SIEMENS

SIPROTEC

Catalogue sheet 7XV5652

RS232 / FO Converter 7XV5652

The RS232 / FO converter is used to convert in full duplex mode serial RS232 signals to FO transmission signals. It has one FO channel each for transmission and receiving, as well as a protected RS232 interface rated to withstand 2 kV discharges which allows it to be directly connected to the serial system interface of SIPROTEC devices. It is designed to be used in substations for isolated, interference-immune transmission of serial signals to a central unit, a star coupler or a PC. When used in combination with the 7SD51 line differential relay in the version with a serial RS232 interface, it allows transmission over distances up to 3 km by multimode fibre optic cables (FO).

Features

- Serial baud rates up to 115 kbauds
- No setting of baud rate necessary
- Protocol transparency
- Polarity selectable: Light ON / Light OFF in idle state
- Distance spanned: 3 km with 62.5/125 µm * gradient fibre
- Multivoltage power supply with self-monitoring function and fault output relay
- Supports the serial TXD and RXD lines of RS232 interface. No handshake lines supported

Supply voltage:	DC 24 V to 250 V AC 60 V to 230 V	± 20 % and ± 20 % without switchover
Current consumption:	approx. 0.1 to 0.2 A	
LEDs:	1 LED	- green: Operating voltage o.k.
Connectors:	Power supply: FO cables: RS232: Fault signal output:	2-pole Phoenix screw-type terminal 820 nm BFOC ST-connectors 9-pin Sub-D socket 2-pole Phoenix screw-type terminal
Controls:	1 DIP switch	Light ON / Light OFF in idle state
Housing:	Plastic housing, EG90, charcoal grey; 90 x 75 105 mm (W x H x D) for snap mount on 35 mm DIN EN 50022 rail	

*) When connected to SIPROTEC devices, the maximum permissible distance with 62.5/125 µm gradient fiber is approx. 1.5 km

Applications

With the serial RS232 to optical 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 (see fig. 1). 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 takes place interference free with multimode fibre cables.

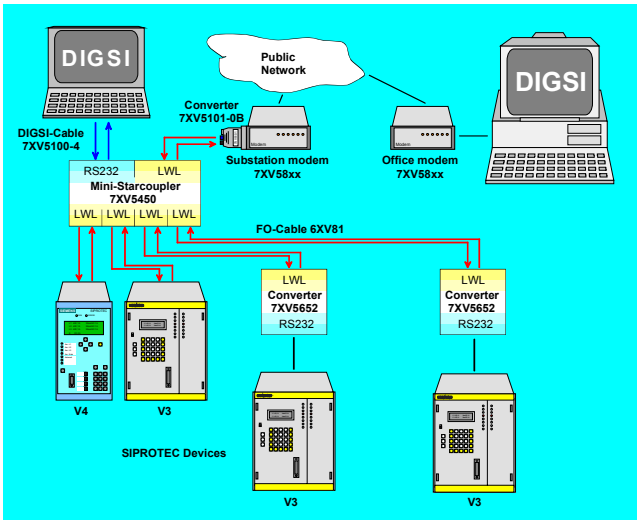

Fig. 1: Remote interrogation with the RS232 interface

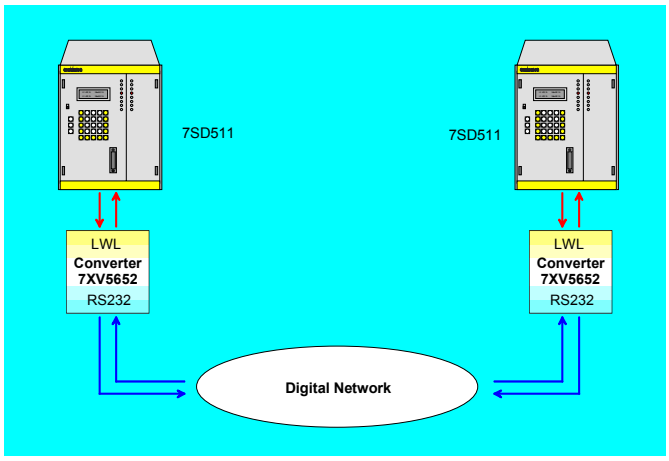

Fig. 2: Link to a serial communication system

Selection and Ordering Data

Product Name	Order No.:
RS232 / FO Converter for conversion of FO to RS232 (V.24) signals up to 115 kbaud with plastic housing for snap mount on 35 mm rail Auxiliary voltage DC 24-250 V DC and AC 110-220 V AC with alarm contact. Connection of devices with RS232 interface by 9-pin SUB-D connector Connection of PC, starcoupler, modem by 850 nm FOC for 62.5/125 µm optical fibre	**7 X V 5 6 5 [ ] - 0 [ ] A 0 0** **2**
Optical Interface 820nm with BFOC-Connector (ST)	**B**

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