

BSMART

TECHNICAL DOCUMENT

KNX IP RTI



KNX IP RTI

DATA SHEET

Compact bus powered interface between LAN/Ethernet and KNX bus



Application area

The KNX IP RTI is used as Interface for connecting to KNX both on telegram level (KNX net/IP Tunneling) and on data point level (KNX Application Layer). Clients can directly access Group Objects via either a Binary Protocol (over TCP/IP or UDP/IP) or via JSON (Java Script Object Notation) Web Services.

The device is configured with the ETS and supports up to 250 Group Objects. 10 simultaneous client connections are supported.

RTI is an acronym for “Bus Access and Object Server”.

It is possible to connect to the KNX bus everywhere over LAN. Bus connection over the internet with KNX IP RTI is also possible. The device supports 5 simultaneous KNX net/IP tunneling connections.

The buttons are for diagnostic purposes. The LEDs indicate the operating status and communication errors on the bus. Power is supplied via the KNX bus.

Technical Specification

Electrical safety

- Protection (acc. EN 60529): IP 20

CE marking according to

- EMC directive 2014 / 30 / EU
- RoHS directive 2011 / 65 / EU
- EN 63044-3: 2018
- EN 50491-5-1: 2010
EN 50491-5-2: 2010, EN 50491-5-3: 2010
- EN 61000-6-2: 2005
EN 61000-6-3: 2007 + A1: 2011
- EN 63000: 2018

Environmental requirements

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

Mechanical data

- Housing: plastic (PC)
- DIN rail mounted device, width: 1 units (18 mm)
- Weight: approx. 40 g

Controls and indicators

- 2 buttons and 3 LEDs, multicolor
- KNX programming button with LED (RD)

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
- KNX BAOS Binary Protocol V2.0
- KNX BAOS Web Services (JSON)

KNX

- Medium TP
- Interface protocol: cEMI
- Max. APDU length: 55
- Object Server: BAOS V2
- Device model: System B

Power Supply

- KNX Bus approx.15 mA

Connectors

- Bus connector for KNX (RD / BK)
- LAN RJ-45 socket

Installation Instructions

- The device may be used for permanent interior installations in dry locations, within distribution boards or small casings with DIN rail.



WARNING

- The device must be mounted and commissioned by an authorized electrician.
- The prevailing safety rules must be heeded.
- The device must not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.