

TS-SR232DR-40 Industrial Din-Rail 1RS232+1RS485 Fibre Converter



1. Overview:

This series adopts industrial-grade design, large-scale FPGA design, provides 1 serial port, and each port supports RS232/422/485 three business interfaces at the same time. The device is the best choice for connecting the remote terminal unit (RTU) to the host computer (HOST) or distributed data acquisition system (SCADA) controller, with high performance-price ratio. The effective communication distance can reach 0-120KM, and the communication rate of the serial port can reach 0-500KBPS.

Due to the use of optical fiber as the transmission medium, it can completely avoid the threat of lightning, surge, electromagnetic interference and other threats to communication equipment in harsh environments, and at the same time save the investment in lightning and surge protection equipment when using copper wires.

2. Functional Description:

Mini Din Rial 1 Channel RS232+1 channel RS485,

FC Dual Core fibre 40 KM

DC Power supply 9-55v

3. Features :

- Integrated circuits based on independent intellectual property rights;
- Provide 1 serial port, and each serial port provides three serial interfaces of RS232/422/485 at the same time (the interface type can be set by DIP switch), which is convenient for opening services on site;
- Automatic detection and control of RS-485 data flow, no need to use handshake signal to control data flow;
- Have the ability to automatically detect the baud rate of the serial port signal;
- Serial data channel can transmit asynchronous serial port data adaptive from 300-500Kbps baud rate;
- Serial port interface anti-radar to IEC61000-4-5 (10/700 μ s) differential mode: 6KV impedance (2Ω); common mode: 6KV, impedance (2Ω) standard;
- Dual DC power supply (5.08 terminal):
- It can be powered by DC9-55V or AC7-50V wide-range power supply. The power supply has the function of polarity automatic detection, and there is no need to distinguish between positive and negative poles during installation;
- Support internal isolation, redundant dual power input; anti-reverse protection
- AC power supply (three-position plum blossom AC seat):
- Support AC~85-265V AC, or DC110-300V DC wide range input
- Provide DIN 35mm rail installation, or wall-mounted installation ;

4. Parameters:

◆ Fiber :

- Optical port: 1
- Optical fiber: single fiber dual fiber
- Optical fiber interface: ST optional
- Wavelength: 850nm multimode;
- Transmission distance without relay: 0~2Km
- Typical transmit power:
 - Multimode 850nm: -18dBm
- Receiving sensitivity range: -28dBm~- 40dBm

◆ Serial ports :

Standard

EIA/TIA-232 RS-232 (ITU-T V.28)

EIA/TIA-422 RS-422 (ITU-T V.11)

EIA/TIA-485 RS-485 (ISO/IEC8284)

◆ Environmental indicators:

Working temperature: -40°C—+85°C

Storage temperature: -40°C—+85°C

Working humidity: 0%-95% (non-condensing)

MTBF: > 100,000 hours



PIC1 : Product picture

5. LED lights description :

NAME	CO	STA	DESCRIPTION
PWR1	Green	ON	Local device power 1 ON
		OF	Local device power 1 OFF
PWR2	Green	ON	Local device power 2 ON
		OF	Local device power 2 OFF
FIB	Green	ON	Optical fiber signal reception is normal
		OF	fiber optic signal loss
TXD1	Green	FL	The serial port signal has data to send
RXD1	Green	FL	Serial port signal has data reception
TXD2	Green	FL	RESERVED
RXD2	Green	FL	RESERVED

6. Fiber Interface Description :

The rear panel has fiber optic ports, FC or SC connector

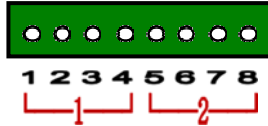
TX is the optical signal output port RX is the optical signal input port

7. Serial Interface Description :

8 bit Phoenix terminal on the rear panel, defined as follows:

	1	2	3	4	5	6	7	8
RS422	TX+	TX-	RXD+	RXD-	FGND	-	-	-

RS485	A	B	-	-	FGND	-	-	-
RS232	-	-	-	-	-	TXD (out)	RXD (In)	GND



8. Power :

The device supports redundant dual power input DC9-70V

Note: The equipment has polarity protection measures. When the positive and negative poles of the power supply are reversed, the equipment will not be damaged, and it can work normally, which is convenient for equipment maintenance and installation.