

IOT5091(FT) USB转RS232/485 串口按压式端子模块

在使用产品之前，请仔细阅读产品手册

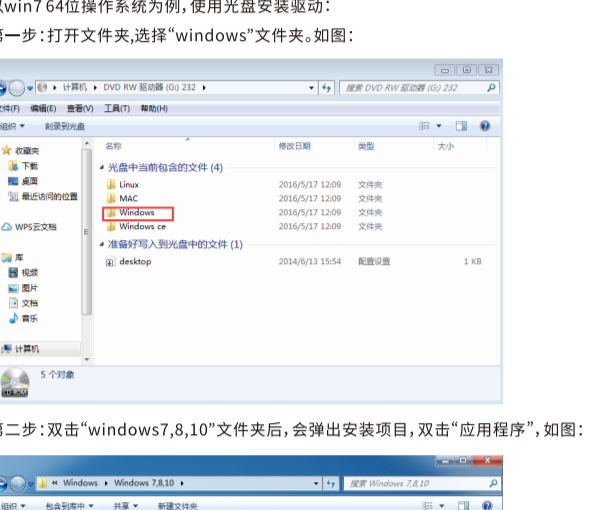
一、产品描述

随着PC设备的不断发展,USB接口正在逐渐替代老式PC的各种低速外围接口,然而目前工业环境中许多重要的设备仍然使用RS485接口设计,因此许多用户使用USB转RS232/485转换器来实现PC机与RS232/485设备之间的数据传输。这款通用的USB转RS232/485转换器,无需外加电源,兼容RS232/485标准,能够将单端的USB信号转换为RS232/485信号,转换器内部带有零延时自动收发转换芯片,独有的I/O电路自动控制数据流向,可以实现半双工(RS485)模式转换、全双工(RS232)模式转换,即插即用,确保适合一切现有的通信设备和接口硬件。产品广泛应用于工业自动化控制系统、门禁系统、考勤系统、刷卡系统、楼宇自动化系统、电力系统、数据采集系统。

二、产品参数

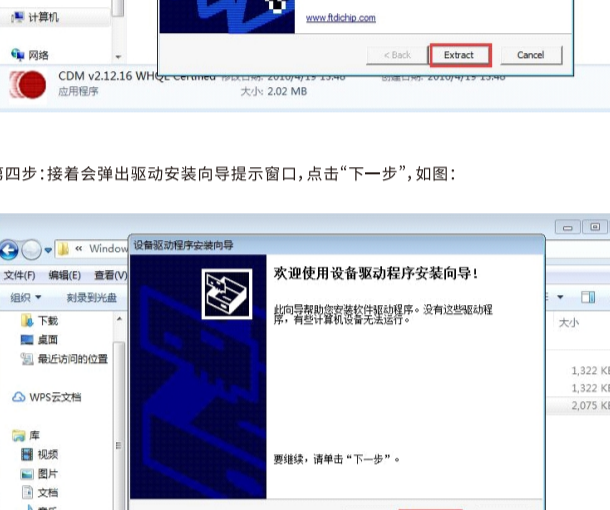
- 1.一款USB转RS232 485串口通讯模块,适用于工业设备通讯的产品。
- 2.全速USB设备接口设计,兼容USB V2.0/V1.1。
- 3.RS232通讯波特率达1Mbps,全双工通讯模式。
- 4.RS485通讯波特率达3Mbps,半双工通讯模式。
- 5.有收发信号指示灯,掌握通讯状态。
- 6.电路集成ESD防护:±20KV IEC1000-4-2气隙放电;
±15KV IEC1000-4-2接触放电。
- 7.产品适用于收银系统、读卡器、数控机床、数码相机等工业设备。
- 8.支持Windows/Mac/Linux操作系统。

三、接口说明



序号	端口及其他定义	说明
1	RS485_A	RS485信号数据发送
2	RS485_B	RS485信号数据接收
3	232_TXD	RS232信号数据发送
4	232_RXD	RS232信号数据接收
5	GND	信号参考地/电源输出地

四、产品连接示意图



五、产品配件

- 1.产品1pcs
- 2.信号线1pcs

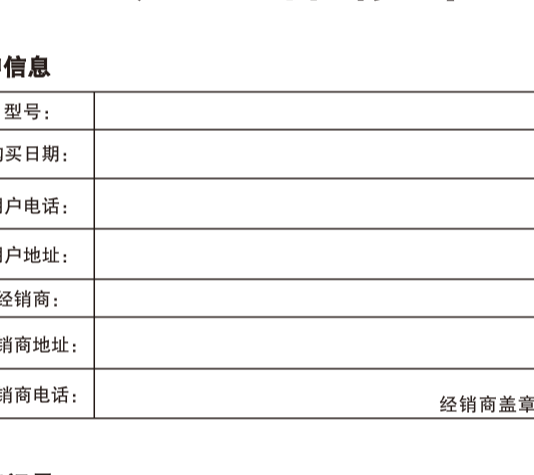
六、故障及排除

- 1.串口(COMX)后会出现“问号”或“感叹号”: 这意味着驱动程序没有正确安装。请删除该项目并安装。
- 2.即使驱动程序安装成功,设备也无法工作: 如果适配器安装在COM5上,请将其重新分配给COM1、2、3或4。它是可能计算机只扫描有限数量的COM端口(例如3个或4个),因此计算机不会识别具有这种限制的COM5端口,直到COM端口重新分配。
- 3.数据通信失败: 检查USB接口接线是否正确。
检查接线端子是否连接良好。
- 4.数据丢失或错误: 检查数据通信设备两端数据速率、格式是否一致。

七、FT系列串口线驱动操作指导

以win7 64位操作系统为例,使用光盘安装驱动:

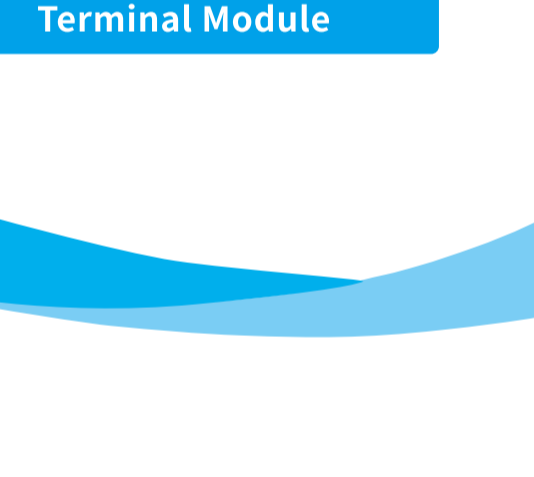
第一步:打开文件夹,选择“windows”文件夹,如图:



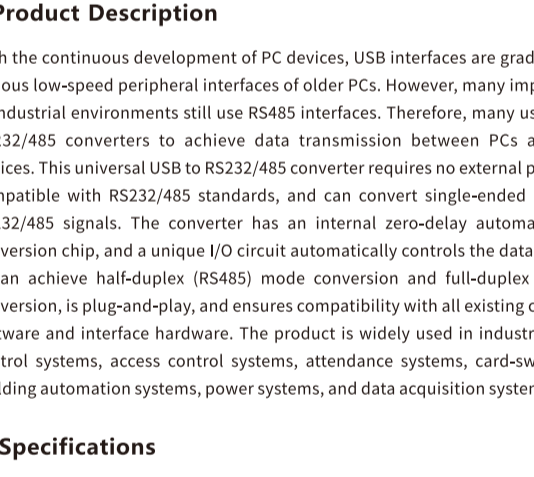
第二步:双击“windows7,8,10”文件夹后,会弹出安装项目,双击“应用程序”,如图:



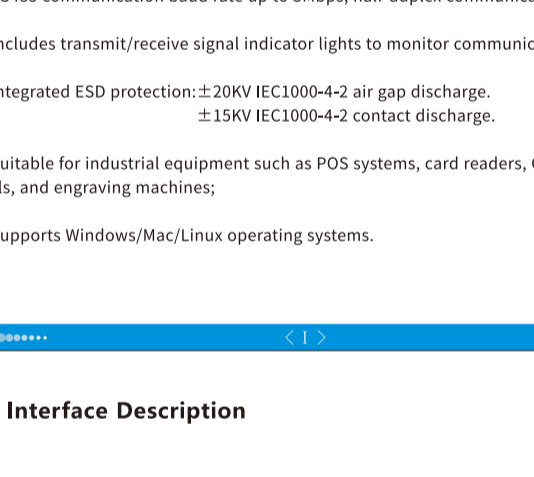
第三步:双击“应用程序”后,会弹出芯片公司名称信息,点击“Extract”如图:



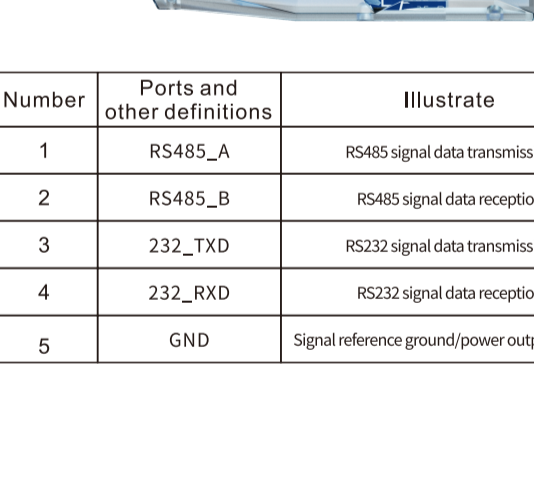
第四步:接着会弹出驱动安装向导提示窗口,点击“下一步”,如图:



第五步:选择“我接收这个协议”,点击“下一步”,如图:



第六步:之后弹出已经完成安装驱动的提示窗口,点击“完成”,如图:



产品保修卡

客户信息

型号:	
购买日期:	
用户电话:	
用户地址:	
经销商:	
经销商地址:	
经销商电话:	经销商盖章有效

保修记录

维修次数	日期	故障	处理措施	维修工号

1. 电子类保期一年,其他产品保期两年,人为因素造成损坏或操作不当导致产品烧坏,不列入保修范围。
2. 产品保修或使用方法与经销商联系。

IOT5091(FT) USB To RS232/485 Serial Port Push-button Terminal Module

Please read the product manual carefully before using the product.

I. Product Description

With the continuous development of PC devices, USB interfaces are gradually replacing various low-speed peripheral interfaces of older PCs. However, many users use USB to RS232/485 converters to achieve data transmission between PCs and RS232/485 devices. This universal USB to RS232/485 converter requires no external power supply, is compatible with RS232/485 standards, and can convert single-ended USB signals to RS232/485 signals. The converter has an internal zero-delay automatic transceiver RS232/485 chip, and a unique I/O circuit automatically controls the data flow direction. It can achieve half-duplex (RS485) mode conversion and full-duplex (RS232) mode conversion, is plug-and-play, and ensures compatibility with all existing communication software and interface hardware. The product is widely used in industrial automation control systems, access control systems, attendance systems, card-swiping systems, building automation systems, power systems, and data acquisition systems.

II. Specifications

1. A universal USB to RS232/485 serial communication module suitable for industrial equipment communication.
2. Full-speed USB device interface design, compatible with USB V2.0/V1.1.
3. RS232 communication baud rate up to 1Mbps, full-duplex communication mode.
4. RS485 communication baud rate up to 3Mbps, half-duplex communication mode.
5. Includes transmit/receive signal indicator lights to monitor communication status.
6. Integrated ESD protection:±20KV IEC1000-4-2 air gap discharge.
±15KV IEC1000-4-2 contact discharge.
7. Suitable for industrial equipment such as POS systems, card readers, CNC machine tools, and engraving machines;
8. Supports Windows/Mac/Linux operating systems.

III. Interface Description

Number	Ports and other definitions	Illustrate
1	RS485_A	RS485 signal data transmission
2	RS485_B	RS485 signal data reception
3	232_TXD	RS232 signal data transmission
4	232_RXD	RS232 signal data reception
5	GND	Signal reference ground/power output ground

IV. Schematic Diagram Of Product Connection

V. Product Accessories

1. Product 1pcs
2. Signal line 1pcs

VI. Troubleshooting

1. A question mark or exclamation mark appears after the serial port (COMX): This means the driver is not installed correctly. Please delete the item and install it.
2. Even if the driver is installed successfully, the device does not work: If the adapter is installed on COM5, please reassign it to COM1, 2, 3, or 4. It is possible that the computer only scans a limited number of COM ports (e.g., 3 or 4), so the computer will not recognize the COM5 port with this limitation until the COM port is reassigned.
3. Data communication failure: Check if the USB interface wiring is correct. Check if the terminal blocks are properly connected.
4. Data loss or error: Check if the data rate and format are consistent at both ends of the data communication device.

VII. FT Series Serial Cable Driver Operation Guide

Taking Windows 7 64-bit operating system as an example, installing drivers using a CD:

Step 1: Open the folder and select the “Windows” folder. (See image)

Step 2: After double-clicking the “windows7,8,10” folder, an installation menu will pop up. Double-click “Applications”, as shown in the image:

Step 3: After double-clicking “Application”, the chip company name information will pop up. Click “Extract” as shown in the image.

Step 4: Next, a driver installation wizard prompt window will pop up. Click “Next,” as shown in the image:

Step 5: Select “I accept this agreement” and click “Next”, as shown in the image:

Step 6: A pop-up window will appear indicating that the driver installation is complete. Click “Finish”, as shown in the image.

Product Warranty Card

Customer Information

Model:	
Date of purchase:	
User telephone:	
User address:	
Distributor:	
Agency address:	
User telephone:	Dealer stamp valid

Intenance Records

Repair times	Date	Fault	Treatment measures	Repair work NO.

Electronic products are guaranteed for one year, and other products are guaranteed for two years. Damage caused by human factors or product burnout caused by improper operation is not included in the scope of warranty.