

# instabus EIB System Communication

Product designation: **USB data interface UP**Design: flush-mounting type (UP)

Article no.: 1070 00

ETS search path: Gira Giersiepen / Communication / USB / USB data interface FM

### **Functional description:**

The USB data interface permits the connection of a PC to the instabus KNX / EIB.

The interface enables Instabus devices to be addressed, programmed and diagnosed by means of the ETS 3 or the ETS 3 Starter.

The device electronics get their power supply completely from the USB interface of the connected PC. For this reason, the USB data interface cannot be accessed from the bus side unless the USB cable is plugged in and the the PC is on. The physical address of the interface can be programmed only locally (ETS) by means of the connected PC. For this reason, the data interface has neither a programming button nor a programming LED.

The firmware of the USB data interface can be updated with the local PC so that the device can easily be adapted to future standards.

For proper functioning, the device requires only the standard Windows HID drivers which are installed and activated automatically when the data interface is plugged into the PC. The device can be accessed by the ETS3 only after successful installation.

### Illustration:

# A B

### Dimensions:

Width: 70 mm Height: 70 mm Depth: 33 mm

(from support ring)

All dimensions with support ring and without decorative cover

### Controls:

A: USB connection socket (type B)

B: KNX / EIB bus terminal (at the rear of device / monoblock device incl. BCU)

The decorative cover used is the cover for TAE boxes.

### Technical data:

instabus EIB supply

voltage: 21 - 32 V DC power consumption: 150 mW max.

connection: instabus connecting and branching terminal

**USB** 

Rate of transmission: typically 9.6 kbaud

Transmission protocol: compatible with USB standards 1.1 and 2.0

PC port: USB connecting socket type B

Connecting cable: max. 5 m

use USB-certified connecting cable

Response to voltage failure

Bus voltage only: communication interrupted

USB only: communication interrupted; device no longer accessible from bus side

Mains voltage only: ---Bus and mains voltage: ----

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### Communication



Response on reactivation

Bus voltage only: communication can continue

USB only: communication can continue after initializing; device is accessible from

bus side

Mains voltage only: --Bus and mains voltage: ---

Degree of protection: IP 20

Insulation voltage: in acc. with VDE 0160

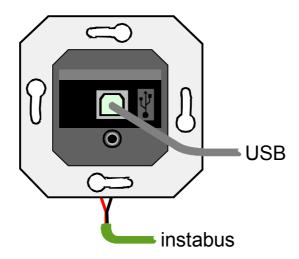
Mark of approval: KNX / EIB Ambient temperature:  $-5 \,^{\circ}\text{C} \dots +45 \,^{\circ}\text{C}$ 

Storage / transport temperature -25 °C ... +75 °C (reduced lifetime when stored above +45°C)

Mounting position:

Type of fixing: installation in flush-mounting box (deep box recommended)

### Connection:



### Hardware information:

• The USB connection should be made using a certified USB connecting cable of 5 m max. On the data interface side, a USB type B plug is required.





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# **USB** configuration

The USB data interface establishes the connection between a PC and the KNX/EIB installation. The data interface works in conformity with the KONNEX-USB-Standard so that addressing, programming and diagnosis of the instabus devices can be performed with the ETS 3 or the ETS 3 Starter.

For functioning, the device requires only the HID drivers (HID = Human Interface Device). It is an advantage of this class of devices that the required drivers are part of the operating system. When the data interface is plugged into the PC, the drivers are installed and activated automatically (depending on the operating system, partly user-controlled). In some cases, the user may be requested to insert the installation source of the operating system or to enter the path. USB is supported by the following operating systems: Windows® 98, Me. 2000 and XP.

Access to the device by the ETS3 is possible only after the drivers have been installed and/or activated successfully.

The ETS3 assumes the serial port COM 1 to be the default port. In order to use the USB support, a USB link must first be created. For this purpose, the ETS 3 must be started and the options dialog called up in the menu under "Extras - Options". In the "Communication" filecard, the communication ports can be selected and activated.

By clicking on the "Configure interfaces" button, the "ETS Connection Manager" is called up. In this menu, new links can be created (button "New" cf. Fig. 1).

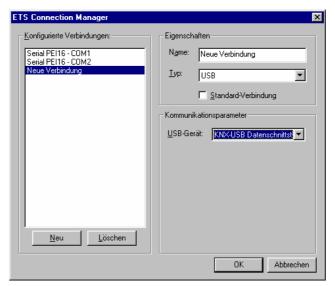


Bild 1: Anlegen einer neuen USB-Verbindung

In the "Name" field, an unambiguous name for the link (e.g. USB) must be entered. Under "Type", "USB" must be selected. If a USB data interface is installed and plugged in, the USB device can be entered under "Communication parameters". The selection window displays all KNX-USB data interfaces that can be used with the PC. Each USB link can be assigned a separate USB data interface. If no USB data interface is available, the field is empty.

### Important:

- In case of the <u>ETS 2</u>, a USB connection with the USB data interface is not available due to the missing KONNEX-USB support!
- The USB data interface is a monoblock device, i.e. all components are housed in only one enclosure and
  are connected directly with the bus controller without being routed via the PEI. The time-critical
  communication protocol of the PEI is thus avoided and a fast and fail-safe local communication becomes
  possible.

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### Communication



### Physical address

The physical address of the USB data interface is programmed only locally by means of the ETS 3. For programming, the ETS 3 is to be started and the options dialog called up in the menu under "Extras - Options". The physical address of the data interface can then be entered on the "Communication" filecard by clicking on the "Settings" button. Make sure a USB link is specified as communication interface.

Software-description:

ETS-search path:

Gira Giersiepen / Communication / USB / USB data interface FM

ETS symbol:



Applications:

Summarized description: Name: Date: Page: Database:

No software application required for the functioning of the USB data interface 12.04 - 10709190