



Features:

- Can convert RS232 / RS485 / RS422 serial port signals into optical fiber signals
- The optical port can be directly connected to the optical switch and participate in TCP / IP routing and exchange transmission
- It can be powered by 9 ~ 24V wide voltage, and can be powered by industrial cabinet 24V
- Provide 2-wire terminal power access, in line with industrial power specifications
- Can provide rail mounting accessories.

◆ Description:

ITT-SR-1RS-1SFP optical fiber serial port server is an industrial-grade serial port-optical fiber conversion device developed by Ittelecom Information Technology Co., Ltd. The device can realize one-way RS232 / RS485 / RS422 data and optical fiber transparent transmission.

ITT-SR-1RS-1SFP optical fiber adopts single-mode single-fiber SC interface, using one optical fiber transmission can save fiber cost when transmitting over long distance. The power input can be a plug or a 2-wire connection terminal, and provides a wide voltage input range of 9-24V.

It also has a three-in-one serial server with RS232 / 485/422. RS232 is a DB9 universal interface, and RS485 / RS422 is a terminal mode, which is convenient for installation.

Unlike ordinary serial-to-fiber products ,ITT-SR-1RS-1SFP does not simply convert serial level signals into optical fiber signals, but first converts serial port data into TCP / IP signals, and then transmits them on optical fibers. Therefore, ITT-SR-1RS-1SFP's optical fiber signal can be directly connected to the optical fiber switch to directly participate in the data transmission and exchange of the network layer.

There are basically two usages of ITT-SR-1RS-1SFP is used in pairs / pairs, that is, two ITT-SR-1RS-1SFP fiber optic interfaces are connected, and RS485 / RS232 / RS422 signals can be extended through the fiber to reach 20 kilometers. This method can also be implemented using ITT-SR-1RS-1SFP, which is more cost-effective. Please refer to "Two Ways of 485 to Fiber" for the choice of two models.

ITT-SR-1RS-1SFP is used alone, directly connected to the optical switch or connected to the Ethernet switch through fiber to Ethernet. After that, ITT-SR-1RS-1SFP can exchange data with any network device in the network. If it is to communicate with the computer, the virtual serial port software (ITTVircom) can be used to collect the data of the ITT-SR-1RS-1SFP serial port through the virtual serial port.



The second usage is the advantage of ITT-SR-1RS-1SFP, which not only reduces the number of serial to optical fibers from 1 pair to 1, but also directly uses the network for data collection without using the serial port on the computer side. Virtual serial port software can also be used on the computer side. At this time, the original host computer software can also be directly implemented without modification to network communication. ITT-SR-1RS-1SFP has truly realized the function of optical fiber serial server.

* Note: ITT-SR-1RS-1SFP is divided into two sub-models: ITT-SR-1RS-1SFP (terminal A) and ITT-SR-1RS-1SFP (terminal B), if they are used in pairs, these two models must be different sub-models. Namely: the A-end machine is connected to the B-end machine; the B-end machine is connected to the A-end machine; the same sub-models cannot be connected. When ITT-SR-1RS-1SFP is connected to an optical switch, please ask first whether the optical port of the optical switch is A or B. If A is selected, please select ITT-SR-1RS-1SFP otherwise choose ITT-SR-1RS-1SFP.

◆ Product features:

- Industrial grade design: 9 ~ 24V power supply, terminal connection mode, industrial grade temperature, can be equipped with rail mounting accessories.
- Single-mode single-fiber optical fiber: only one transmission optical fiber is needed to save costs.
- RS232 / RS485 / RS422 three-in-one product can be used without configuring any interface.
- ITT-SR-1RS-1SFP adopts SC pluggable interface; it is convenient for users to install.
- ITT-SR-1RS-1SFP is a full-duplex, uninterrupted, and no-drop optical fiber serial server. Support users to send large amounts of data at the same time on the serial port and fiber end without interruption, and no data is lost.
- Support TCP Server, TCP Client, UDP mode, UDP multicast, automatically switch to Real Com Driver mode when communicating with ITTVirCom.
- The baud rate supports 1200 ~ 115200bps, the data bit supports 5 ~ 9 bits, the parity bit can be None, odd parity, even parity, Mark, Space five ways, support CTS / RTS hardware flow control.
- Built-in 48/422 lightning protection function, suitable for outdoor 485/422 communication.
- Built-in Web server, module parameters can be modified through the browser.
- Support DHCP to solve IP management and IP conflict problems; support DNS to meet the requirements for communication through domain names; support virtual serial ports.
- Contains all software features of ITT-SR-1RS-1SFP products.

◆ Technical Parameters : Serial port parameters

• Serial port type	➤ RS232 / 485/422 × 1
• Baud rate	➤ 1200 ~ 115200bps
• Parity bit	➤ None, odd parity, even parity, Mark, Space
• Data bit	➤ 5-9 people
• Flow Control	➤ XON / XOFF, RTS / CTS, NONE

◆ Technical Parameters : 3G / 4G parameters

• software	➤ protocol: ETHERNET, IP, TCP, UDP, HTTP, ARP, ICMP, DHCP, DNS ➤ Configuration method: ITTVirCOM serial port configuration, ITTVircom network port configuration, WEB browser ➤ way of communication: Socket, virtual serial port, device management function library ➤ Data bit: 5-9 people ➤ Flow Control: XON / XOFF, RTS / CTS, NONE
• Fiber parameters	➤ (end A) wavelength: Transmitting (TX) wavelength: 1310nm; receiving (RX) wavelength 1550nm ➤ (B-end) wavelength: Transmit (TX) wavelength: 1550nm; receive (RX) wavelength 1310nm ➤ Fiber transmission: distance 20Km ➤ Optical communication interface: SC
• working environment	➤ Operating temperature, humidity -40 ~ 85 °C, 5 ~ 95% RH ➤ Storage temperature, humidity -45 ~ 165 °C, 5 ~ 95% RH
• Mechanical properties	➤ Size: Length × width × height = 9.4cm × 6.5cm × 2.5cm
• Antenna interface	➤ 50Ω / SMA glue stick antenna or sucker antenna optional