ITR901-003 - KNX USB INTERFACE

Product Manual



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1.) PRODUCT DESCRIPTION

The ITR901-003 Interra KNX USB interface connects a PC to KNX TP via USB and provides a galvanic isolated bi-directional data connection to the KNX bus. With the ETS or another KNX compatible commissioning tool the ITR901-003 works as programming interface. Due to HID profile support no specific USB driver is required. Moreover, the ITR901-003 also supports the USB suspend mode.

The Interra KNX USB Interface establishes access to all bus devices to feature commissioning, addressing, setting parameters, visualization, protocolling, and diagnostic operation. The protocol used for communication between interface and host is the flexible "cEMI" protocol.

The connection between KNX and a PC with standard software (like ETS, EITT softwares) or other software is handled by the FALCON driver. The ITR901-003 Interra KNX USB Interface

supports long messages (up to 220 byte APDU length) and ensures easy software handling also under operating systems not supported by the FALCON driver (e.g.: Linux). For specific diagnostic applications like EITT the ITR901-003 supports the "Raw Frame" operating mode.

The ITR901-003 Interra KNX USB Interface is supplied by both KNX TP and USB. Hence, no additional external power supply is necessary. Two LEDs are located on the front panel as illustrated below. The LEDs indicate details concerning the bus (connection) state and telegram traffic. The following shows the front view of the device.



Şekil 1: Front View of Device

NUMBER	LED	COLOUR	DESCRIPTION	
1	Bus State USB (+Telegram Traffic)	Green	USB connection Ok / There is no telegram traffic.	
		Blinking Green	Telegram traffic extent indicated by blinking.	
		Off	No USB connection.	
2	Bus Durum KNX TP (+Telegram Traffic)	Green	KNX TP connection Ok/ There is no telegram traffic.	
		Blinking Green	Telegram traffic extent indicated by blinking.	
		Off	KNX TP line not connected(or no USB connection)	

2.) OPERATIONAL DESCRIPTION

After connecting the ITR901-003 Interra KNX USB Interface to the PC the LEDs show the bus connections status. Lightning green means a connection is established. Blinking green indicates the telegram traffic extent. In Microsoft Windows the ITR901-003 device is recognized as HID (Human Interface Device). So, no extra drivers have to be installed or downloaded. In general, network configurations become less time-consuming. The ITR901-003 device's ETS database entries are available for ETS3.0d and upward. The device (dummy application without parameters and without communication objects) can be added to an ETS project as usual.

2.1) ETS Bus Connection Current Interface

To use the ITR901-003 as the KNX programming interface in the ETS, the device has to be chosen as the Current Interface. This can be done in the ETS Bus Connections tab and when editing a project, at the bottom line ("Name and state of current connection") of the ETS window.



Şekil 2: ETS Bus Connections Window

2.2) Physical Address Assignment

The device is supplied with the individual physical address "0.2.255". With the ETS the physical address can be assigned to the device by setting the desired address in the Bus Connections window of the ETS. To download the desired physical address the Interra KNX USB Interface has to be chosen as the Current Interface. Then type in the Individual Address and press the Test button.

Note: In this document only the term "physical address" is used. The term "physical address" means the physical address as well as the individual address. Both terms are used interchangeably by the KNX organisation.

2.3) ETS Product Database

The KNX product database entry (only as ETS dummy application) can be downloaded from Interra website and the KNX Online Catalog and it should only be used as a test application. Because the device has no parameters and objects. Please be aware of this situation.



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Şekil 3: Adding the Interra KNX USB Interface to ETS

3.) TECHNICAL DRAWINGS

All dimensions shown here are specified in mm. The total device width is 2 modules at 18 mm.



Fig 4: Drawings and Dimensions of the Device

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