

# USB-Interface KNX

Data Interface Accessory

**thermokon**<sup>®</sup>  
HOME OF SENSOR TECHNOLOGY

## Datasheet

Subject to technical alteration  
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### » APPLICATION

ETS® compatible USB-data interface between a computer and the installation bus KNX for parameterization and configuration of Thermokon KNX devices.

### » 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

### » PRODUCT TESTING AND CERTIFICATION



#### Declaration of conformity

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

### » TECHNICAL DATA

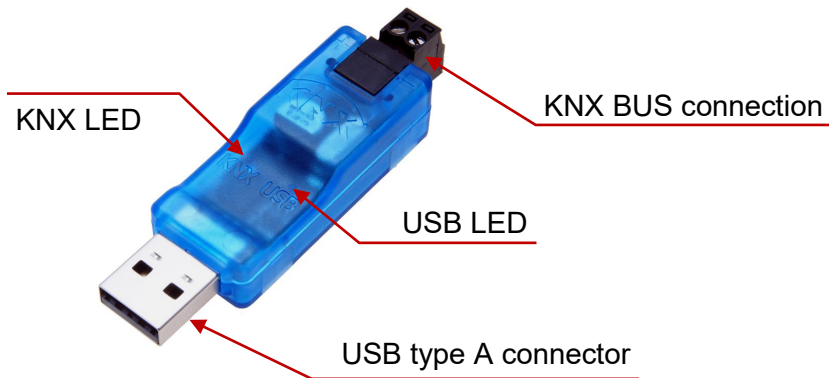
Network technology	KNX TP, usable from ETS Version 4
Power supply USB	< 10 mA
Power supply KNX	< 3 mA
Display	2 LEDs, multicolor
Enclosure	ABS, transparent
Dimensions	60 x 19 x 13 mm
Protection	IP20 according to DIN EN 60529
Connection (KNX)	Pluggable screw terminal, 0,14..1,5 mm <sup>2</sup> cross section,
Connection (PC)	USB type A
Ambient condition	-5..+45 °C, max. 85% non condensing
Scope of delivery	USB interface KNX (USB stick)
Notes	max. cable length: 5m

### » 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.

## » DESCRIPTION – DEVICE COMPONENTS



**KNX BUS connection**  
Pluggable screw terminal

**KNX LED / USB LED**  
The LEDs show operational states / BUS communication error (see below)

**USB Typ-A connector**  
Galvanic isolation of USB and KNX connection.

KNX LED Status	
<b>LED lights green</b>	KNX bus voltage available
<b>LED flickers green</b>	Telegram traffic on the KNX bus
<b>LED shortly red</b>	Communication failures on the KNX Bus (telegram repetitions / telegram fragments)
<b>LED lights orange</b>	Interface is set to bus monitor mode
<b>LED flickers orange</b>	Telegram traffic on the KNX bus in bus monitor mode

USB LED Status	
<b>LED lights green</b>	Device is connected to a USB port
<b>LED flickers green</b>	Telegram traffic on USB
<b>LED shortly red</b>	Communication failures on USB-communication

The LEDs are switched off, as soon as the USB devices connected to a computer are set to standby (e.g. computer sleep mode or peripheral devices unused)

## » COMMISSIONING

For indoor use only!

### Interface settings

1. Connect the KNX USB-interface to a computer
2. Choose interface in ETS software „Discovered interfaces“
3. On the right side of the ETS window all specific information and options of the connection appear and can be configured.

To check if the address you want to assign is unique within your KNX installation you can click the button “Address free?”

### Factory default settings

device address: **15.15.255**

## » MONITOR MODE

The KNX USB Interface supports the bus monitor mode and can be used with ETS. In bus monitor mode all traffic on the KNX bus is shown including ACK, NACK and BUSY characters.

Interfaces in bus monitor mode are completely passively on the bus and therefore cannot be used simultaneously for other operations like download. To monitor an ETS download within the same ETS the group monitor can be used.

The group monitor uses the KNX USB Interface in normal operation mode (data link layer) and can be used in parallel to other bus operations. In the group monitor also sending of telegrams is possible.

**Note: In group monitor mode individual addressed telegrams which do not address the KNX USB Interface cannot be received.**

## » KNX LONG FRAMES

To increase the efficiency of KNX communication mainly for the download the “KNX Long Frames” -format has been defined, which is supported by the USB interface KNX. It can be used to send longer telegrams on the bus. To use this feature it must be supported by the tool (ETS), the bus interface (USB), all couplers in between and the addressed device.

ETS starting with version 5 is able to detect automatically whether long frames can be used and optimizes the download accordingly. The download is much faster if the USB interface is installed in the same line as the target device. With each line coupler in-between the download time grows.