K-BUS®

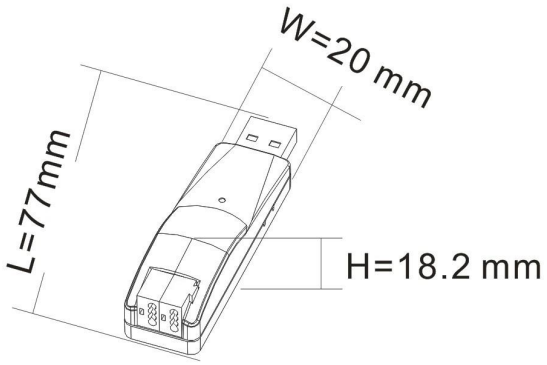
Technical Sheet For KNX TP-USB Interface

BNTP-USB/00.1

CE KNX

The worldwide STANDARD for home and building control

DIMENSIONS



Model	Dimension	Weight
BNTP-USB/00.1	18×20×77mm	0.1kg

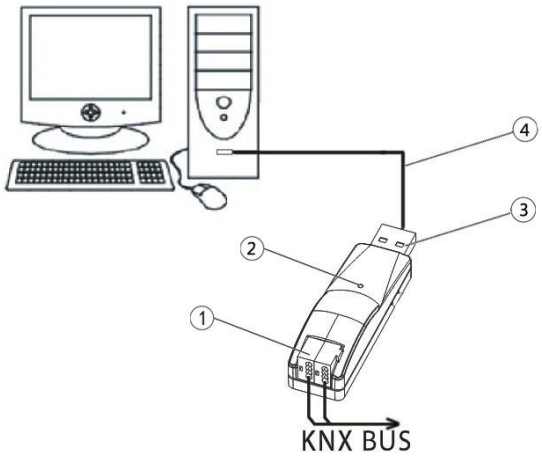
CHARACTERISTICS

The KNX TP-USB Interface is used for facilitating communication between the PC and the KNX system, in order to configure, parameterize and commission the KNX installation as well as bus monitor using the ETS (ETS5 or later) software.

The KNX TP-USB Interface has not an application program, and its physical address is able to be allocated in the individual address field of the bus connection window of the ETS. The factory default physical addresses are 10.15.255 and default serial number 0085:00000001

The KNX TP-USB Interface supports extended frames and long messages with up to 55 bytes APDU length. Due to HID profile support, no specific USB driver is required. The protocol used for communication between interface and host is the flexible “cEMI”protocol.

DESCRIPTIONS



① KNX bus connection terminal

② The green LED lights up as soon as the USB interface and PC are connected and ready for operation. It flashes mean that there is communication between the USB interface and PC. The red LED lights up as soon as the USB interface and KNX bus are connected and ready for operation. It flashes mean that there is telegram traffic on the bus.

③ USB serial ports connection terminal

④ USB extension cable

PARAMETERS

Power supply	Bus voltage	21~30V DC, via the KNX bus
	Bus current	<3.5mA/24V, <3mA/30V
	Bus consumption	<90mW
	USB voltage	5V DC
	USB current	<100mA
	USB consumption	<500mW
	Total	<600mW, USB and KNX
Interface	USB Standard 2.0	
Connections	KNX	Bus connecting terminal
	PC-connection	Via USB socket type A
		Max.cable length 5m
		(standardized)
Display	Green LED ON, PC connection indicator	
	Green LED flash, traffic indicator between PC and device	
	Red LED ON, KNX connection indicator	
	Red LED flash, telegram traffic indicator on the bus	
Temperature	Operation	– 5 °C ... + 45 °C
	Storage	–25 °C ... + 55 °C
	Transport	– 25 °C ... + 70 °C
Ambient	Humidity	<93%, except dewing
Mounting position	As required	

INSTALLATION FIGURE

The extremely compact design enables the USB interface appearance as USB flash disk as small, delicate, and portable. So it can be installed in many positions according to user requirements. Must ensure that the device operation, testing, detecting, maintenance correctly before installing.

IMPORTANT INFORMATION

Installation and commissioning of the device may only be carried out by trained electricians. The relevant standards, directives, regulations and instructions must be observed when planning and implementing the electrical installation.

- Protect the device against moisture, dirt and damage during transport, storage and operation!
- Do not operate the device outside the specified technical data (e.g. temperature range)!

Should the device become soiled, it may be cleaned with a dry cloth. If this does not suffice, a cloth lightly moistened with soap solution may be used. On no account should caustic agents or solvents be used.

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K-BUS®

KNX USB 接口技术规格书

适用型号：
BNTP-USB/00.1

国际标准的家庭和楼宇控制系统

CE KNX

产品功能

KNX USB 接口用于实现 PC 与 KNX 系统之间的通讯，以便使用计算机中的 ETS 软件(版本 ETS5 及以上版本）给 KNX 装置分配物理地址，配置参数，对 KNX 装置进行调试，及总线监控。

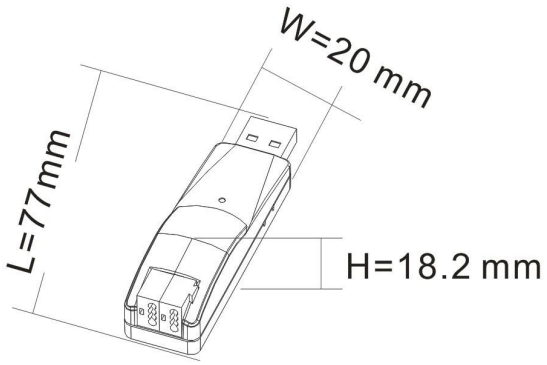
此设备没有应用程序。通过 ETS 软件的总线接口连接界面可以直接给此设备分配物理地址，出厂默认的物理地址是 10.15.255，及默认序列号是 0085:00000001。

KNX USB 接口支持扩展帧和 APDU 长度高达 55 字节的报文。由于 HID 配置文件支持，不需要特定的 USB 驱动程序。用于接口和主机之间通信的协议是灵活的“cEMI”协议。

技术参数

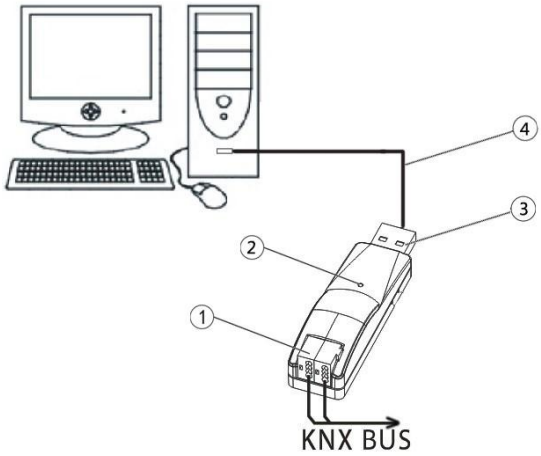
电　源	总线电压	21~30V DC，由总线提供
	总线电流	<3.5mA/24V, <3mA/30V
	总线功耗	<90mW
	USB 电压	5V DC
	USB 电流	<100mA
	USB 功耗	<500mW
	KNX 和 USB 总功耗	<600mW
通讯接口	标准 USB2.0 接口	
连　接	KNX	KNX 总线连接端子(黑/红)
	计算机	A 型 USB2.0 接口 标准的 USB 延长线最大长度 5m
指示	绿色 LED 亮	指示设备与 PC 连接正常
	绿色 LED 闪	指示设备与 PC 进行通讯
	红色 LED 亮	指示设备与 KNX 总线连接正常
	红色 LED 闪	指示总线上有报文传输
温度范围	运行	− 5 °C ... + 45 °C
	存储	−25 °C ... + 55 °C
	运输	− 25 °C ... + 70 °C
环境条件	湿度	<93%,结露除外
安装位置	根据需要	

尺寸规格



型号	尺寸	重量
BNTP-USB/00.1	18×20×77mm	0.1kg

接线图



说明

① KNX 总线连接端子

② 设备上绿色的 LED 指示设备与 PC 连接正常，当设备与 PC 进行通讯时，绿色 LED 会闪烁；红色 LED 指示设备与 KNX 总线连接正常，当总线上有报文时，红色 LED 会闪烁。

③ USB 接口

④ USB 延长线

安装说明

KNX USB 接口设计紧凑，外观如 U 盘一样小巧，精致，轻便易携。因此，根据使用需要可以安装在很多地方。安装时必须确保设备操作、测试、检测、维护、维修正确无误。

重要提示

安装和调试设备只能由合格的熟练电工来操作。在计划与实施电气安装的过程中，相关的标准、指令、规则和指示都要严格执行。

- 需要避免器件在运输、储存、使用的过程中受潮、脏污以及受损。
- 不要使器件运行在指定的技术指标之外（例如温度范围）。

当设备脏污时，只可以使用干燥的布来清洁。如果这样不足以清洁干净,可以使用湿布蘸少许肥皂溶液轻轻擦拭。绝不能使用碱剂或者腐蚀性溶剂。

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