

RS485 Optical Isolator

Optical isolator supports bi-directional "half-duplex" transmission for RS485 networks. Optical isolator protects TapHome control unit when connecting Modbus RTU or other RS485 bus device to it. Use of optical isolator is obligatory if one of the conditions is met:

- External device is powered by other (typically its internal) power source and does not have galvanic or optical isolation
- TapHome module or other RS485 device device is connected to TapHome BUS, and the wire or device itself is outside of the lightning protection. This is the most common situation when when connecting TapHome modules in the garden house, or meteo station on the roof. In this case, also power source must be galvanically isolated - the easiest way is to use separate power source.

SLAVE side is external device MASTER side is protected device, typically TapHome Core control unit

The isolator must always be installed on the side of one of the protected devices (MASTER) - as close as possible to it. In order to achieve protection, SLAVE device must be powered by other power source than MASTER device (TapHome Core and Modules).

Features

- 2-way half-duplex transmission
- Transmission speed up to 1 Mbit
- Very fast 1-bit resolution path switching regardless of baud rate
- Indication of data transmission by means of LED diodes, with direction resolution
- ESD protection - SLAVE page, surge protection

Specifications

- Power supply: 9-24V AC / DC
- Current consumption: max. 60 mA
- Galvanic bus insulation: max. 1kV DC
- ESD protection: pulse max. 600W
- Transmission mode: bidirectional, half-duplex
- IP class: IP40
- Ambient temperature: -20-60 ° C
- Dimensions: 74 x 32 x 25 (mm) with terminals

