

STAR COUPLER STAR-10

Monitoring and Control Program

NU-17024E

Application

Star coupler STAR-10 provides connecting of distributed devices with optical communication in star configuration to one central unit. Depending upon position of switch S2, device can operate in two modes: The first mode interconnects data from five optical inputs to one RS485 (RS232C) communication line. The second mode interconnects data from four optical inputs CH1-CH4 to output CH0. Slave units connected to optical lines should have different addresses. If more than five optical lines are required, it is possible to connect up to 31 devices STAR-10 on one RS485 line. In this way, distributed star coupler is obtained with more optical inputs. Star coupler is intended for use in power and industrial plants and in other objects where fast and reliable data transfer is ensured in harsh environment.

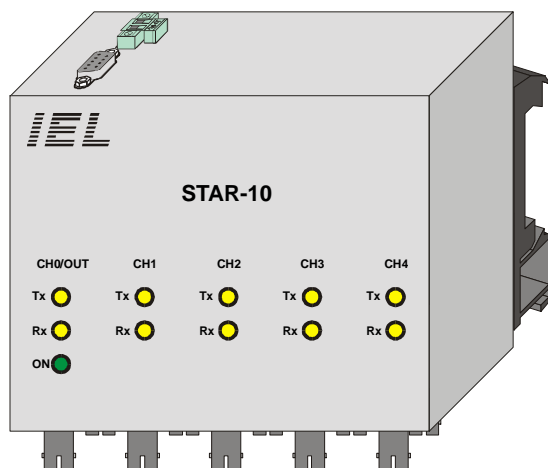


Figure 1. Star coupler STAR-10

Main features

- data transfer and media conversion independent of communication protocol
- cascading of up to 31 devices STAR-10
- data rate selection 9,6 kbps to 1,5Mbps by setting DIP-switch S1 for RS485
- indication of data transfer on optical lines
- line length up to 1500m for multimode 62,5/125 μ m optical cable (G.F.O.) or 50m for 980/1000 μ m multimode optical cable (P.F.O.)
- wide range of power supply voltages
- small dimensions, wall or DIN rail mounting

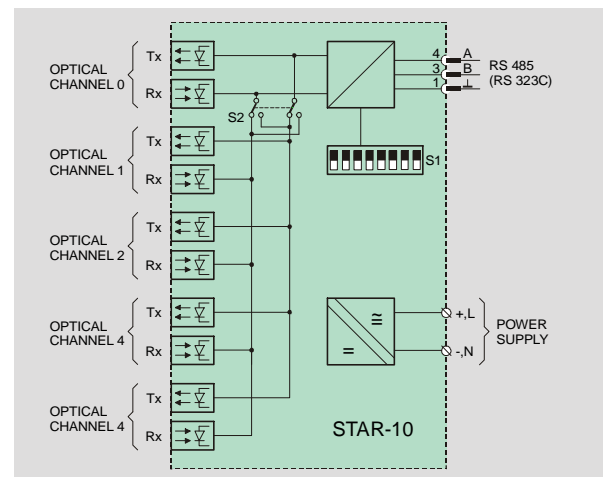


Figure 2. STAR-10 terminal diagram

Technical specifications

Optical inputs:

number.....4(5)
 optical cable.....multimode, 62,5/125 μ m (G.F.O.) or
 multimode, 980/1000 μ m (P.F.O.)
 wavelength.....820 nm or 660nm

RS485 input:

cable.....shilded twisted pair
 LiY-CY 2x0,75mm2

settings:

data rate.....9,6/19,2/38,4/57,6/115,2/
 187,5/500/1500 kbaud
 (DIP switch S1)

signalling:

Tx, Rx.....LED yellow/channel
 Power supply.....LED green

supply:

voltage.....24, 48, 110 or 220 VDC
 110 or 220 VAC
 consumption.....<3VA

connection:..9-pin SubD connector for RS485,(RS232C)
 ST connectors for optical cable (G.F.O.)
 snap-in connectors for optical cable (P.F.O.)
 2x2,5mm2 plug-in connector for supply

temperature range:.....-10 $^{\circ}$ C..+50 $^{\circ}$ C

extended temperature range:.....-20 $^{\circ}$ C..+60 $^{\circ}$ C

mechanical data:

mounting.....on DIN rail or on the wall
 dimensions.....115 x 110 x 65 mm