strongcast

DATA DROP
Powered by

Sensus 620 with Hydropulsar

Sensus 640

Sensus Repeater

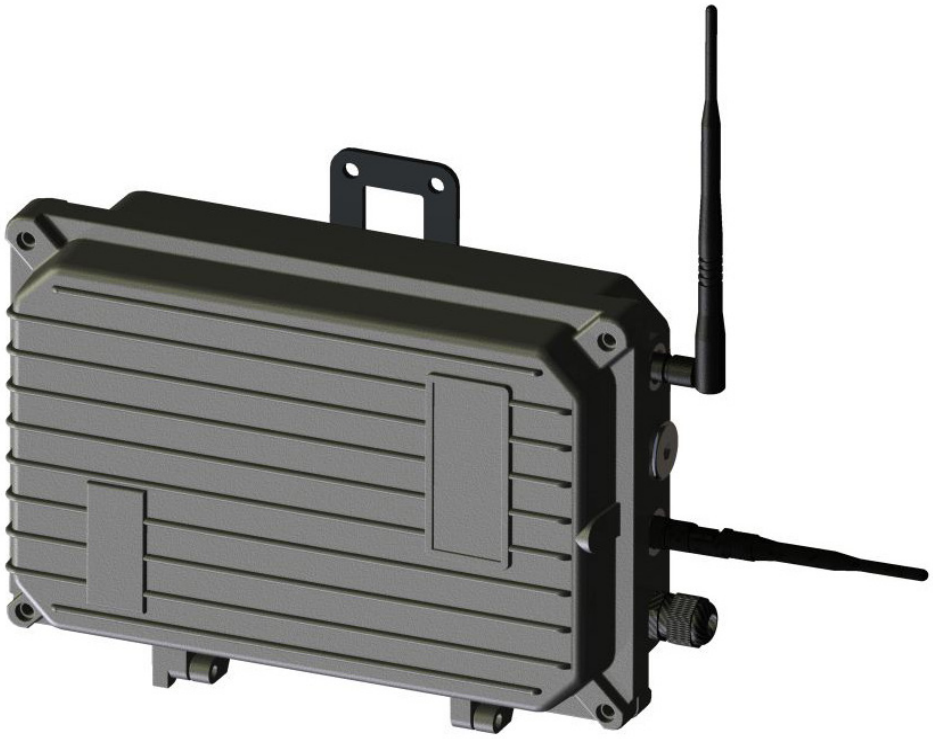
Sensus-RF Gateway

Optional displays available

SENSUS
a xylem brand

High-rise RF AMI

SensusRF Gateway



Application

Compact Gateway for fixed Radio network which can interface with:

Short Range Devices (SRD)

- SensusRF Radio Endpoints like iPERL
- SensusRF Repeaters
- standard wMBus water meters

Long Range Radio (LRR)

- GPRS and 3G
- Ethernet

Designed to receive meter data of meter Endpoints in periodical interval or communicate on demand and transfer the data on the long range via GPRS (Ethernet) communication.

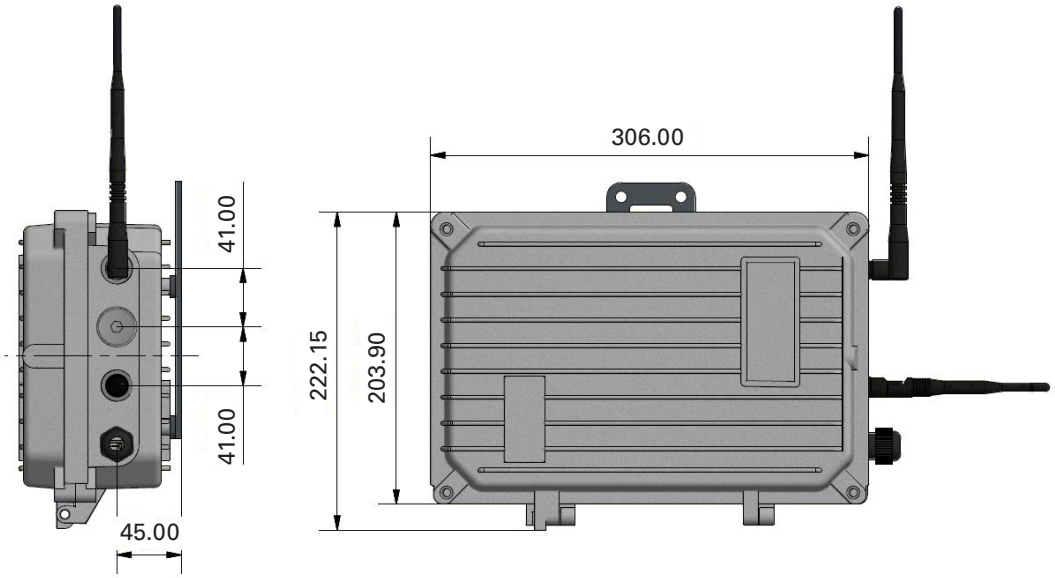
Overview

The Gateway can handle more than 1000 Endpoints (meters).

At 868 MHz the distance to the meter Endpoint is line of sight 500 m, under normal conditions outside a building 100 m to 300 m, hard conditions e.g. pit installation 50 m to 100 m.

The distance to SensusRF Radio Repeaters can be more than 1 km LoS (Line of sight) at 868 MHz and up to 350 m LoS at 433 MHz.

Dimensions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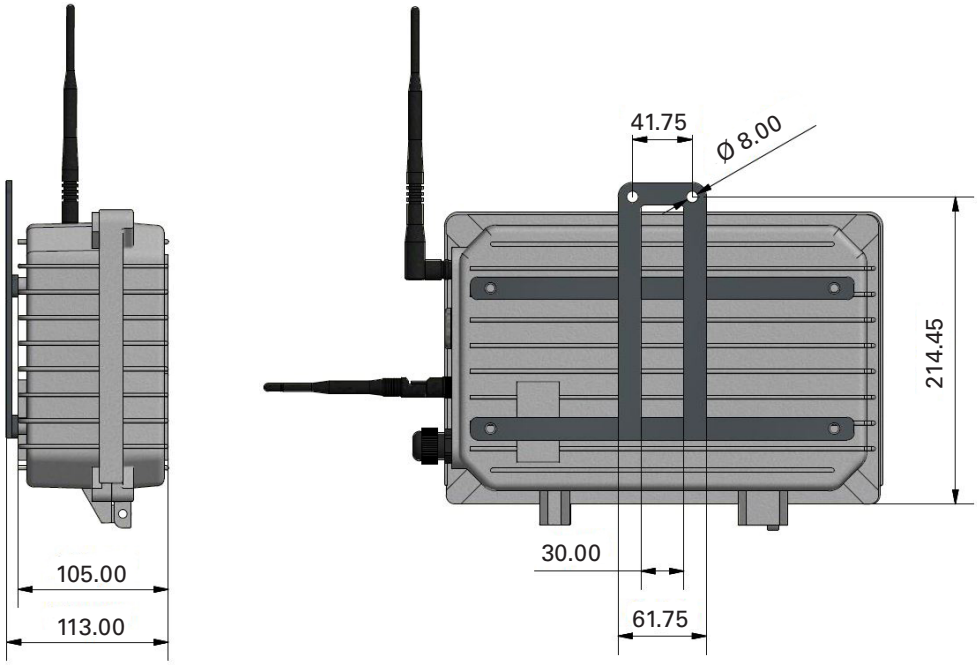
41.00
45.00
306.00
222.15
203.90


105.00
113.00
41.75
Ø 8.00
214.45
30.00
61.75

Features

Input	SensusRF Radio protocol 868 MHz (433 MHz)
Number of inputs	More than 1000 Endpoints (512 KB flash, 128 KBRam)
GSM/GPRS	GSM/GPRS quad-band and 3G
Housing	IP 65 Aluminium alloy, UV resistant
Installation	Fixing on a pole/wall with screws back support
Power supply	65..285 VAC Optional: Auxiliary 12-24 DC, i.e. solar panel , consumption 8.2 Watt
	Internal NiMH Backup Battery to cover power failure up to one hour
Radio Power	Endpoint <> Gateway 25mW (868 MHz) Repeater <> Gateway 100mW (868 MHz) In 433 MHz all links are 10mW
Configuration Interface	via GPRS, Ethernet, – remote upgrade over the air, USB local
Reading Interface	GSM/GPRS and Ethernet
Environmental temperature	-20 °C ...+70 °C operating and storage
Environment	Attention on hard environment, cold, dirty, wet. Outdoor installation with direct sunshine
AMR integration	Irislite - built in SMTP and FTP service CAS IRIS communication server CAS Hemera™ Platform – SmartWater™ Module
Compliance	CE (RED, EMC, LVD, RoHS, ...)
Recycling	WEEE

SensusRF Radio Repeater

(Standard 868 MHz, optional 433 MHz)

Application

Bidirectional, compact, radio module for automatic meter reading (fixed network or Walk by/Drive by) that can interface with:

- Sensus radio endpoints like iPERL
- Repeater to Repeater communication
- Repeater to Sensus SIRT communication
- Repeater to Sensus Gateway communication

Designed to collect meter data at periodic intervals or communicate on demand to a fixed radio transceiver or gateway.

Critical events such as alarms are sent automatically through the radio network in less than 20 minutes when immediate alarms are supported by the radio endpoints.

Repeaters work as a relay station for the received radio transponder modules and forward the data over longer distances to the handheld or gateway.

The overall performance depends on the associated components and available software.

The maximum number of repeater hops in a chain can be up to 7; the maximum number of radio endpoints per repeater is 298.

The Sensus Radio Repeater uses an internal lithium battery and does not need an external power supply. The Repeater can transmit over a long distance due to its higher radio output power.

The distance to the first repeater is set by the meter endpoint or the reading device and is line of sight 500 m, under normal conditions outside a building 100 m to 200 m, hard conditions e.g. pit installation 20 m to 100 m.

Repeater to Repeater or Repeater to Gateway is min. 1000m line of sight.

The output power depends on the frequency according the regulations for the available spectrum.

There are two versions of frequencies and equipment that can be utilised: Standard 868 MHz and optional 433 MHz. All components need to be operating on the same frequency to ensure interoperability and communications.

Features

Input	Sensus RF Radio protocol 868 MHz (433 MHz)
Number of inputs	298
Output	Radio protocol 868 MHz (433 MHz)
Housing	IP68, 145 x 80 x 80mm, 430g (540g incl. packaging)
Installation	Fixing on a pole/wall with screws back support. Orientation as in the picture
Power supply	Internal battery expected battery lifetime: 12 years
Radio Power	Endpoint <> Repeater 25mW (868 MHz) Repeater <> Repeater/Sirt up to 100 mW (868 MHz) Repeater <> Gateway up to 100mW (868 MHz) In 433 MHz all are 10mW
Transmission interval	4 times a day (default, latest reading of the endpoints) Alarms are transferred immediately (in max. 20 min) On demand reading at any time (1 time a day considered)
Configuration Interface	bi-directional via radio
Environmental temperature	-20... 60 °C operating and storage
Environment	Attention on hard environment, cold, dirty, wet. Outdoor installation with direct sunshine
Compliance	CE (RED, EMC, LVD, RoHS, ...)
Recycling	WEEE