

IP router

Ref.-no.: IPR 300 SREG

Operating instructions

1 Safety instructions



Electrical equipment may only be fitted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

These instructions are an integral part of the product and must remain with the end customer.

This product is only intended for use in dry rooms.

2 Device components

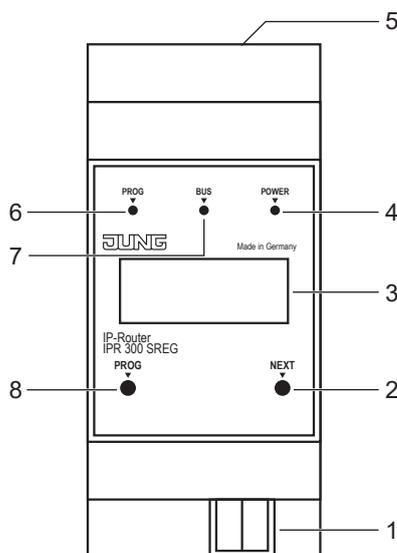


Fig. 1: Device components

- (1) KNX connection
- (2) NEXT button
- (3) Display
- (4) POWER LED
- (5) LAN connection
- (6) PROG LED
- (7) BUS LED
- (8) PROG button

3 Function

System information

The device can be updated. Firmware can be easily updated.

The device is KNX Data Secure capable. KNX Data Secure offers protection against manipulation in building automation and can be configured in the ETS project. Detailed specialist knowledge is required. A device certificate, which is attached to the device, is required for safe commissioning. During mounting, the certificate must be removed from the device and stored securely.

Planning, installation and commissioning of the device are carried out with the aid of the ETS, version 5.7 and above.

Intended use

- Connection between KNX devices and PC or other data processing devices via IP
- Operation as KNX area/line coupler or data interface
- Mounting on DIN rail according to EN 60715 in distribution boxes

Product characteristics

- KNXnet/IP routing for communication between KNX lines, areas and systems via IP network
- Support of KNX Data Secure from ETS version 5.7 upwards
- Support of KNX IP Secure from ETS version 5.7 upwards
- Telegram forwarding and filtering according to physical address or group address
- Max. 48 telegrams per second in IP secure mode
- LED display for KNX communication, Ethernet communication and programming mode
- Configuration via ETS, Telnet or software tool
- SNTP server, buffered
- Commissioning with display support
- Max. 8 connections to IP terminal devices, e.g. for simultaneous visualisation and configuration
- Outage message of the KNX system to the IP system
- Electrical isolation between KNX and IP network
- Power consumption max. 1 W

4 Information for electrically skilled persons**Installation and electrical connection****DANGER**

Electrical shock on contact with live parts in the installation environment.

Electrical shocks can be fatal.

Before working on the device, disconnect the power and cover live parts in the area!

Mounting

Mount IP router on DIN rail according to EN 60715 in distribution boxes.

Connection

Requirements:

- one Ethernet connection with 10/100 Mbit
- one KNX/EIB bus connection

For position of the connections see device components.

- Connect LAN and KNX.

5 Commissioning**Switching on**

After connecting, the device is switched on automatically. The product name and assigned IP address appear on the display when switching on.

Boot procedure

The automatic boot procedure starts after switching on. The green POWER LED flashes during the assignment of the IP address.

The IP address of the device appears in the display at the end of the boot procedure.

6 Operation

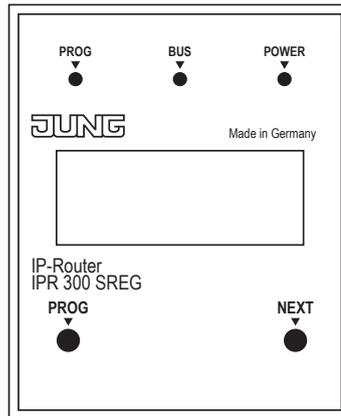


Fig. 2: Operation

Display

The display switches itself off automatically after one minute.

Switching on display:

- Press NEXT button.

Scrolling through menu:

- Press NEXT button repeatedly while the display is switched on.

Menu structure:

- Page 1:
Displaying the firmware version, IP address, physical address, serial number and tunnel connections used
- Page 2:
Displaying all IP settings
Displaying the boot-up time
- Page 3:
Information on the telegram rate
- Page 4:
Displaying the FDSK (Factory Default Setup Key)
This is only displayed if the device is still in the delivery state.
- Page 5:
Displaying the Data Secure FDSK (Factory Default Setup Key)
This is only displayed if the device has not yet been set to secure mode.
- Page 6:
Displaying the device time
This is only displayed if the device has loaded the additional application.

LED displays

There are three LEDs on the front of the device. The LEDs indicate the following device statuses during operation:

- PROG LED lights up red:
Device is in programming mode.
- BUS LED flashes yellow:
Device bus is active.
- POWER LED lights up green:
Device is ready for operation.

There are two other LEDs next to the LAN connection. The LEDs indicate the following device statuses during operation:

- green LED:
Connection to another IP device or switch is established.
- yellow LED:
IP data transfer is active.

Programming mode

Program device:

- Press PROG button.
PROG LED lights up red.

Program product application:

- Press the PROG button again.
PROG LED flashes red.

Terminate programming mode:

- Press the PROG button again.

Master reset

- Ensure that the device is switched off (disconnect bus voltage and power supply).
- Press PROG button, hold it and connect device.
Device switches on.
- Hold PROG button until PROG LED flashes slowly (approx. 1 Hz).
- Release PROG button.
- Press PROG button again and hold it until PROG LED flashes fast (approx. 4 Hz).
The master reset starts.
- Release PROG button.

7 Configuration

The device is configured via parameters in the ETS product database.

You can find detailed information about the configuration or parameterization of the device in the product documentation. The product documentation is available for downloading on our website.

KNX IP Secure and KNX Data Secure

Requirements:

- Safe commissioning activated
- FDSK entered/scanned or device certificate added

Configuration of KNX IP Secure:

- Activate secure tunnelling.
- Define a password for each tunnel (max. 8 tunnels).
- Define a password for commissioning and authentication code.

 Document all passwords and store them securely.

8 Technical data

Rated voltage KNX	DC 21 ... 32 V SELV
KNX connection	Connection terminal
Current consumption	max. 20 mA
Power consumption	max. 1 W
IP communication	Ethernet 10/100 BaseT (10/100 Mbit/s)
IP connection	1 x RJ45
Resolution	128 x 64, OLED display
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Relative humidity	max. 95 %
Installation width	36 mm (2 rail units)

9 Warranty

The warranty follows about the specialty store in between the legal framework as provided for by law.