

KNX Line Coupler Secure



Product Code	ITS901-1102
Power Supply	KNX TP Main Line 21...30 V DC KNX TP Sub Line 21...30 V DC
Current Consumption	Approx. 5 mA Main Line Approx. 3 mA Main Line
Connections	KNX TP Main Line KNX TP Sub Line
Mode of Commissioning	S-Mode
Max. APDU Length	233
Type of Protection	IP 20
Maximum Air Humidity	< 93 RH
Temperature Range	Operation (-5°C...45°C) Storage (-25°C...70°C)
Color	Light Grey
Dimensions	90.7 x 17.8 x 61.7 mm (H x W x D)
Configuration	Configuration with ETS

DESCRIPTION

ITS901-1102 KNX Line Coupler Secure is designed to interconnect two KNX TP bus lines (main line and sub line) while providing galvanic isolation between them. Depending on the configuration and the assigned individual address, the device can operate as a KNX line coupler, area coupler, or repeater (without telegram filtering).

The coupler reduces the bus load by filtering telegram traffic according to its position in the KNX system topology and by using ETS-generated filter tables for group-oriented communication.

The device supports long telegrams (up to 240 bytes APDU length) and offers extended commissioning and diagnostic capabilities.

For commissioning and troubleshooting purposes, the device provides a configurable manual operation function. This function can be activated via a single button press and automatically deactivates after a defined time period. During manual operation, telegram filtering can be temporarily bypassed.

Operational states, filtering modes, communication errors, and malfunction conditions are indicated by LED status indicators, while local buttons enable direct operation on the device.

The following manual functions are available:

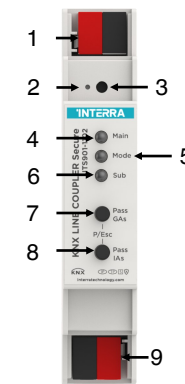
- Suppressing device configuration telegrams from the sub line.
- Suppressing individually addressed telegrams.
- Monitoring telegram traffic on the sub line.
- Enabling or disabling the filtering of group telegrams or physical address telegrams.
- Optional reduction of telegram retransmissions.
- Integrated diagnostic functions.

MOUNTING, COMMISSIONING AND SAFETY NOTES

- The device may only be installed and put into operation by a qualified electrician or authorized personnel.
- For planning and construction of electric installations the appropriate specifications, guidelines and regulations in force of the respective country have to be complied.
- For mounting only use an appropriate equipment according to IEC60715.
- Installation only in distribution boards and enclosed housings.
- Installation only on a 35 mm DIN rail (TH35).

- Connect the KNX bus line as for common KNX bus connections with a KNX bus cable, to be stripped and plugged into a KNX TP connector.
- Do not damage electrical insulations when connecting.
- Installation only in dry locations.
- Accessibility of the device for operation and visual inspection must be provided.
- For commissioning use the ETS.

CONNECTION DIAGRAM



1. KNX Bus Connector Main Line
2. KNX Programming LED
 - Red: Program Mode
3. KNX Program Button
4. Bus State KNX TP (Main line) LED
 - Green: Main line OK
 - Red: Manual Function active
5. Mode Status LED (Multicolor)
 - Green: Subline OK
6. Bus State KNX TP LED (Multicolor)
 - Green: Subline OK
7. Pass GAs Button
8. Pass IAs Button
9. KNX Bus Connector Sub Line