» STC65-FTT LON

EnOcean Empfänger/Sender mit LON-Schnittstelle

thermokon®
HOME OF SENSOR TECHNOLOGY

Datasheet

LON
LOCAL OPERATING NETWORK

))))((**SmartACK**

enocean®

» APPLICATION

Bidirectional gateway for EnOcean-based Sensors and actuators as well as controllers and control systems with LON interface. The STC65-FTT enables the receipt and transmission of radio telegrams corresponding to the EnOcean communication protocol. With predefined sensor objects (sensor, switch, ...) and corresponding output variables (SNVT) for communication in a LON system.

» 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

CE

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.

»INFORMATION ABOUT SMART ACKNOWLEDGE (SMARTACK)

This bi-directional communication mechanism also allows the building system to send back data to a sensor, i.e. to overwrite SR06LCD´s set point. Smart Acknowledge requires that both communication devices do support the Smart Acknowledge mechanism.

Repeaters are not supported, they delay in the telegram transmission. Sensor and gateway must communicate directly with each other.

Additional Information of the used EEP´s with Smart ACK can be found using the following link:

→ **Download PDF**

»TECHNICAL DATA

Network technology	LON FT (free topology)
Radio technology	EnOcean (IEC 14543-3-10), transmission power <10 mW
Frequency	868 MHz
Antenna	external transmit- / receive antenna
Data transmission	bidirectional
Receive channels	11 (Rx)
Transmit channels	11 (Tx)
Power supply	15..24 V = (±10%) or 24 V ~ (±10%) SELV
Power consumption	typ. 0,8 W (24 V =) | 0,9 VA (24 V ~)
Enclosure	PA6.6, cover PC, transparent with quick lock screws
Protection	IP42 according to EN 60529
Cable entry	M20 for cable max. Ø=8 mm, seal insert for double cable entry for wire max Ø=6 mm
Connection electrical	terminal block, max. 1,5 mm²
Ambient condition	-20..+60 °C, max. 85% rH non-condensing
Delivery content	external transmit- / receive antenna
Notes	up to 4 devices with Smart Acknowledge (SmartACK) magnetic antenna holder required for better radio range

»MOUNTING ADVICES

The module enclosure is prepared for direct wall mounting. For the operation a separate external 868 MHz receiving antenna is necessary, which is included in shipment as a standard.

The antenna should be mounted at metallic objects, e.g. at an air tube behind a false ceiling or at an 180x180 mm metal plate (material: galvanized sheet steel, see accessories).

If possible the antenna should be mounted with a distance of >10 cm from the ceiling and from a wall. The distance to other transmitters (e.g. GSM / DECT / wireless LAN / EnOcean sender) should be minimum 0,5 m.

The antenna should be vertically aligned downwards. The antenna cable should 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, in order to avoid any damages to the sheathing respectively to the connectors.

» CONNECTION ELECTRICAL
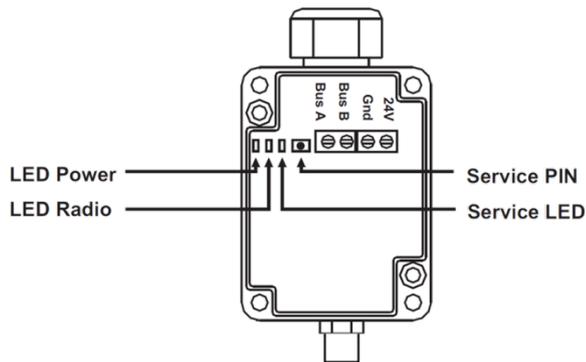
» INSTALLATION & CONFIGURATION

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 (depending on the respective receiver type). 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.

XIF files and the corresponding interface description can be found under the following link:

→ Download

» DIMENSIONS (MM)
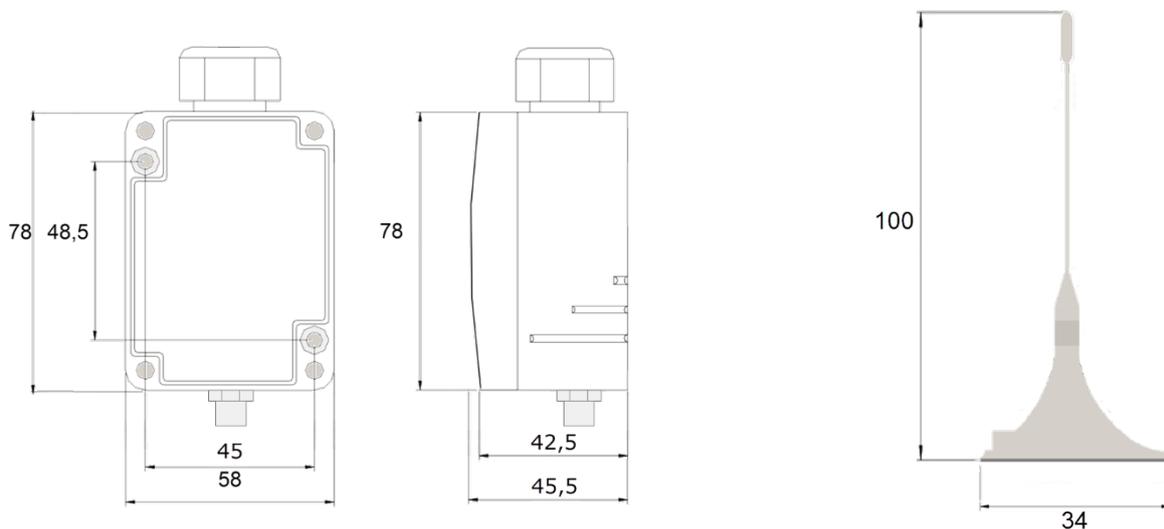
» ACCESSORIES

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