Bidirectional Gateway between EnOcean and KNX Bus



Datasheet

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Application

Bidirectional gateway between EasySens® wireless sensors and the EIB/KNX bus for mounting in a standard flush-mounted box. The device has 8 receive and transmit channels that can be assigned with the functions switch, dim, blinds up/down, presence, set point adjustment, tap changer, humidity sensor, window handle/contact, binary input, light sensor and motion sensor.

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.

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Technical Data

Network technology	KNX (TP)
Radio technology	EnOcean (IEC 14543-3-10)
Frequency	868 MHz
Data transmission	bidirectional
Receive channels	8 (Rx)
Transmit channels	8 (Tx)
Power supply	supply via BUS
Power consumption	12 mA
Enclosure	ABS, blue
Protection	IP20 according EN 60529
Connection electrical	plug-in terminal, max. 1,5 mm ²
Ambient condition	-5+45 °C, max. 85 rH non-condensing
Mounting	flush mounted in standard EU box (Ø=60 mm)
Notes	software for configuration (freeware via download)



Declaration of conformity

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

Mounting Advices

The device can be flush-mounted, the housing has the appropriate housing size for mounting in a 55 mm flush-mounted socket.

When choosing the installation location the RF range of EnOcean devices to be associated with the gateway has to be considered.

Shielding objects (e.g. metal cabinets) or interfering transmitters (e.g. computers, electronic transformers, ballasts) near the gateway should be avoided.

Connection Plan and Configuration

The connection to the KNX bus is made with a bus connector. The correct polarity of the terminal referred to the printing inside the unit has to be considered.



The KNX programming mode is activated/deactivated by pressing the KNX programming button P 1.

When the programming mode is active, the programming LED (2) lights red, this LED blinks red, when the application is not running, e.g. after a failed ETS download.

A gateway ex-factory has the default individual address 15.15.255. There are no group addresses and no connections to RF sensors and actuators programmed.

The configuration during the teach-in process can be done with the buttons A (6) and B (7).

A long key press is detected when a button is pressed for longer than 1 second.

- Key press B long (Add.): Start linking mode
- Key press B short (Active): Activate or change the channels 1-8
- Key press A long (Del.): Delete the stored device from the current channel
- Key press A short (Exit): Leave channel/linking mode

LEDs for state and channels 1-8

The LEDs state (4) and channel 1..8 (5) are used for commissioning and system diagnostics. The device start is signaled by a short green flashing of all LEDs (4) and (5).

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In normal operation, the status LED is used as a display for a received EnOcean telegram, for every telegram, this LED lights up briefly white.

When learning/deleting Enocean devices, the LED indicates the ETS configuration of the currently selected channel::

LED Status	Meaning
LED lights green	ETS configuration "Link from EnOcean Sensor to KNX"
LED lights red	ETS configuration "Link from KNX to EnOcean actuator"
LED lights blue	ETS configuration "Control/Logic"

During an ETS download, this LED flashes green.

During normal operation, the channel LEDs 1-8 indicate whether a received EnOcean or KNX telegram is linked to one or more gateway channels. If so, the LED of the linked channel will light up briefly green.

Dimensions (mm)



