Datasheet

Subject to technical alteration
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enocean®

ASHRAE BACnet™

» 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 EASYSENS® (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	902 MHz, optional 315 MHz
Antenna	external transmit- / receive antenna
Data transmission	unidirectional
Receive- transmit channels *type-dependent*	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=0.31 in., seal insert for double cable entry for wire max Ø=0.24 in.
Connection electrical	terminal block, max. 16AWG
Ambient condition	-4..+140 °F, max. 70% rH non-condensing
Weight	without antenna 3.88oz.
Delivery content	external transmit- / receive antenna
Notes	magnetic antenna holder required for better radio range

When several BUS devices are supplied by one 24 V AC voltage supply, it is to be ensured that all "positive" operating voltage input terminals (+) of the field devices are connected with each other and all "negative" operating voltage input terminals (-) (=reference potential) are connected together (in-phase connection of field devices). In case of reversed polarity at one field device, a supply voltage short-circuit would be caused by that device. The consequential short-circuit current flowing through this field my cause damage to it.

Therefore, pay attention to correct wiring.

»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.
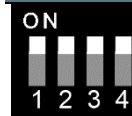
» CONNECTION CONFIGURATION

DIP 1.1 – 1.7 Address (binary coded)
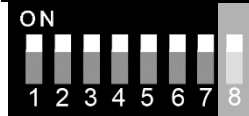
The address of the device is set binary-coded in the range 1...127 via a 7-fold dip switch. The address 0 is reserved for a broadcast and is initiated by the master.

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

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

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.*
Radio	Indicator EnOcean radio traffic	
Rx/Tx	Indicator RS485 data traffic	
Uv	Power supply OK	
	LED flashes at 1s intervals	

Uv+
Gnd -
Bus-B
Bus-A

Error
Radio
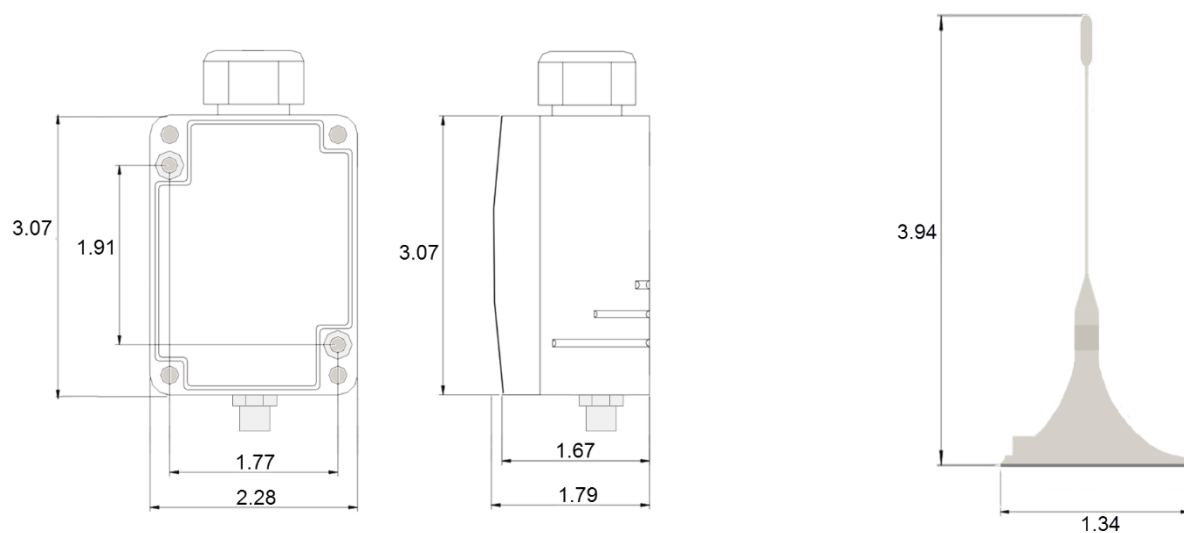Rx/Tx
Uv

+15..24 VDC / 24 VAC
GND
Bus B
Bus A
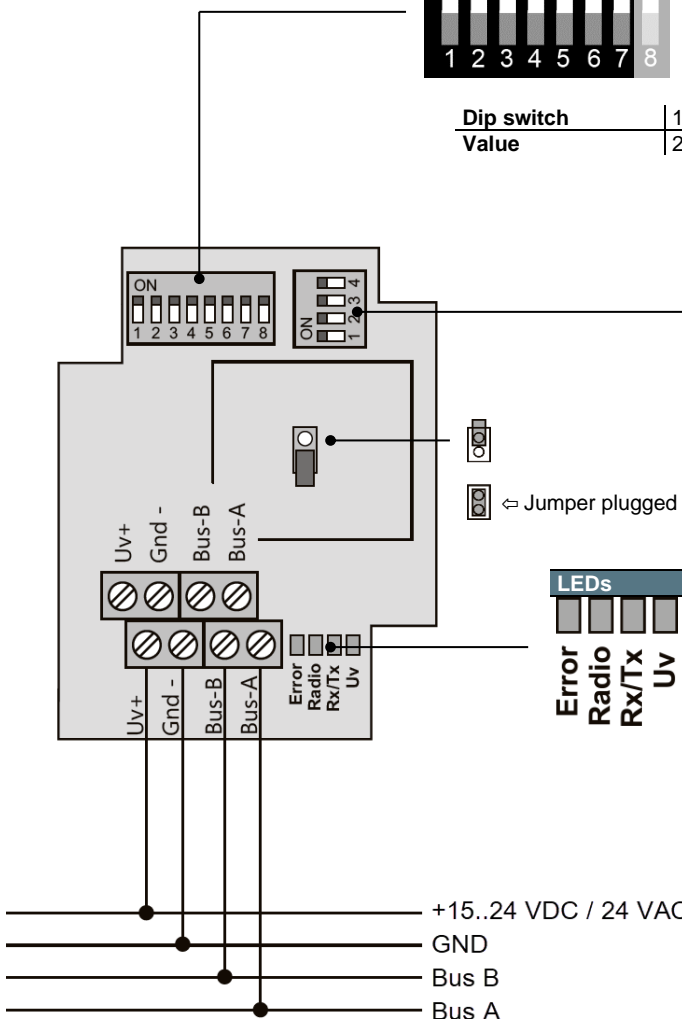
A = TxD- / RxD-
B = TxD+ / RxD+

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 (IN)

» ACCESSORIES (OPTIONAL)

Antenna extension 10 m	Item No. 257206
Antenna extension 20 m	Item No. 257213
Antenna holder form L, 180x180 mm	Item No. 255097
Rawl plugs and screws	Item No. 102209