

Model:UT-277

Serial RS-232/485/422 to fiber optic transceiver

Datasheet



1. Overview

The UT-277 is a multi-functional fiber optic modem that supports asynchronous RS-232, RS-485 and RS-422 communication interfaces and is ideal for connecting a RTU to a host or a distributed data acquisition system (SCADA) controller. The UT-277 supports RS-232, RS-485 and RS-422 asynchronous communication protocols and can mix two RS-232, RS-485 or RS-422 interfaces at the same time, and supports 2-wire (half duplex) RS-485 and 4-wire (full duplex) RS-422 operation. It can easily support various types of software and also simplifies the control method. The fiber optic modem supports a variety of fiber optic connections between asynchronous serial ports, it supports full or half duplex communication between two devices with asynchronous serial ports via fiber optics, with a communication distance of up to 4km for multi-mode and 20km for single mode, with a maximum transmission rate of 115.2Kbps for RS-232 signals, and RS-485/RS-422 signal transmission rates up to 460Kbps, interfaces of different electrical standards can be mixed, RS-232 devices can be used to connect RS-485/RS-422 devices, can replace RS-232 to RS-485/422 interface converters or optoelectronic isolators, and offers excellent EMI/RFT characteristics.

2. Major Functions & Features

- Supports RS-485/422/232 fiber optic transceivers

3. Technical Parameters

- Supports RS-232, RS-422, RS-485 interface
- Asynchronous transmission: point to point, 460kbps
- Transmission distance: multi-mode: 4Km,
Single mode: 20/40Km
- Operating temperature: -40°C~85°C
- Operating wavelength: multi-mode: 1310nm,
Single mode: 1310nm
- Electrical interface: RS-232: Terminal block connectors
RS-485/422: Terminal block connectors
Fiber: with optional SC/FC/ST
- RS-232 interface features: Standard RS-232 three-wire interface +/- 15kV (anti-static) ESD protection supports up to 115.2kbps
- Input voltage: DC9-48V 200mA
- RS-485/422 interface features: Adaptive port-to-rate adjustment with port adaptive technology, no switch settings, +/-15KV (anti-static) ESD protection supports up to 32-point polling environment.

4. Pin Assignment

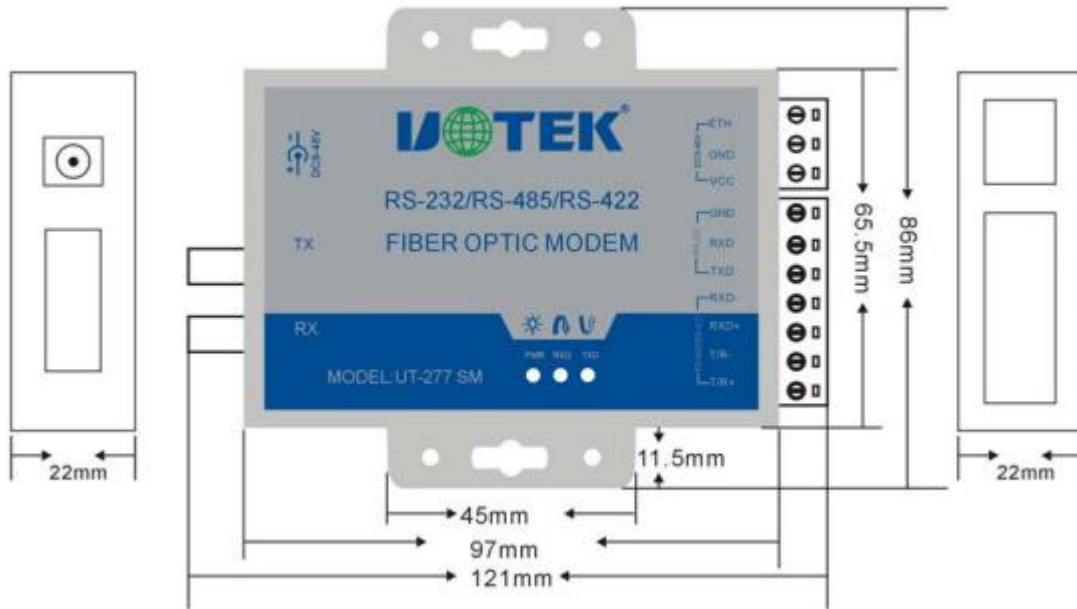
Terminal block pin assignment

Terminal block(PIN)	Signal	RS-422 full-duplex	RS-485 half-duplex
1	T/R+	A+	RS-485(A+)
2	T/R-	B-	RS-485(B-)
3	RXD+	A+	N/A
4	RXD-	B-	N/A
5	TXD	RS-232 transmitting	
6	RXD	RS-232 receiving	
7	GND	RS-232 GND	
8	VCC	Power input DC9-48V	
9	GND	GND	
10	ETH	ETH	

5. Product View (Appearance)



6. Structure Dimensions



7. Ordering

Model	Signal/ Interface		Number of Ports		Protection level		Baud rate		Operating Environment		Power
	Fiber	RS232/485/422							Temperature	Humidity	
	SC/ST/FC	Terminal block	Fiber	RS232/485/422	RS232	RS485/422	RS232	RS485/422	-40~85℃	5~95%	External power
UT-277MM	Optional	√	1	1	±150KV ESD	600W Surge	300-115.2 Kbps	300-460.8 Kbps	√	√	9-48VDC
UT-277SM	Optional	√	1	1	±150KV ESD	600W Surge	300-115.2 Kbps	300-460.8 Kbps	√	√	9-48VDC
UT-277RMM	Optional	√	1	1	±150KV ESD	600W Surge	300-115.2 Kbps	300-460.8 Kbps	√	√	9-48VDC
UT-277RSM	Optional	√	1	1	±150KV ESD	600W Surge	300-115.2 Kbps	300-460.8 Kbps	√	√	9-48VDC

