



Fig. 13/57 RS232 – FO converter

### Function overview

- Serial baud rates up to 115 kbaud
- No setting of baud rate necessary
- Protocol transparency
- Light idle state: Light ON/light OFF selectable
- Distance: 3 km with 62.5/125  $\mu$ m FO cable
- Wide-range power supply with self-supervision function and alarm contact
- Supports the serial TxD and RxD lines of the RS232 interface.
- No handshake lines supported

### Description

The RS232 – FO converter is used to convert serial RS232 signals to FO transmission signals in full duplex mode. It has one FO channel for transmission and one for receiving, as well as a protected RS232 interface rated to withstand 2 kV discharges, thus allowing direct connection to the serial system interface of SIPROTEC relays. It is designed to be used in substations for isolated, interference-free transmission of serial signals to a central unit, a star coupler or a PC.

The converter supports the conversion of serial TxD (transmit) and RxD (receive) signals to an optical output. No handshake signals are supported.

## Application, construction

### Application

With the serial RS232 – FO converter, an existing RS232 interface at a SIPROTEC relay can be upgraded to an optical 820 nm interface to connect the relay with further optical components for central and remote interrogation with DIGSI. Another application is the interfacing between a line differential relay and a communication network, which provides electrical RS232 inputs. The connection between the communication room, where the converter is located, and the relay is executed without interference via multi-mode FO cables (Fig. 13/58).

### Construction

The converter is provided with a snap-on mounting housing for a 35 mm EN 50022 rail. Auxiliary power supplies can be connected via screw-type terminals. The fiber-optic cables are connected by ST connectors. The unit is free of silicone and halogen as well as flame-retardant.

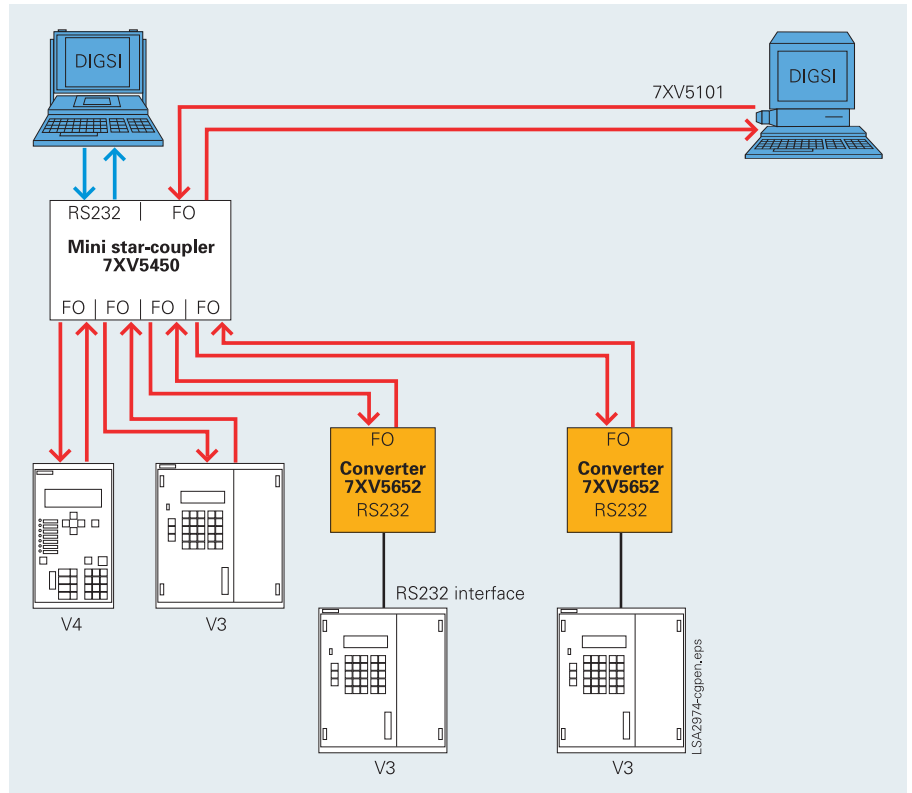


Fig. 13/58 Remote interrogation with the RS232 interface

### Technical data

#### Rated auxiliary voltage

DC 24 to 250 V and AC 60 to 230 V	± 20 % without switchover
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#### Current consumption

Approx. 0.1 to 0.2 A	
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#### LEDs

1 LED Green	Operating voltage o.k.
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#### Connectors

Power supply	2-pole Phoenix screw-type terminal
FO cables	820 nm ST connector
RS485	9-pin SUB-D socket
Alarm contact	2-pole Phoenix screw-type terminal

#### Light idle state

Light ON/OFF selectable	
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#### Housing

Plastic housing, EG90, charcoal grey; 90 × 75 × 105 mm (W × H × D)  
for snap-on mounting on 35 mm EN 50022 rail

### Selection and ordering data

Description	Order No.
<b>7XV5652 RS232 – FO converter</b>  For conversion of FO to RS232 (V.24) signals up to 115 kbaud With plastic housing for snap-on mounting on 35 mm rail Rated auxiliary voltage DC 24 – 250 V and AC 110 – 230 V with alarm contact. Connection of units with RS232 interface by 9-pin SUB-D connector Connection of PC, star coupler, modem via FO cable for 62.5/125 µm and 850 nm wavelength Fiber-optic connectors: FO 820 nm with ST connector	<b>7XV5652-0BA00</b>