

» SRC65 RS485 BACnet

Unidirectional EnOcean gateway with RS485 interface

thermokon[®]
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration
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» APPLICATION

The unidirectional SRC65-BACnet MS/TP gateway allows the reception of information from EasySens[®] sensors, switches, room units and other transmitters. Details of the communication protocol are described in the software documentation accordingly. The delivery content includes an external antenna for achieving best transmission ranges.

» SECURITY ADVICE – CAUTION



The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorised modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

» NOTES ON DISPOSAL



As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most of the products may contain valuable materials that should be recycled and not disposed of as domestic waste. Please note the relevant regulations for local disposal.

» PRODUCT TESTING AND CERTIFICATION



Declaration of conformity

The declaration of conformity of the products can be found on our website <https://www.thermokon.de/>.

» INFORMATION ABOUT EASYSSENS® (RADIO) / AIRCONFIG GENERAL USAGE



EasySens® - airConfig

Basic information about EasySens® radio and about general usage of our airConfig software, please download from our website.

» OVERVIEW OF THE RADIO TELEGRAMS



EEP

The structure of the data contained in the telegram can be found in the EEP (EnOcean equipment profile) list provided by the EnOcean Alliance.

» TECHNICAL DATA

Network technology	RS485 BACnet
Radio technology	EnOcean (IEC 14543-3-10)
Frequency	868 MHz
Antenna	external transmit- / receive antenna
Data transmission	unidirectional
Receive- transmit channels	32 (Rx)
Power supply	15..24 V = (±10%) or 24 V ~ (±10%) SELV
Power consumption	typ. 1 W (24 V =) 1,3 VA (24 V ~)
Enclosure	PA6.6, pure white, cover PC, transparent, with quick lock screws
Protection	IP42 according to EN 60529
Cable entry	M20 for wire max. Ø=8 mm, seal insert for double cable entry for wire max Ø=6 mm
Connection electrical	terminal block, max. 1,5 mm ²
Ambient condition	-20..+60 °C, max. 70% rH non-condensing
Weight	without antenna 110 g
Delivery content	external transmit- / receive antenna
Notes	magnetic antenna holder required for better radio range

Werden mehrere Bus-Geräte von einer 24V AC-Spannung versorgt, ist darauf zu achten, dass alle „positiven“ Betriebsspannungseingänge (+) der Feldgeräte miteinander verbunden sind, sowie alle „negativen“ Betriebsspannungseingänge (-) = Bezugspotential miteinander verbunden sind (phasengleicher Anschluss der Feldgeräte). Bei Verpolung der Versorgungsspannung an einem der Felgeräte würde über diese ein Kurzschluss der Versorgungsspannung erzeugt. Der somit über dieses Feldgerät fließende Kurzschlussstrom führt zur Beschädigung dieses Gerätes.

Achten Sie daher auf die korrekte Verdrahtung.

» MOUNTING ADVICES

The module enclosure can be mounted directly onto a DIN top-hat rail using the mounting base or surface-mounted using dowels and screws.

- The antenna should be mounted at metallic objects, e.g. at an air tube behind a false ceiling or at an 180 mmx180 mm metal plate (material: galvanized sheet steel, see accessories).
- In rooms the antenna should be at least 10 cm away from the ceiling.
- The antenna should be vertically aligned downwards.
- Minimal distance to the wall: 10 cm.
- Distance to other transmitters (e.g. GSM/ DECT/ wireless LAN/ EnOcean sender): at least 0,5 m.
- The antenna cable shall be wired in an electric conduit.
- A crushing of cable shall be absolutely avoided.
- The minimal bend radius of the extension cable is 50 mm.
- As for the cable laying the use of an active pull-up device should be avoided, so to avoid any damages on the sheathing respectively on the connectors.

»COMMISSIONING

Radio sensors send time or event controlled telegrams to the receiver. The receiver verifies the incoming telegrams and output them directly via their interface. Each telegram allows a precise allocation and consists of the format: type of the telegram, data, sender-ID 32bit.

In order to assure a correct evaluation of the measuring values by the receiver, it is necessary to have the devices learned by the receiver. This is done automatically by means of a “learn button” at the sensor or manually by input of the 32bit sensor ID and a special “learning procedure” between sender and receiver. The respective details are described in the corresponding software documentation of the receiver.

»CONNECTION CONFIGURATION

DIP 1.1 – 1.7 Address (binary coded)

ON

1

2

3

4

5

6

7

8

The address of the device is set binary-coded in the range 1...127 via a 7-fold dip switch. The address 0 is reserved for a broadcast and is initiated by the master.

Dip switch	1 = on	2 = on	3 = on	4 = on	5 = on	6 = on	7 = on
Value	2 ⁰ (1)	2 ¹ (2)	2 ² (4)	2 ³ (8)	2 ⁴ (16)	2 ⁵ (32)	2 ⁶ (64)

DIP 2.1 - 2.4

ON

1

2

3

4

1	2	3	4	Baud rate
on	off	off	off	9600
off	on	off	off	19200
on	on	off	off	38400
off	off	on	off	57600
on	off	on	off	76800
off	on	on	off	115200

↔ Jumper plugged in, bus termination resistor (120Ω) active

LEDs

Error

Radio

Rx/Tx

Uv

ERR

Indicator Error message

A steady light indicates that no valid communication is detected on the BUS. A flashing LED indicates that valid communication is detected, but the device is not integrated in the token circulation. If communication is valid and the device is actively participating in the Token circulation, the LED is off.

Indicator EnOcean radio traffic

Indicator RS485 data traffic

Power supply OK

LED flashes at 1s intervals

Uv+

Gnd -

Bus-B

Bus-A

Uv+

Gnd -

Bus-B

Bus-A

Error

Radio

Rx/Tx

Uv

+15..24 VDC / 24 VAC

GND

Bus B

Bus A

A = TxD- / RxD-

B = TxD+ / RxD+



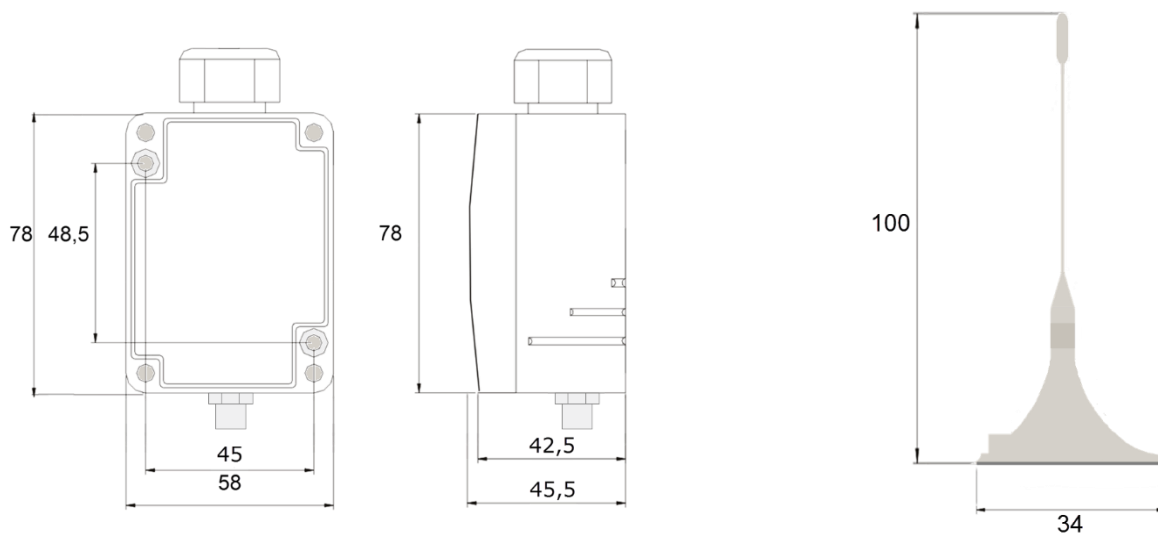
Interface description

BACnet objects, PICS und BIBBs

More information about the parameterization of the BACnet gateway may be downloaded at the following link.

[→ Download *.zip](#)

» DIMENSIONS (MM)



» ACCESSORIES (OPTIONAL)

Antenna extension 10 m
 Antenna extension 20 m
 Antenna holder form L, 180x180 mm
 Rawl plugs and screws

Item No. 257206
 Item No. 257213
 Item No. 255097
 Item No. 102209