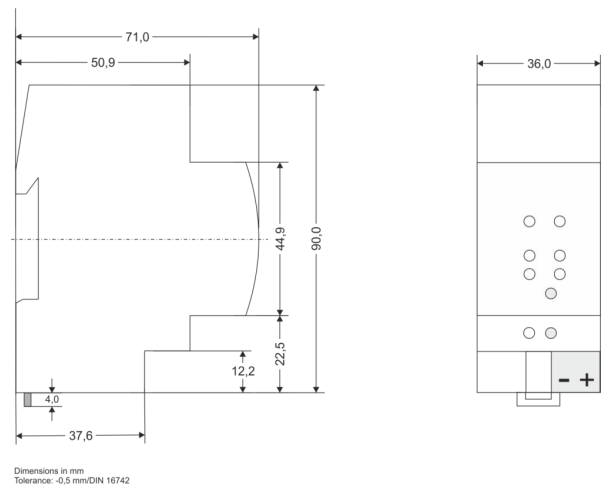


Technical Sheet For EIB/KNX IP Router

BNIPR-00/00.1



The worldwide STANDARD for home and building control



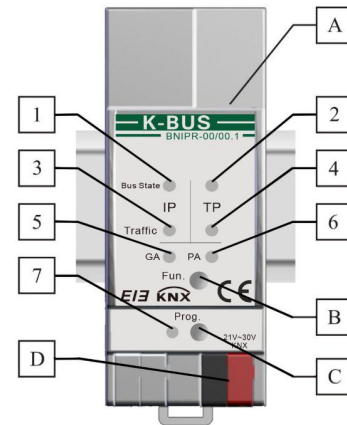
CHARACTERISTICS

The IP Router can be used as line or backbone coupler. It provides a data connection between the upper KNXnet/IP line (main line or backbone) and the lower TP KNX bus line (sub line). The basic functionality of the IP Router is to couple the Ethernet with one or more KNX-TP lines. The IP Router features a galvanic isolation between the Ethernet and the KNX-TP line(s). Due to its flexibility the IP Router can be used as a line coupler e.g. to connect several KNX TP lines via Ethernet. And it can be used as a backbone coupler to connect several TP areas or different TP installation systems via Ethernet.

The main task of the IP Router is filtering the traffic according to the installation hierarchy. For group oriented communication the traffic is filtered according to the built-in filter tables.

With the ETS or any other KNX compatible commissioning tool the IP Router can be used as the programming interface. For this purpose the device provides up to 4 additional physical addresses that can be used for tunneling.

DESCRIPTIONS



PARAMETERS

Power supply	Operation voltage	21-30V DC, via the EIB bus
	Current consumption,EIB	<40mA
Connections	KNX/EIB	EIB bus connection terminal
	LAN	RJ45 socket for 100 Mbit and 10 Mbit BaseT, IEEE 802.3 networks
Operation and display	LED Bus State LAN green	LED Bus State LAN red
	LED Bus State KNX green	Function button
	LED Traffic KNX green	LED Traffic KNX red
	LED Traffic LAN green	LED Traffic LAN red
	LED PA green	LED PA yellow
	LED GA green	LED GA red
	Programming button	Programming LED

Temperature	operation	-5 °C ... + 45 °C
	storage	-25 °C ... + 55 °C
	transportation	- 25 °C ... + 70 °C
Ambient	Humidity	5~93%, except dewing
Design	Standard 35mm DIN rail installation	
Housing	Plastic PA66 housing grey	

DIMENSIONS

Model	Dimension	Weight
BNIPR-00/00.1	36 x 90 x 71 mm	0.1kg

- ① LED Bus State LAN-- green on: LAN line ok; green off: LAN line error or not connected; red on: manual overwrite active ② LED Bus State KNX-- green on: KNX line ok; green off: KNX line not connected ③ LED Traffic on LAN-- green blinking: bus traffic on LAN line ; green off: no traffic on LAN line, red blinking: transmission error on LAN line. ④ LED Traffic on KNX-- green blinking: routed bus traffic from KNX line to LAN; green off: no traffic routed; red blinking: transmission error on KNX line. ⑤ LED GA (Group Address): off: LAN and KNX different; green: filter table active; green and red: route all; red: block ⑥ LED PA (Physical Address): off: LAN and KNX different; green: filter table active; green and yellow: route all; yellow: block ⑦ Programming LED: Red on: device in boot mode or addressing mode ; red blinking: LAN line error. ⑧ Ethernet connector ⑨ Function button: Switch to manual override via long operation (3s) ⑩ Programming button ⑪ KNX-Bus connection

INSTALLATION FIGURE

The devices are suitable for installation on the distribution boards with 35mm mounting rail which complies with DIN EN 60715 or a small box in order to facilitate quick installation of the device. Must ensure that the device operation, testing, detecting, maintenance correctly.

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)!
- The device may only be operated in closed enclosures (e.g. distribution boards).

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.

适用型号：
BNIPR-00/00.1

国际标准的家庭和楼宇控制系统



产品功能

IP 路由器可用作线耦合器或骨干耦合器。它提供了在 KNXnet/ IP 线路（主线或骨干线）和 TP KNX 总线（支线）之间的数据连接。IP 路由器的基本功能是把以太网跟一个或多个 KNX-TP 总线耦合。IP 路由器在以太网和 KNX-TP 总线之间采用了电隔离。由于其灵活性，IP 路由器可被用作一个线耦合器，例如通过以太网连接多条 KNX TP 总线。它也可以用作一个骨干耦合器，通过以太网连接多个 TP 区域或不同的 TP 安装系统。

IP 路由器的主要任务是根据安装层级过滤通讯报文。IP 路由器提供了一个过滤表，所有存在于过滤表中的组报文，它们将按路线传送，否则被阻止，从而减少总线负荷。

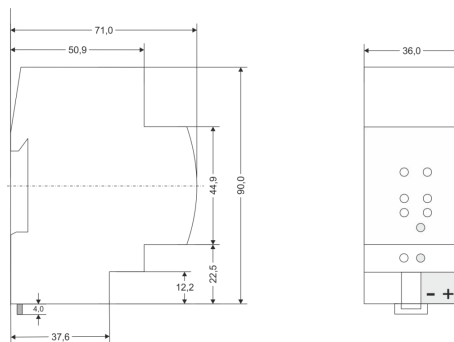
在 ETS 或任何其他 KNX 兼容的调试工具中，IP 路由器可被用作编程接口。鉴于此目的，此设备提供了多达 4 个额外的物理地址，可用于通道。

IP 路由器支持 KNXnet/IP, ARP, ICMP, IGMP, HTTP, UPnP 发现, UDP/IP, TCP/IP, DHCP 和 自动 IP。

技术参数

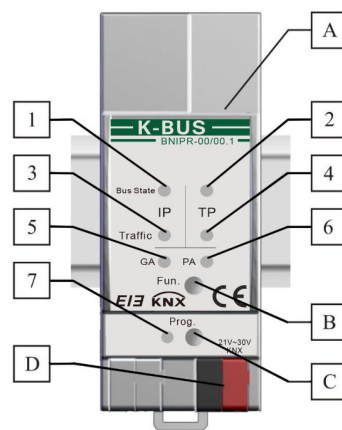
电 源	工作电压	21-30V DC, 通过总线获取
	总线电流	< 40mA
连 接	KNX/EIB	EIB 总线连接端子
	LAN	RJ45 端口 10/100Base-T, IEEE 802.3 网络, 自适应
操作与指示	Bus State LAN LED	绿色: LAN 连接 ok; 绿灭: LAN 错误或未连接; 红色: 手动操作激活
	Bus State KNX LED	绿色: KNX 连接 ok; 绿灭: KNX 未连接
	Traffic LAN LED	绿闪: 报文在 LAN 中传输; 绿灭: 无报文传输; 红闪: LAN 中有传输错误
	Traffic KNX LED	绿闪: 在 KNX 和 LAN 之间有报文通讯; 绿灭: 没报文路由; 红闪: 在 KNX 线上有传输错误。
	GA LED	灭: LAN 和 KNX 的组报文设置不同; 绿色: 路由过滤表中的组地址报文; 绿和红: 路由所有; 红色: 阻止
PA LED	灭: 主线和支线的物理地址报文设置不一样; 绿色: 路由过滤表中的物理地址报文; 绿和黄: 路由所有物理地址报文; 黄色: 阻止	
	编程按钮和 LED	给设备分配物理地址
功能按钮	长按 3s 切换到手动操作或退出	
温度范围	运行	-5 °C ... + 45 °C
	存储	-25 °C ... + 55 °C
	运输	- 25 °C ... + 70 °C
环境	湿度	5~93%, 结露除外

尺寸规格



型号	尺寸	重量
BNIPR-00/00.1	36 x 90 x 71 mm	0.1kg

接线图



说明

- | | |
|---------------------|-------------------|
| ① Bus State LAN LED | ⑦ 编程 LED |
| ② Bus State KNX LED | Ⓐ LAN 端口 |
| ③ Traffic LAN LED | Ⓑ 功能按钮 |
| ④ Traffic KNX LED | Ⓒ 编程按钮 |
| ⑤ GA LED | Ⓓ EIB /KNX 总线连接端子 |
| ⑥ PA LED | |

安装说明

此设备为了方便快速安装到配电箱或小盒子里面，根据 EN 60715 系列设计成模块化安装设备，能安装在 35 毫米丁导轨上。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）。
- 器件只可以运行在封闭的环境中（例如配电箱）。

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。