Model: UT-883R

(Product Name: USB to RJ45 Console debugging cable)

User manual

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1. Overview

With the continuous development of the PC industry, USB interfaces are gradually replacing various low-speed peripheral interfaces of old PCs. However, many important devices in the industrial environment still use RS-232 interface design. Therefore, many users use USB to RS-232 converters to realize data transmission between PC and RS-232 devices.

UT-883R is a universal USB/RS-232 converter that is compatible with USB and RS-232 standards, and can convert single-ended USB signals to RS-232 signals without the need for external power. The converter has zero-delay automatic send-receive conversion and unique I/O circuitry that automatically controls the data flow direction. It is plug and play and is suitable for all existing communication software and interface hardware.

The UT-883R interface converter can support point-to-point communication, data communication rates of 300-460800bps, and supports USB to RS-232 conversion. Applications include attendance machines, switches, routers, gateways, firewalls, PLCs, cash registers, PLAM, CNC machine tools, disposal modems, ISON terminals, scanners, industrial controls, industrial instruments, temperature control equipment, LED displays, PDA tax control machines, touch screens, printers, access control systems, etc.

2. Major Functions & Features

The UT-883R interface converter supports the following communication modes: point-to-point communication.

3. Hardware Installation and Application

Before installing the UT-883R interface converter, please read the product manual carefully. Connect the USB end communication cable of the product to the USB interface of the computer. The product adopts USB/RJ45 connector, and the universal connector is used as the input/output interface. It automatically realizes RS-232 communication without the need for setting, and can be connected and disconnected easily using twisted pair or shielded wire. The converter is an 8-wire system, with DCD RXD TXD DTR GND DSR RTS CTS signal connections.

4. Performance Parameters

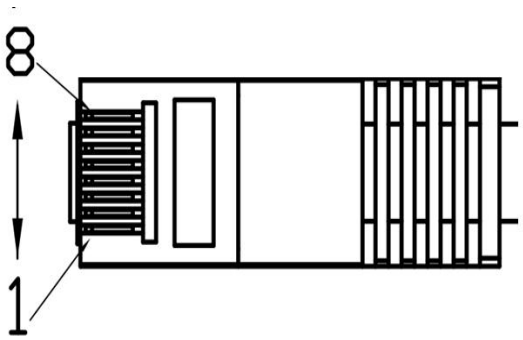
- Built-in watchdog technology, fault self-recovery, to ensure stable operation of the equipment
- Standard: Complies with USB V1.1, 1.0, 2.0 standards, EIA RS-232 standard
- USB signal: VCC, DATA-, DATA+, GND, FG
- RS-232 signal: DCD RXD TXD DTR GND DSR RTS CTS
- Working mode: asynchronous working, point-to-point working
- Direction control: adopts data flow automatic control technology, automatically identifies and controls data transmission direction
- Baud rate: 300-460800bps, automatically detects serial port signal rate
- Load capacity: supports point-to-point communication mode

- Transmission distance: RS-232 end 5 meters, USB port not more than 5 meters
- Interface protection: ±15KV electrostatic protection
- Interface form: USB end A-class interface male head, RJ45 connector
- Transmission medium: twisted pair or shielded wire
- Cable length: 1500±20mm
- Operating environment: -40℃ to 85℃, relative humidity 5% to 95%
- Supports Windows 95/98/2000/2008/xp/Vista/win7/8/8.1/10, IMAG

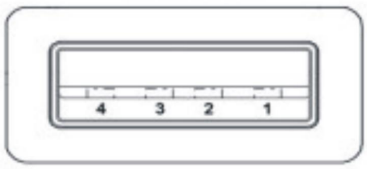
5. Connector and Signal

1. RS-232C pin assignment

RJ45(PIN)		RS-232C 接口信号
1	橙白	请求发送 RTS
2	橙	数据终端准备 DTR
3	绿白	接收数据 SIN (RXD)
4	蓝	数据载波检测 DCD
5	蓝白	信号地 GND
6	绿	发送数据 SOUT(TXD)
7	棕白	数据装置准备 DSR
8	棕	清除发送 CTS

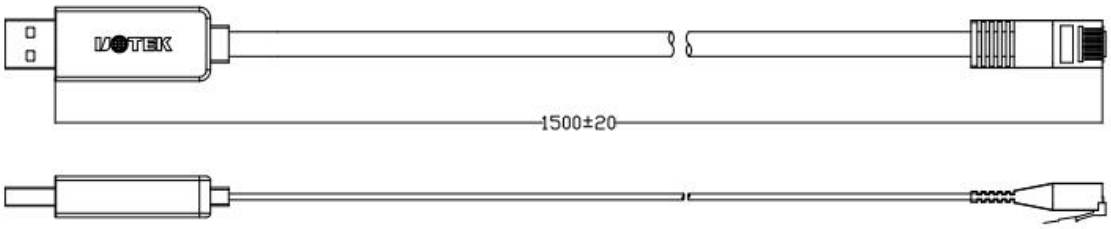


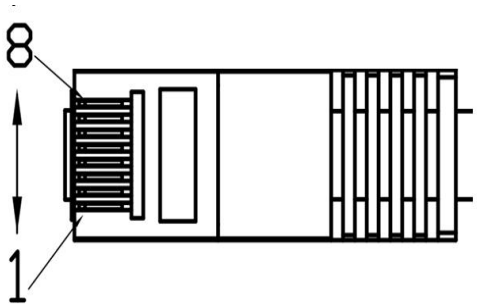
2. USB-A type: USB signal input and pin assignment diagram



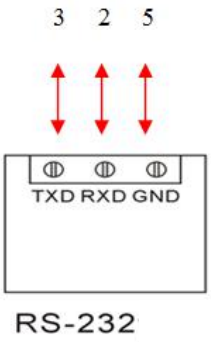
1、VCC
2、DATA-(DM)
3、DATA+(DP)
4、GND

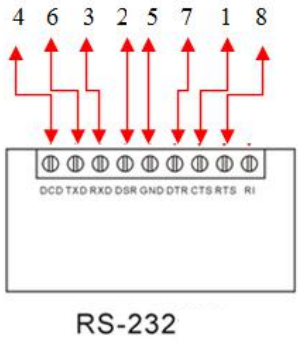
6. Appearance





1. RTS2. DTR 3. TXD4. DCD5. GND6. RXD7. DSR8. CTS





7.Troubleshooting and Solutions

Data communication failure

A. Check if the USB interface connection is correct

B. Check if the RS-232 output interface connection is correct

C. Check if the power supply is normal

D. Check if the wiring terminals are connected properly

Data loss or error

A. Check if the data rate and format of the data communication equipment at both ends are consistent.


MAIN
AUX
RST
WAN/LAN
LAN


PWR 4G/5G
DC
V+
V-
232T
232R
GND
485A
485B
DIO
WLAM SYS
SIM