

7XV5652

Description

The RS232 optical fiber converter 7XV5652 converts serial RS232 full duplex signals to optical fiber transmission signals. It has one optical fiber channel each for the transmit and receive directions and an RS232 interface isolated for 2 kV. As a result, the converter can be connected directly to the serial interface of SIPROTEC devices.

Benefits

- Serial baud rates up to 115 kBd
- Not necessary to set the baud rate
- Protocol transparency
- Non-flickering light: Can be switched to light ON/OFF
- Radius: 3 km at 62.5/125 μm , fiber-optic cable
- Wide-range power supply with self monitoring and signaling contact
- Supports the serial TxD and RxD lines of the RS232 interface. Handshake lines are not supported.

Applications

It is designed for use in switchgear and enables the galvanically separated, interference-free transmission of serial signals to a central controller, a star coupler, or a PC.

The converter supports the conversion of serial TxD (transmit) and RxD (receive) signals to an optical output. Handshake signals are not supported.

Application

Using the serial RS232 optical fiber converter, an existing RS232 interface on a SIPROTEC protection device can be upgraded to



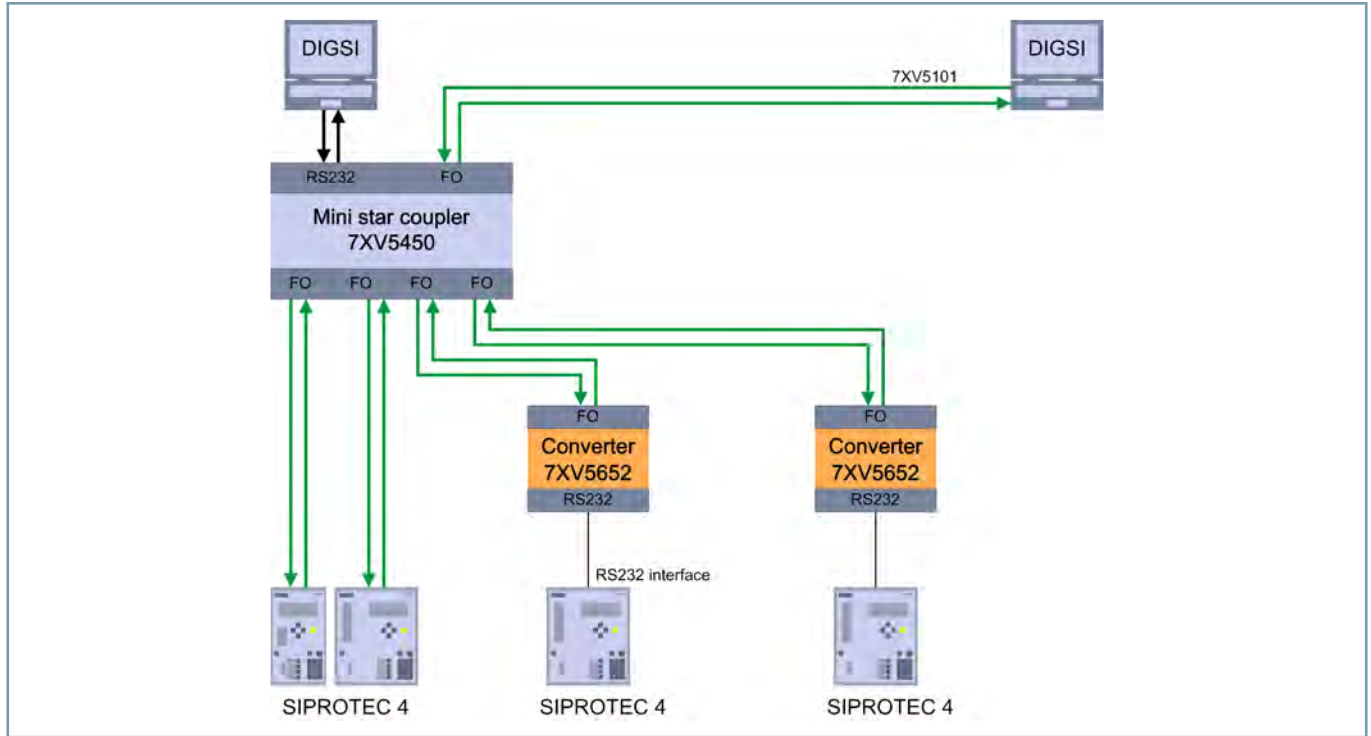
[ph_7XV5652, 1, ...]

Figure 3.5/6 RS232 Optical Fiber Converter

an optical 820 nm interface to connect the device to other optical components for central and remote queries using DIGSI. Another application is the coupling between a line differential protection and a communication network having electrical RS232 inputs. The connection between the communication space containing the converter and the protection device is established in an interference-free manner via multimode fiber-optic cable.

Communication

Converters – RS232 Optical Fiber Converter



[dw_remote-interrogation_with_RS232-interface_2_en_US]

Figure 3.5/7 Remote Query with the RS232 Interface

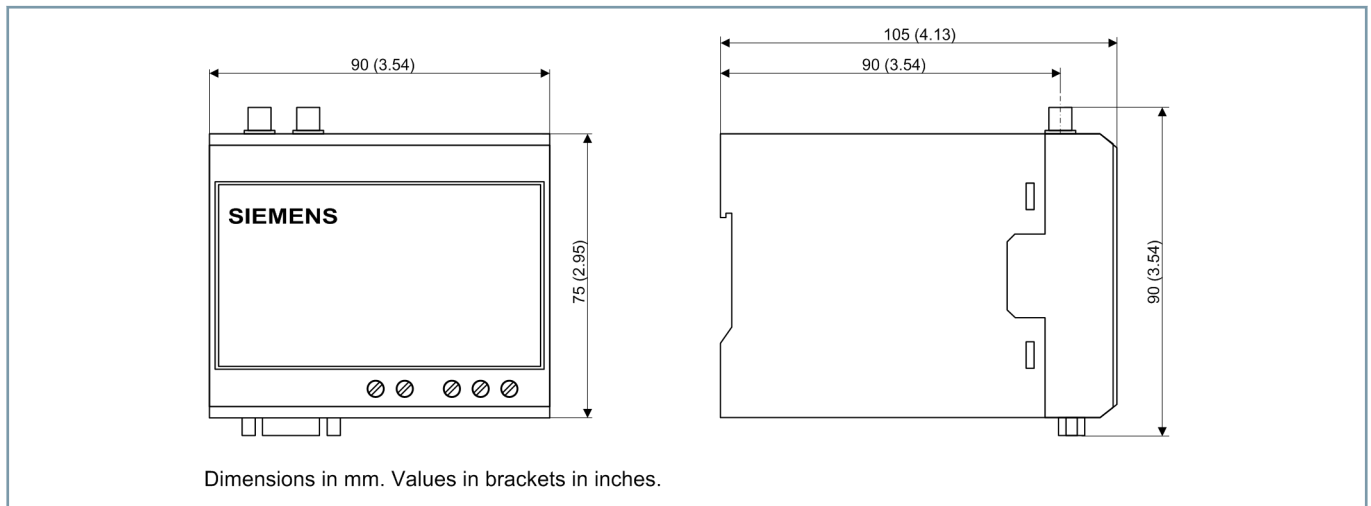
Optical Fiber Converter 7XV565x-0CA00

The following improvements are planned for the functional follow-up model ... -0CA00:

- Increased EMC (incl. new standards), adaptation for SIPROTEC 5
- Higher temperature ranges
- Additional UL approval
- Metal housing (KU-2M basis) in place of plastic
- Other form factor; converter size the same as CC-2M
- Grounded housing
- Switchable signal relay/GOK (3 terminals)
- Ring redundancy expansion for 2-channel version
- Additional LED to display power/error

3.5

Dimensioned Drawing



[dw_Dimension_7XV5652-0AA00_2_en_US]

Figure 3.5/8 Converter Device for DIN Rail Mounting

Technical Data

Auxiliary voltage	
Rated input voltage	
● Direct voltage	DC 24 V to 250 V ± 20 %
● Alternating voltage	AC 60 V to 230 V ± 20 % / 45 to 65
Protection class	III
Power consumption	For rated voltage (typical value)
● Direct voltage	3 W
● Alternating voltage	2.5 W; 3.5 VA

LEDs	
1 LED	
Green	Operating voltage OK

Connector Plug	
Power supply	2-pole Phoenix screw terminal
Fiber-optic cables	820 nm, ST connector

Connector Plug	
RS232	9-pole D-sub socket
Signaling contact	2-pole Phoenix screw terminal

Non-Flickering Light	
Can be switched to light ON/OFF	Using jumpers

Housing	
Plastic case, EG90, dark gray; 90×75×105 mm (W×H×D) for snap-on mounting to 35-mm DIN rail according to EN 60715	

You can find additional technical data in the manual at:

www.siemens.com/accessories

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Surface Mounting

The converter has a housing for snap-on mounting to a 35-mm DIN rail according to EN 60715. Auxiliary voltage can be provided via screw connections. The fiber-optic cables are connected using ST connectors. The device contains no silicone or halogen and is very flame-resistant.

Selection and Ordering Data

Description	Order No.												
	1	2	3	4	5	6	7	8	9	10	11	12	
Converter, optical fiber according to RS232 up to 115 kBd	7	X	V	5	6	5	2	–	0	C	A	0	0
Auxiliary voltage, DC 24 V to 250 V and AC 110/230 V with alarm relay													
Connection for RS232 interface via 9-pole D-sub connector plug													
Connection, optical fiber 820 nm, via ST connector													
DIN rail mounting, metal housing													