



## KNX IP-Router

### IP-Network Interface

#### Product description

The IP-Router is the interface between KNX-bus and IP network. It can be used as line or backbone coupler using the LAN network as backbone. Inside the ETS (from version 3.0d) the IP-Router can be used as interface to programme KNX-devices and for diagnostics via LAN. The device uses the KNXnet/IP protocol. The connection to the KNX line is done via bus connection block, the connection to the IP network via RJ45 jack. The IP-Router needs an additional supply voltage. This can either be done via POE (power over ethernet) or via power supply 24V AC or DC.



#### Security advices

- Electrical connection and startup operations shall only be done by electrically skilled persons.
- For installation, assemblage, operating and accident prevention please comply to the regional regulations.
- Connection and maintenance operation might only be done, in not energized condition.
- If safe operation is not possible, the device must not be started up or has to be disabled.
- The device shall only be applied for normal use and according to the specified technical data.

#### Configuration

- Configuration by ETS version 3.0f or higher of the KNX Association.
- By pushing the programming button A2, the programming mode is switched on and off. The programming LED A1 shows the mode. The physical address can only be programmed when the LED is switched on.

#### Starting-up

- Check device, clamps and connections.
- Switch on the power supply and the bus voltage and check the LED states.
- Mount all covers; apply special labels, if necessary; update the technical documentation.

#### Advices

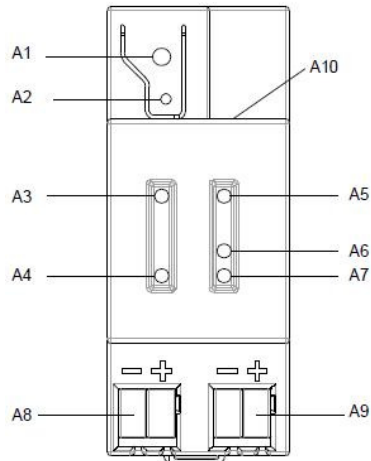
- For proper function of the IP-Router as line or backbonecoupler (KNXnet/IP Routing) all network components have to support IP multicasting.
- Especially network/LAN routers have to be assembled that way, that IP multicast datagrams are forwarded.
- For KNXnet/IP routing the IP multicast address 224.0.23.12 has been reserved international.

#### Technical Data

<b>KNX-Bus</b>	<b>Nominal voltage</b>	24V DC (21-30V DC)
<b>Supply voltage</b>	<b>Power consumption via POE</b>	max. 10mA (bei 29V DC) 48V DC (IEEE 802.3af) Max. 0,8W
	<b>External voltage</b>	24V AC/ DC nominal (AC: 12-24V, DC: 12-30V) max. 1,7W (57mA at 24V DC)
<b>Network-communication</b>	<b>Ethernet supported Internet Protocols</b>	10BaseT (10 Mbit/s) ARP, ICMP, IGMP, UDP/IP, DHCP, AutoIP
	<b>KNXnet/IP according to KNX- system specification</b>	Core, Routing, Tunneling Device Management
<b>Connections</b>	<b>KNX-Bus</b>	0,6-0,8 mm <sup>2</sup> single wire (red-black connection block)
	<b>Supply voltage</b>	0,6-0,8 mm <sup>2</sup> single wire (white-yellow connection block)
	<b>Ethernet/ IP network</b>	RJ45 jack
<b>Environment</b>	<b>Operation environment</b>	-5° to +45° C
	<b>Storage environment</b>	-25 °C to +70 °C
	<b>Relative humidity</b>	5 to 93 % non-condensing
<b>General</b>	<b>Potection</b>	IP 20
	<b>Degree of pollution</b>	2
	<b>Installation</b>	on DIN rail 35 mm
	<b>Dimensions</b>	2 SU 36 x 90 x 55 mm (WxHxD)
	<b>Weight</b>	approx.. 105g



## Location and function of the display and operator elements



- A1 LED red: indicating normal operating mode (LED off) and addressing mode (LED on)
- A2 learning button for switching between normal operating mode and addressing mode for receiving the physical address
- A3 LED green: Operation
- A4 LED yellow: data transmission on bus line (Line)
- A5 LED green: Ethernet Link signal (Lk)
- A6 LED yellow: Ethernet Receive signal (Rx)
- A7 LED red: Ethernet Transmit signal (Tx)
- Note  
When the learning button (A2) is pressed, this LED signals for 10 seconds how the IP address was assigned to the device:  
1x flashing: fixed IP address  
2x flashing: DHCP  
3x flashing: AutoIP
- A8 extra low-voltage bus terminals (red-black)
- A9 extra low-voltage terminals (yellow-white)
- A10 RJ45 socket for data network cable