

Interface between IP and KNX

Application area

The KNXnet/IP interface is used to connect a PC (e.g. BMS server, visualization, ETS, ...) to the KNX network. The connection is made through LAN (IP). The IP address can be retrieved from a DHCP server or it can be configured manually (ETS).

This device works according to the KNXnet/IP specification using the parts core, device management and tunnelling.

Address allocation

The KNXnet/IP interface device supports up to 5 connections simultaneously. An additional physical address has to be reserved for every connection.

The first additional physical address is allocated to the connection in the ETS. The remaining additional addresses can be assigned directly at the device by pressing the learn button for at least one second. The automatic address allocation is performed as follows: connection 2 contains the next higher address from connection 1, connection 3 the next higher from connection 2 etc.

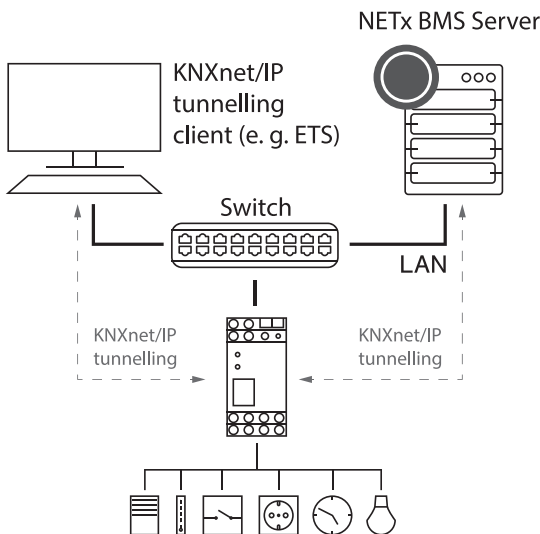
For example:

Connection 1 uses the additional individual address 15.15.250. Connection 2 is automatically set to 15.15.251, connection 3 is 15.15.252, connection 4 is 15.15.253 and connection 5 is 15.15.254. The assignment of the additional individual addresses is shown by a fast blinking learn led.

Note: It is necessary to check whether the additional individual addresses are unused before they are assigned.

For new devices (i.e. in the factory settings state), only the additional individual address of the first connection is active with the address 15.15.250. To support multiple concurrent connections the additional address assignment is required.

Typical application



Technical data

Electrical safety

- Protection (EN 60529): IP 20
- Complies with EN 50491-3
- Safety extra low voltage SELV DC 24 V

EMC requirements

- Complies with EN 61000-6-2, EN 61000-6-3, EN 50491-5-1, EN 50491-5-2 and EN 50491-5-3

Environmental requirements

- Ambient temp. operating: - 5 ... + 45 °C
- Ambient temp. Non-op.: - 25 ... + 70 °C
- Rel. humidity (non-condensing): 5 % ... 93 %

Certification

- KNX

CE norm

- Complies with the EMC regulations (residential and functional buildings) and low voltage directive

Physical specifications

- Housing: Plastic
- DIN rail mounted device, width: 2 units
- Weight: approx. 100 g

Operating controls

- Programming button for KNX

Indicators

- Programming LED (red)
- Signal-LED (green) for KNX
- Signal-LED (green) for LAN

Ethernet

- 10BaseT (10Mbit/s)
- Supported Internet protocols ARP, ICMP, IGMP, UDP/IP, TCP/IP, DHCP and Auto IP
- Up to 5 KNXnet/IP tunneling connections simultaneously

Power supply

- External supply 12-24 V AC / 12-30 V DC
- Alternative: "Power-over-Ethernet"
- Power consumption: < 800 mW

Connectors

- KNX connection terminal
- LAN RJ-45 socket
- Screw connector for power supply