ethernet, LTE modem Dual SIM
- **Interface:**
RS232, RS485, CAN, USB, Digital/Analog Inputs/Outputs, Relay Outputs, PPS (Pulse Per Second)
- **Features:**
SD storage, USB storage, WiFi*, BlueTooth*, VPN, Network Load Balancing
- **Electrical:**
Input voltage: 7-28VDC; Power consumption: < 7W
- **GSM:**
LTE FDD: B1/B3/B7/B8/B20/B28A
WCDMA: B1/B8
GSM: 900 / 1800 MHz
- **GNSS:**
Channels: 226 channels with universal tracking technology
Signals tracked: GPS: L1C/A, L1C, L2C, L5
GLONASS: L1C/A L2C/A, L3;
Galileo: E1, E5a, E5b
Beidou: B1, B2
SBAS: L1, L2C
L-band: PPP
RTK accuracy: H: 5mm + 0.5ppm x baseline
V: 10mm + 0.8ppm x baseline
RTK initialisation: < 10 sec
RTK reliability: > 99%
- **Available also as IP67 rugged version**

BSP Link

Multi-channel communication module

Item number:
1101006-1001



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Description

BSP Link is an industrial grade GNSS & IoT smart hub that allows users to install a mobile base station for RTK as well as operating a local LoRaWAN™ IoT gateway for connecting a multitude of IoT devices and sensors.

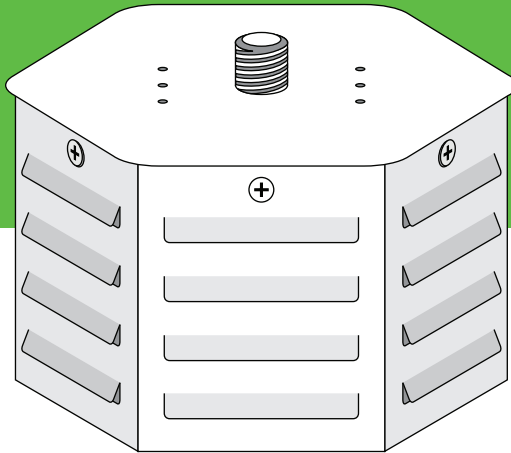
Dimensions:	248 x 145 x 65 mm
Operating temperature:	-20° to +80° C
Storage temperature:	-20° to +85° C

Notice

EMC compliance
Radio compliance
CE certificate

Adjustable head

Adjustable head for Sensor Set and GNSS antenna



Item number:
1131002-2000

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Description

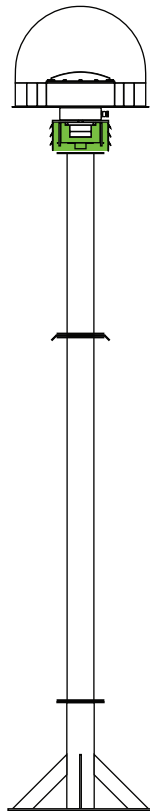
This head has 3 screws for adjusting the antenna to the right position. Adjustable head was developed for Sensor Set, but can be used without it. Sophisticated solution allows all sensors work with maximum accuracy and stay safe hidden.

Material:

Stainless steel

Weight:

0.9 kg

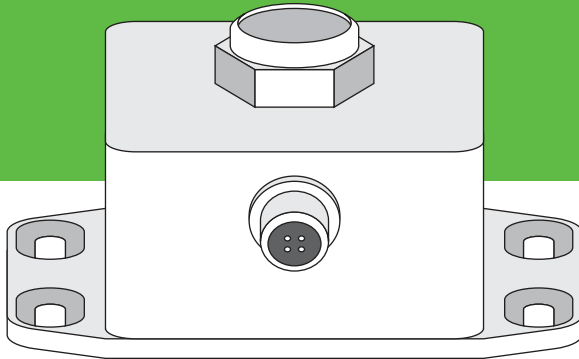


Sensor Set

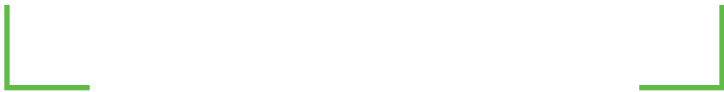
Inclinometer with environmental sensors



Item number:
1101004-2000



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Description

Set of modules designed to monitor various characteristics of GNSS antenna and its surroundings.

Parameters

Inclinometer:	max $\pm 0,05^{\circ}$ (at 20° C)
Humidity:	1,8% RH
Pressure:	± 4 mbar
Temperature:	$\pm 0,2^{\circ}$ C
Working temperature:	-40° C - $+80^{\circ}$ C
Connector:	Binder 99-0980-100-04

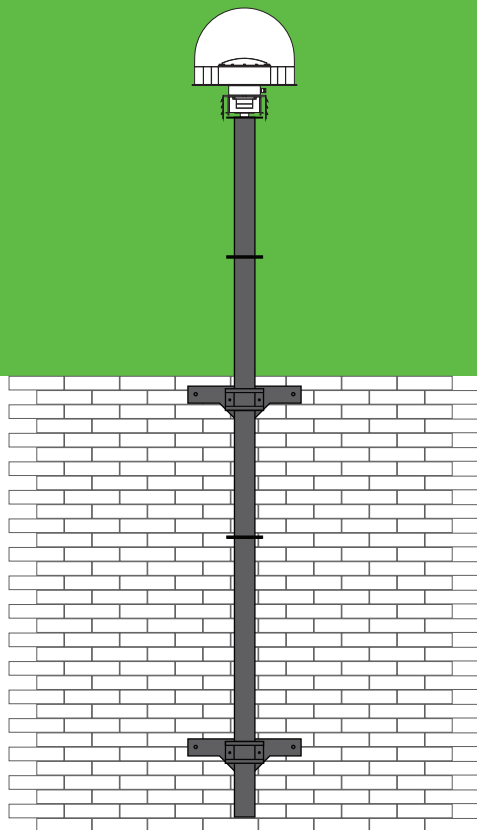
Notice

Sensor Set is designed for using with adjustable head (page 8-9) and BSP Link (page 6-7).

GNSS antenna mast - wall

Wall mounted antenna mast

Item number:
1131000-1100



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Description

This mast is designed for wall mounting of GNSS antenna.
Easy transportation, installation and fixing.
Ready for adjustable head and Sensor Set (page 8 - 11).
Antenna mast doesn't include the head.

Parameters

Material:

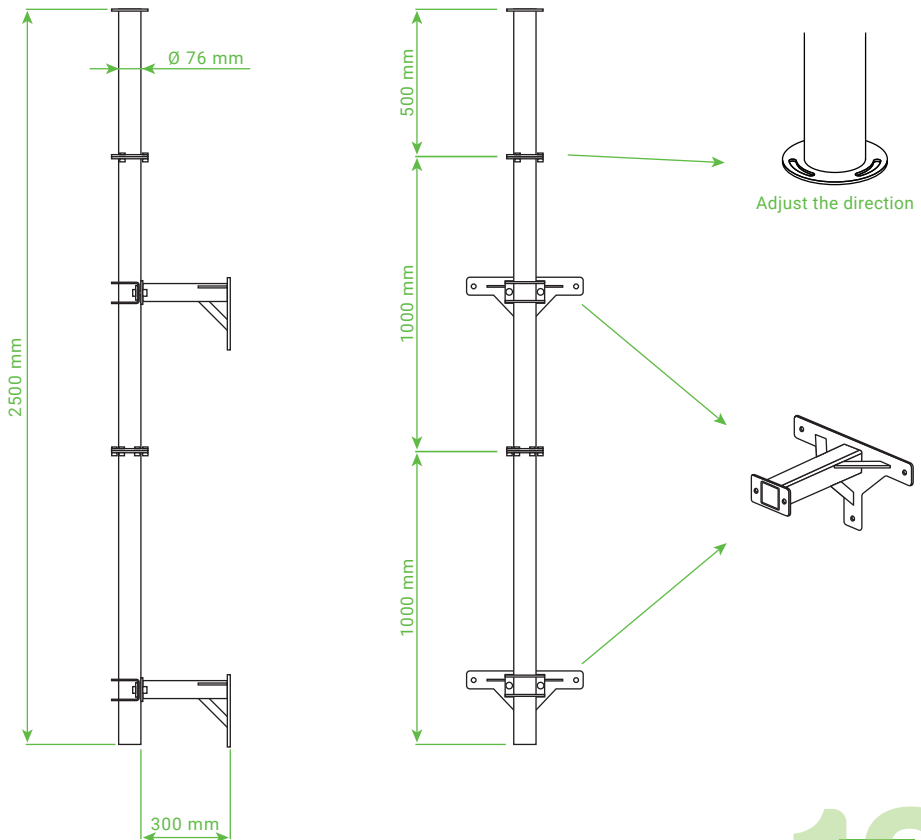
Galvanized iron

Height:

2,5 m

Wall distance:

30 cm
(Different distance on demand)

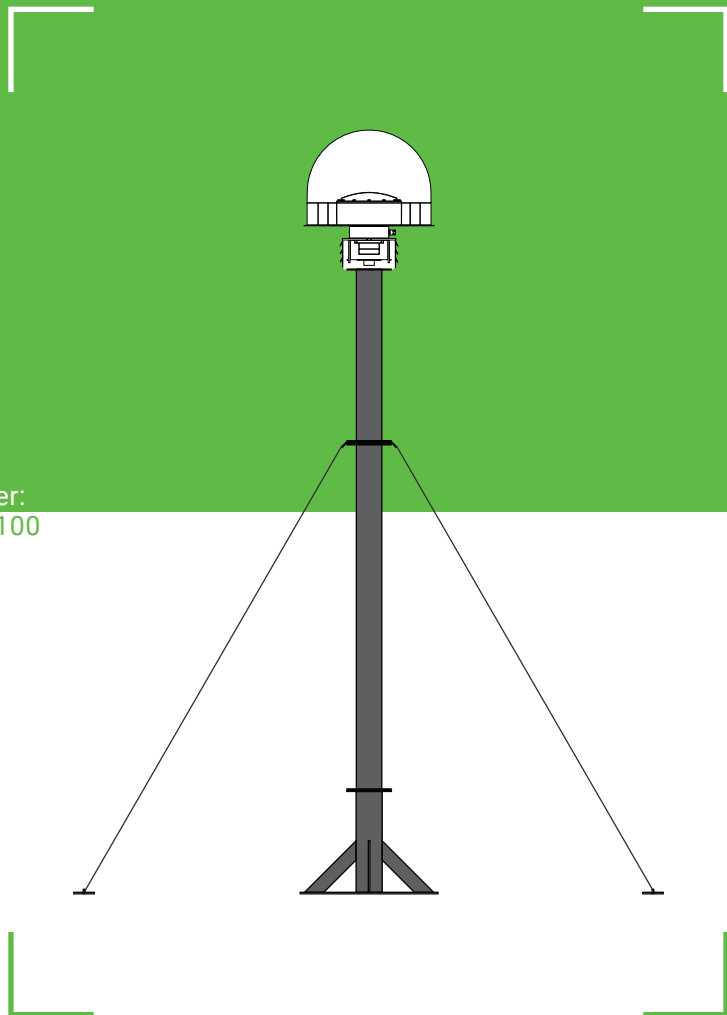


GNSS antenna mast - roof

Roof mounted antenna mast

Item number:
1132000-1100

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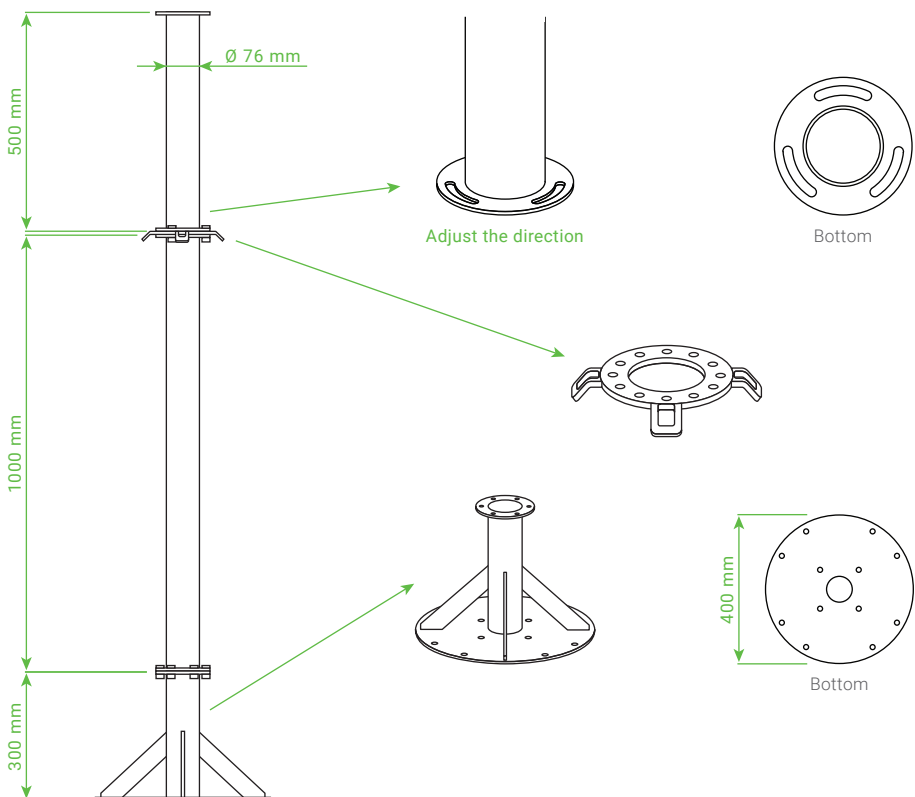
Description

This mast is designed for roof mounting of GNSS antenna.
Easy transportation, installation and adjusting.
Ready for adjustable head and Sensor Set (page 8 - 11).
Antenna mast doesn't include the head.
The set doesn't include anchor rope.

Parameters

Material:
Height:

Galvanized iron
1,8 m



Accessories

Optional components



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Components

Extension pole

Item number:

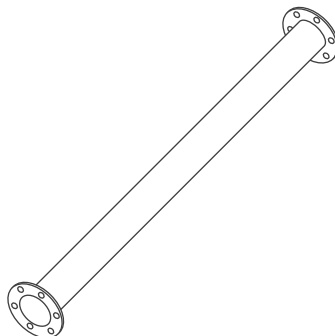
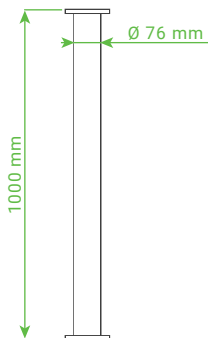
Material:

Weight:

113100-1101

Galvanized iron

5.9 kg



Spacers 20 cm - 2 pcs

Item number:

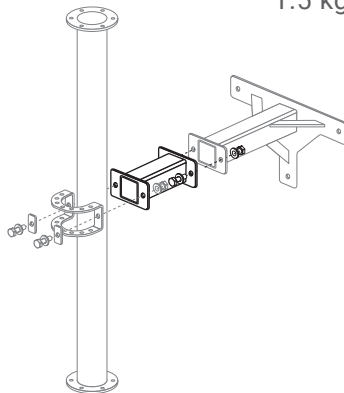
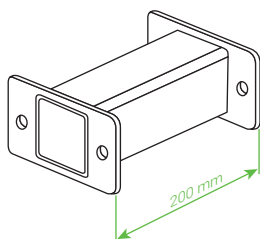
Material:

Weight:

1131000-1104

Galvanized iron

1.5 kg



Ring for anchoring rope

Item number:

Material:

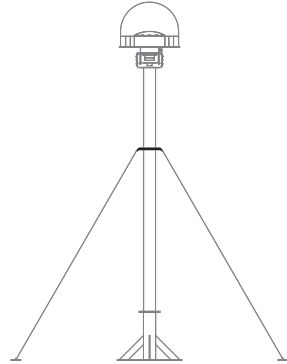
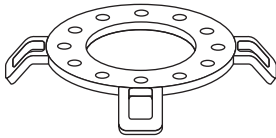
Weight:

Anchoring rope is not included

1131000-1105

Galvanized iron

0.4 kg



Iron pad - 4pcs

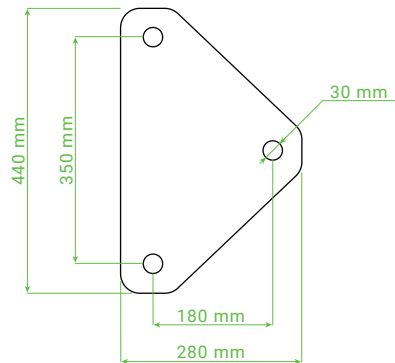
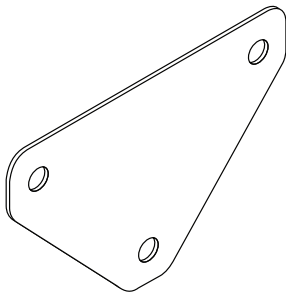
Item number:

Material:

Increases wall load capacity

1131000-1103

Galvanized iron



Cable protection holders - 3pcs

Item number:

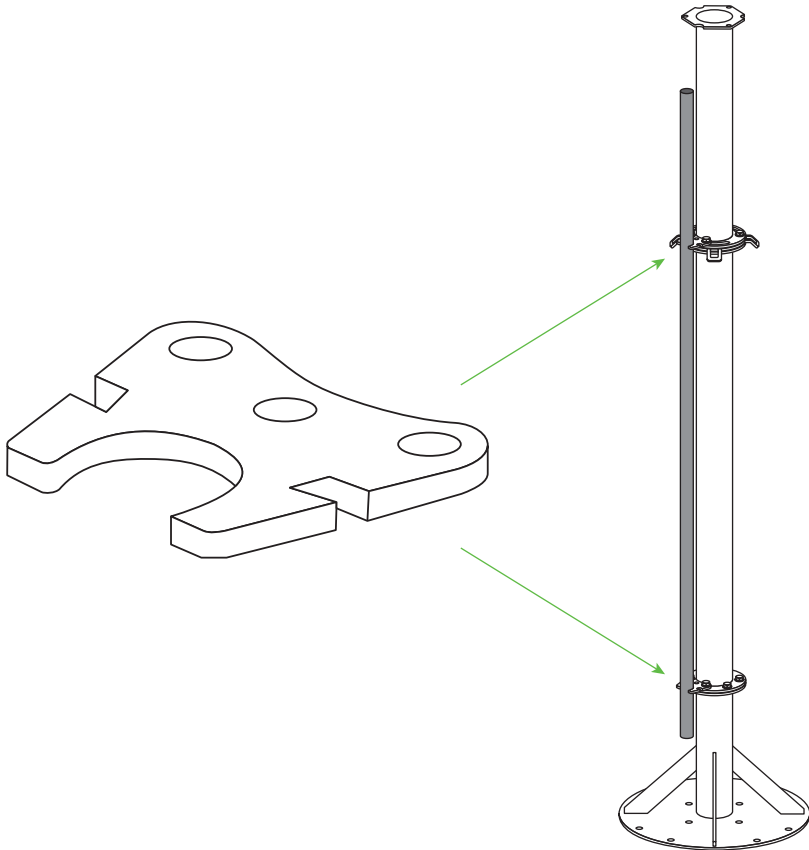
113100-1102

Material:

Galvanized iron

Weight:

0.1 kg (1 pcs)



Designed for plastic pipe 32mm diameter (not included)

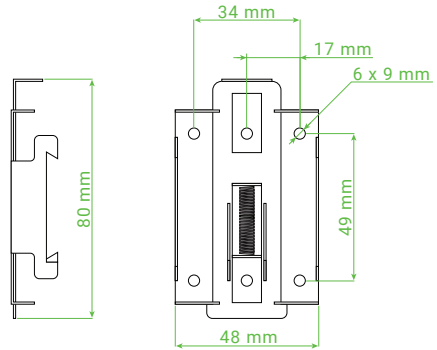
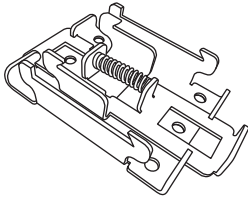
DIN rail holder

Item number:

Material:

1111005-1101

Galvanized iron



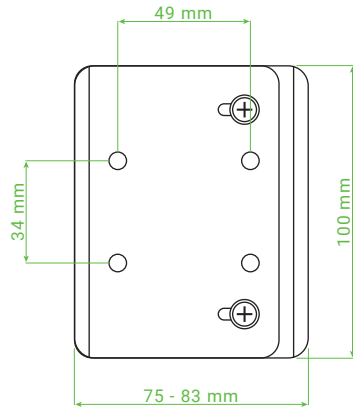
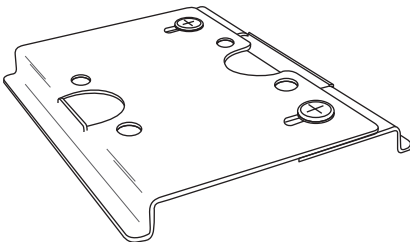
Additional bracket for NET G5

Item number:

Material:

1111005-1102

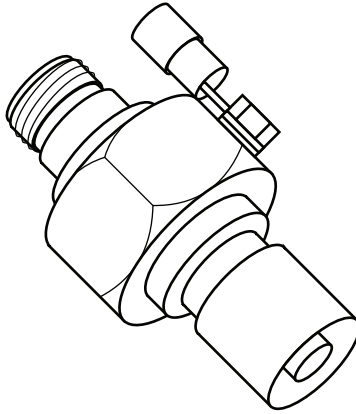
Galvanized iron



Lightning arrester

Item number:

1101009-5000



Bandwidth of protection: 0 kHz - 3,5 GHz

Test current impulse IZRP: 2,5 kA for pulse of 10/350 μ s

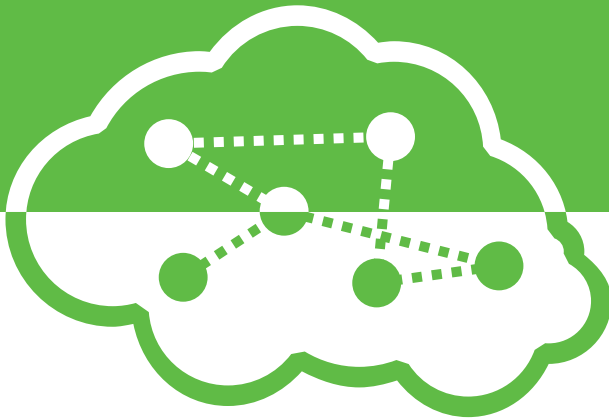
Connector: N/F-M

Attenuation/reflection coefficient in the working bandwidth: better than -0.4 dB/-20 dB

Max. residual voltage on the protected output with IZRP applied: < ± 100 Vp-p, for tZRP >250 ns

IoT Sensors

LoRa, Sigfox, NB-IoT



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Internet of things

List of sensors

- Temperature, Humidity, Atmospheric Pressure
- Multi-point rod thermometer
- CO₂, NO_x
- Particulate matter PM1.0, PM2.5, PM4, PM10
- Volatile organic compounds VOC
- GPS tracker with accelerometer
- Vibration detection and accelerometer
- Load sensor
- Proximity
- Motion detectors
- Soil moisture
- Flood sensor
- Electricity meter reading unit
- Water meter reading unit
- Legionella detection

Notice

Kind of sensor is almost unlimited.
Find your way of using the sensors for your business,
safety, comfort or security.

Contact

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