GVS

BNTP-USB/00.1 KNX/EIB Home and Building Control System

GVS BNTP-USB/00.1 KNX/EIB Home and Building Control System User Manual

Contents

GVS

GVS BNTP-USB/00.1 KNX/EIB Home and Building Control System

Specifications

- Product Name: KNX USB Interface-V1.1
- Model Number: BNTP-USB/00.1

Product Usage Instructions

Connection and Setup

1. Ensure the device is kept away from strong magnetic fields, high temperatures, and wet environments.
2. Connect the KNX USB Interface to the KNX bus and to the computer using a USB cable.
3. Install the ETS software (version ETS5 or above) on your computer.

Configuration and Addressing

1. Use the ETS software to assign individual addresses, configure parameters, and monitor the KNX device.
2. The KNX TP-USB Interface does not require an additional power supply when connected to the KNX bus.
3. The default individual address is 10.15.255, which can be changed using the ETS software.

Communication Protocol
The KNX TP-USB Interface supports extended frames, long telegrams, and uses the flexible cEMI protocol for communication between the interface and host.

KNX/EIB Home and Building Control System

Attention

1. Please keep devices away from strong magnetic field, high temperatures, wet environments;

2. Do not fall the device to the ground or make them get hard impact;

3. Do not use wet cloth or volatile reagent to wipe the device;

4. Do not disassemble the devices.

Chapter 1 Summary

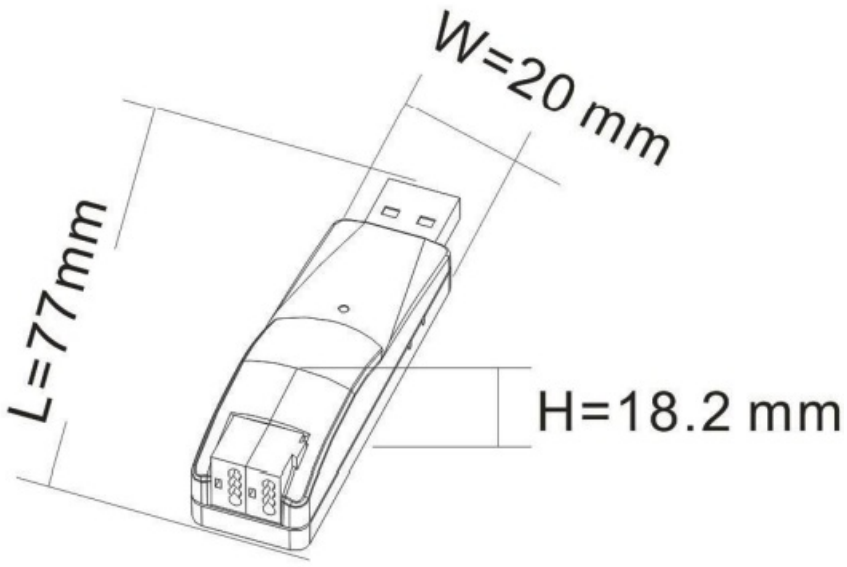
- The KNX TP-USB Interface is designed for an intelligent building control system, which is used for facilitating communication between the PC and the KNX system. The device can connect the USB communication interface to the computer through a standard type A USB2.0 interface extension line, and the other end of the device can be connected to the KNX bus via a bus connection terminal. If the KNX bus on the device side is long enough, it can also be directly connected to the computer without USB extension line.
- After the USB communication interface and the KNX bus are connected normally, the device can work and do not need an additional power supply.
- Through the ETS software (version ETS5 and above) in the computer of this device, the individual address, configuration parameters, debugging and bus monitoring of the KNX device can be assigned.
- The KNX TP-USB Interface has not an application program, and its individual address is able to be allocated in the individual address field of the bus connection window of the ETS. The factory default individual addresses are 10.15.255.
- The KNX TP-USB Interface supports extended frames and long telegrams with up to 55 bytes APDU length. Due to HID profile support, no specific USB driver is required.
- The protocol used for communication between the interface and host is the flexible“cEMI” protocol.

Chapter 2 Technical data

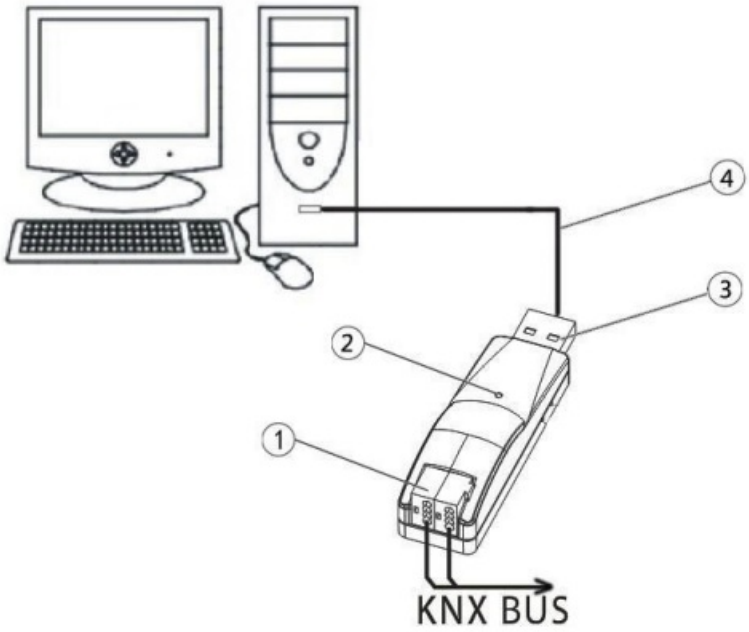
Power supply	Operating voltage 21-30V DC via the KNX bus Current consumption, bus <3.5mA/24V, <3mA/30V Power consumption, bus <90mW USB voltage 5V DC Current consumption, USB <100mA Power consumption , USB <500mW Total power consumption, <600 mW KNX and USB			
Interface	USB Standard 2.0			
Connections	KNX PC-connection	Bus connecting terminal (red/black) Via USB socket type A Max. cable length 5m (standardized)		
Indication	Green LED ON Green LED flashing Red LED ON Red LED flashing	A PC is linked to the device Data transfer between USB interface The device is linked to the KNX bus Telegram traffic on the bus	and	PC
Temperature	Operation	–5 °C … + 45 °C		
	Storage	–25 °C … + 55 °C		
	Transport	– 25 °C … + 70 °C		
Ambient	Humidity	<93%, except dewing		
Mounting	As required			
Dimensions	18mm×20mm×77mm			
Weight	0.1kg			

Chapter 3 Dimension and Connection Diagram

Dimension diagram



Connection diagram



1. KNX bus connection terminal
2. The green LED lights on as soon as the USB interface and PC are connected and ready for operation. Flashing means that there is telegram communication between the USB interface and PC. The red LED lights on as soon as the USB interface and KNX bus are connected and ready for operation. Flashing means that there is telegram traffic on the bus.
3. USB serial ports connection terminal
4. USB extension cable

Chapter 4 Operational Description

After the USB interface and KNX bus connection of this device are normal, we will see its default configuration in the bus connection window of the ETS, as follows:

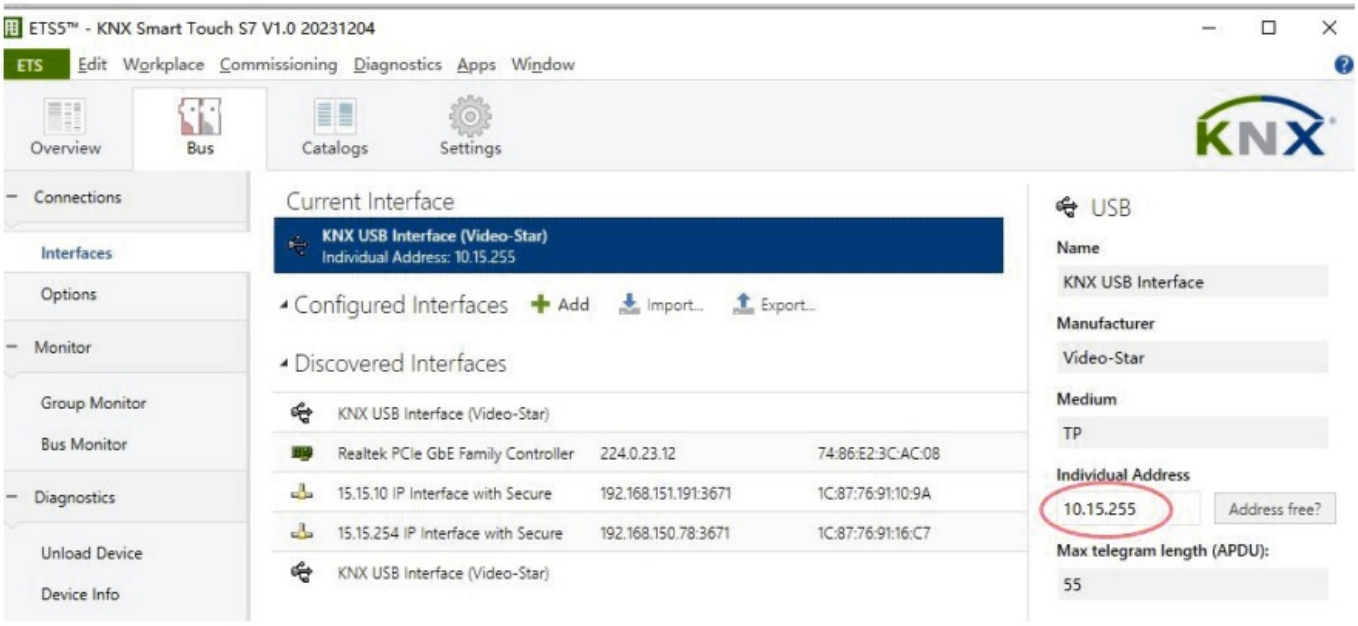


Fig.4.1 Bus connection window for ETS5--Individual address assignment (1)

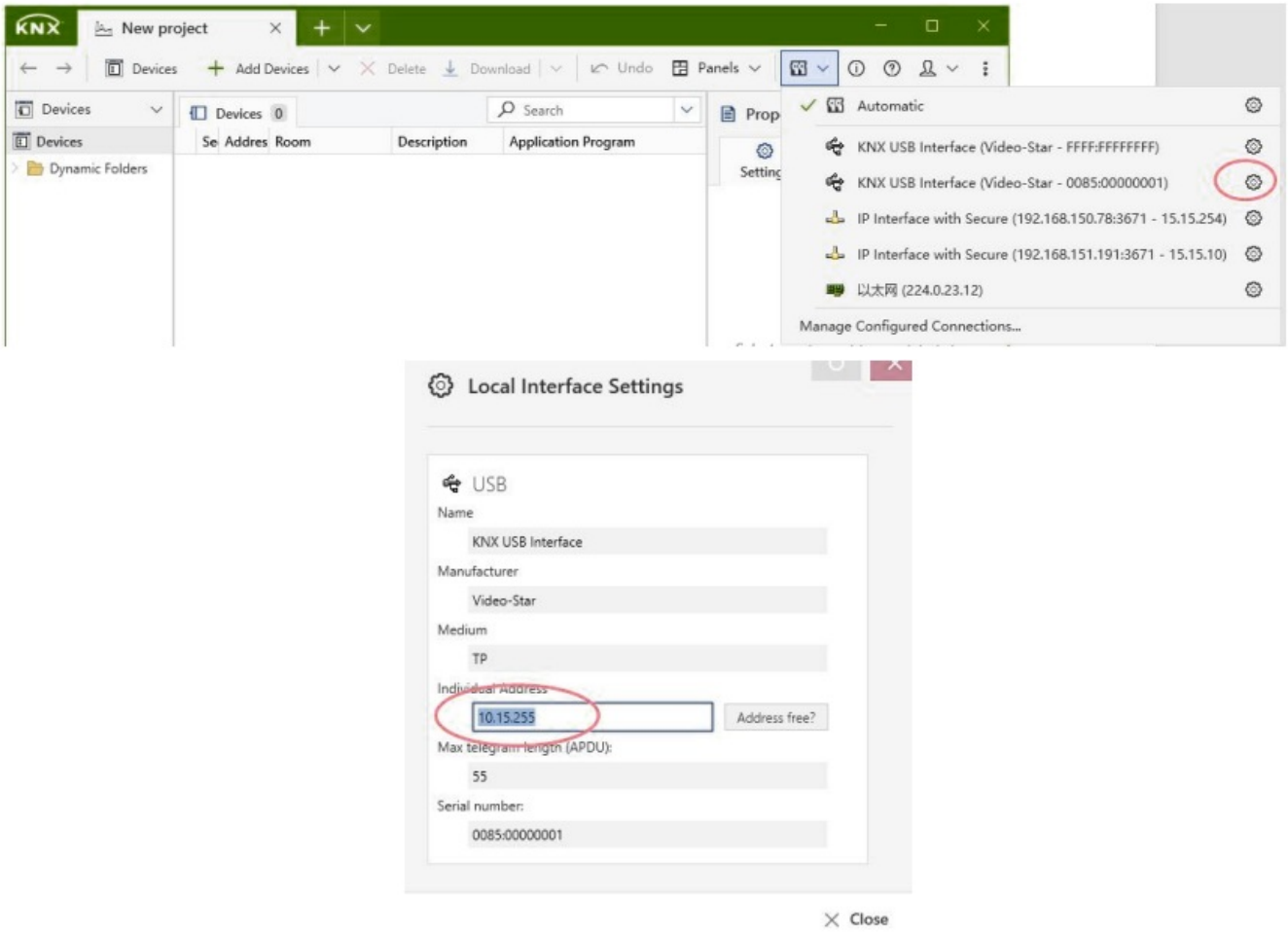


Fig.4.1 Bus connection window for ETS6–Individual address assignment (2)

- In general, in the KNX topology system, it is necessary to set the correct individual address for the device according to the topology location of the device in the ETS bus connection window in Figure 4.1.

The device has an ETS database and can be used with ETS 5 or above version. But the device has not an application program, so there won't be parameters and objects in the database. The database is mainly convenient for us to add the device to a project and set itself individual address(as shown in Figure 4.2 below), to clarify the topological location or line where the device is located.

Note: The database cannot be used to program the individual address, and the individual address can only be modified via the bus connection window of the ETS.

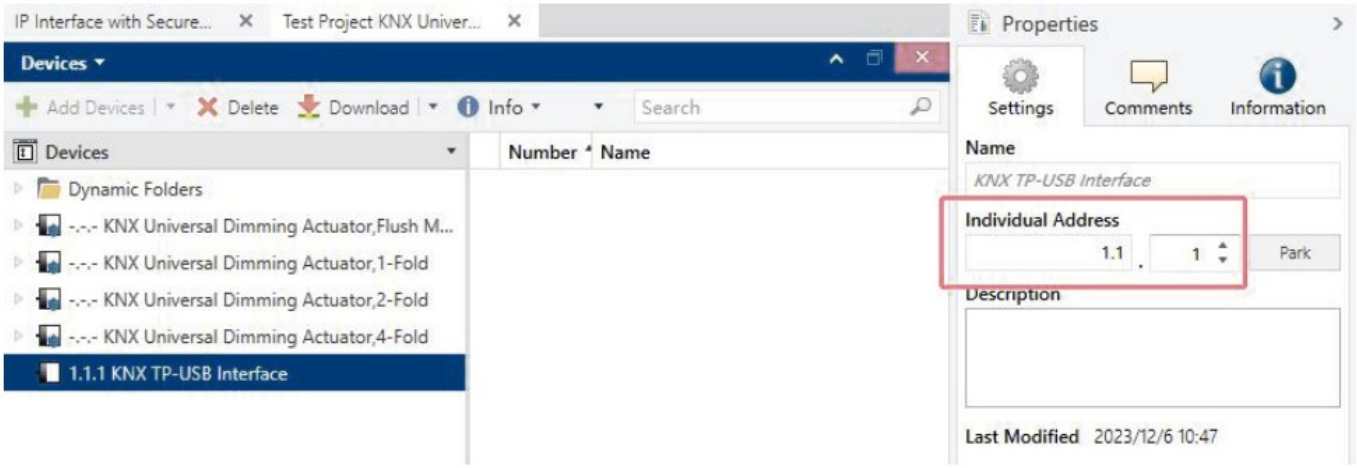


Fig.4.2 ETS project properties window–setting the desired individual address

FAQs

Q: Can the KNX TP-USB Interface be disassembled?
A: No, it is not recommended to disassemble the device as per the instructions provided in the user manual.

Q: What is the default individual address of the KNX TP-USB Interface?
A: The default individual address is 10.15.255, but it can be changed using the ETS software.

Documents / Resources

	GVS BNTP-USB/00.1 KNX/EIB Home and Building Control System [pdf] User Manual BNTP-USB-00.1, BNTP-USB 00.1 KNX EIB Home and Building Control System, BNTP-USB 00.1, KNX EIB Home and Building Control System, Home and Building Control System, Building Control System, Control System, System

References

- User Manual