

Model:UT-2077

RS-232 to Multi-Mode Fiber Port-Powered Converter

Datasheet

1. Overview

UT-2077 is a mini fiber converter which supports asynchronous RS-232. It is the best choice for connecting a remote terminal unit (RTU) to a HOST or a SCADA controller. It supports RS - 232 asynchronous communication protocol. The RS - 232 port supports data (TXD or SD) sending control, thus to improve the ability to adapt to all kinds of software; it also simplifies the control method. UT-2077 supports asynchronous serial communication between a variety of optical fiber connection, the communication distance can reach as far as 2 km, the RS-232 signal transmission rate can be up to 115.2 KBPS. Different standards of the electrical interface can be mixed. There is no need of external power supply, it adopts the unique "RS-232 charge pump" driver, and get the power by initializing the RS-232 serial port. This converter is with built-in zero delay auto receiving and transmitting conversion and unique I/O circuit auto control data flow direction without any handshake signal (RTS, DTR), thus ensuring the program that written in RS-232 half-duplex mode, and provides excellent EMI/RFT characteristics.

UT-2077 supports two data signals: sending data and receiving data. RS-232 is connected through DB9 female interface, and fiber optic connection is connected through two ST interfaces, which is very convenient for disassembly and installation.

2. Major Functions & Features

- Support RS-232/RS-485 or RS-422 opt isolation

3. Technical Parameters

- Support RS-232/ST interface
- Asynchronous transmission: point-to-point application, transmission rate up to 115.200bps
- Transmission distance: multimode 4,000 meters
- Operating temperature: -25~ 70°C, relative humidity of 5~ 95%
- Operating wavelength: 850nm (multi-mode)
- Electrical interface.
- RS-232: with DB9 female connector
- Fiber optic interface: ST-type interface (other interfaces can be customized)
- RS-232 interface features: standard RS-232 three-wire interface, $\pm 15KV$ (anti-static) ESD protection, support rate of up to 115.2Kbps without external power supply, using the serial port power pump technology

4. Hardware Definition and Initial Setting

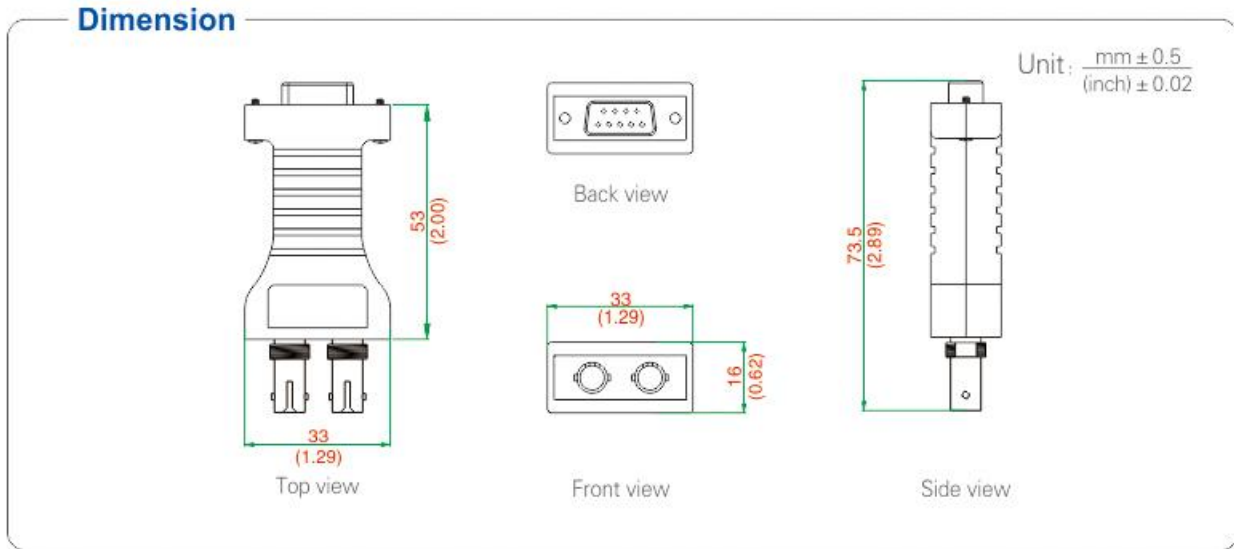
- RS-232C Pin Assignment

| DB9 female | RS-232C interface signal |
|------------|--------------------------|
| 1 | / |
| 2 | SOUT(TXD) |
| 3 | SIN (RXD) |
| 4 | / |
| 5 | GND |
| 6 | / |
| 7 | / |
| 8 | / |
| 9 | / |

5. Product View (Appearance)



6. Structure Dimension



7. Ordering Information

| Ordering | | | | | | | | | | | |
|----------|---------------|----------------|---------------|----------------|------------|------------|---------------|-------------|----------|--------------|----------------|
| Model | Signal/Port | | Port qty | | Protection | | Baudrate | Environment | | Power | |
| | Optical fiber | RS-232/485/422 | Optical fiber | RS-232/485/422 | RS-232 | RS-485/422 | | Temperature | Humidity | Port-Powered | External Power |
| | SC/ST/FC | Terminal block | Optical fiber | RS-232/485/422 | RS-232 | RS-485/422 | | -25/70°C | -40/85°C | 5-95% | Port-Powered |
| UT-2077 | ST | DB9 female | 1 | 1xRS232 | ±15KV ESD | | 300-460.8Kbps | ✓ | | ✓ | ✓ |