

IOT5092 (MS) USB转RS485按压式端子 带亮隔离串口模块

使用产品前请仔细阅读产品说明书

一、产品概述

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接口的设计,因此许多用户使用USB转RS485转换器来实现PC机与RS485设备之间的数据传输。这款通用的USB转RS485转换器,无需外加电源,兼容RS485标准,能够将单端的USB信号转换为RS485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方向,可以实现半双工(RS485)模式转换,即插即用,确保适合一切现有的通信软件和接口硬件。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、数据采集系统等。

二、功能参数

- 1.一款USB转RS485隔离串口通讯模块,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.RS485通讯波特率可达3Mbps,半双工通讯模式。
- 4.产品具有收发信号指示灯,掌握通讯状态。
- 5.产品具有隔离防护作用,隔离等级:2500Vrms脉冲或500VDC连续。
- 6.电路集成ESD防护:±20KV IEC1000-4-2气隙放电或500VDC连续; ±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、刻字机等工业设备;
- 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_A信号接入端
2	RS485_B	RS485_B信号接入端
3	NC	NC
4	NC	NC
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.杜邦线 1pcs

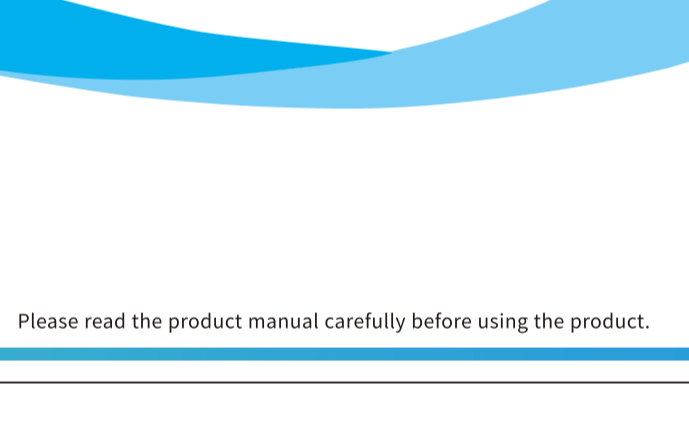
六、故障及排除

- 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.即使适配器安装成功,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RS485输出接口接线是否正确。 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

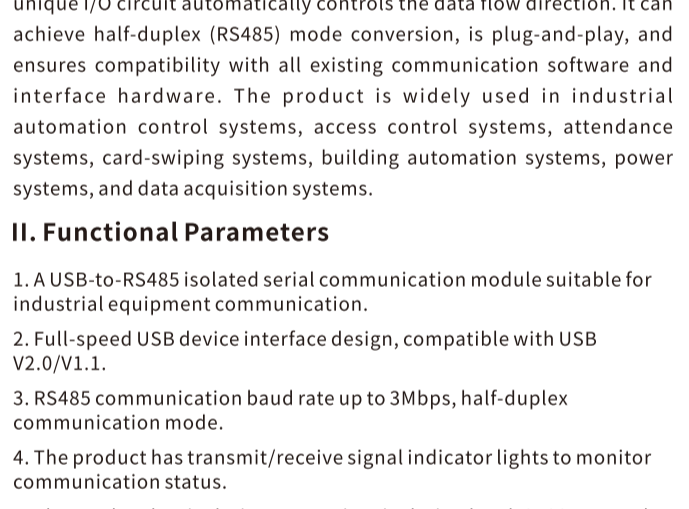
七、MS系列串口线驱动操作指导

扫描产品附带的二维码通过官网下载并安装驱动。

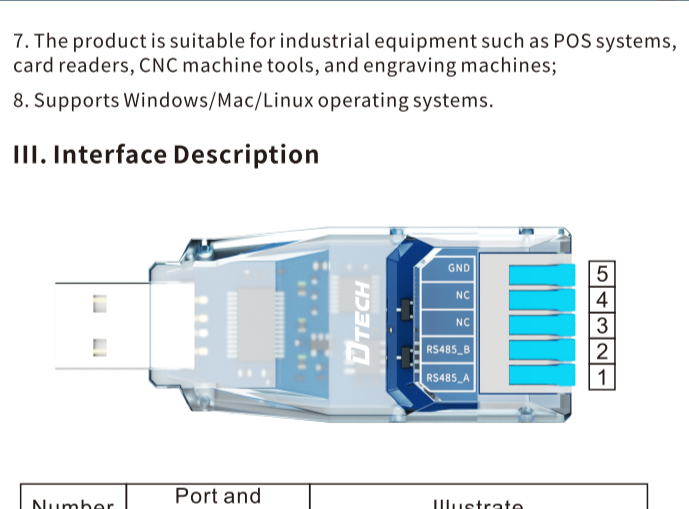
第一步:下载驱动安装包,点击MS3020drive.zip压缩包,并解压。



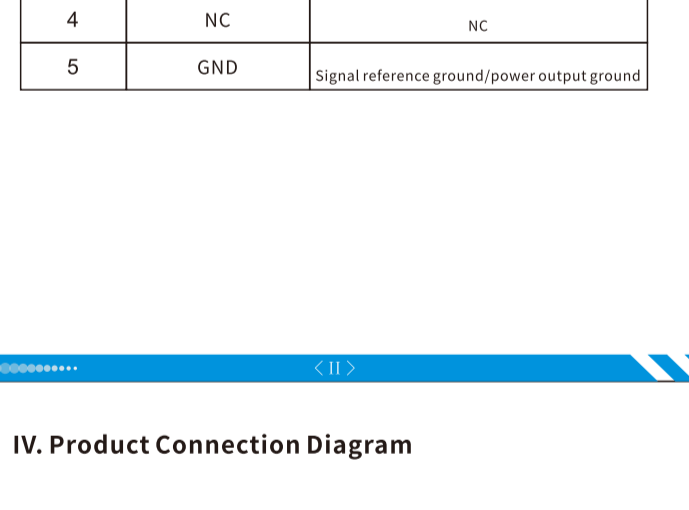
第二步:解压后如下图所示,进入Windows文件夹下,双击windows后缀的应用程序。



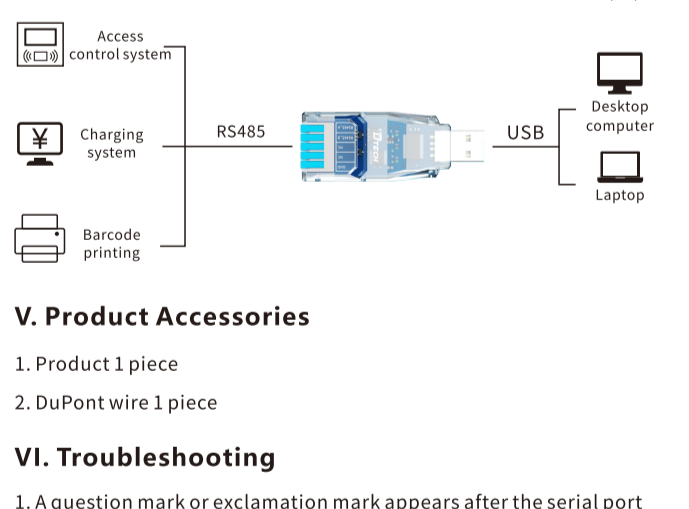
第三步:弹出安装对话框,点击Next和Install直到完成。



第四步:等安装过程结束后点击对话框中的Finish结束安装。

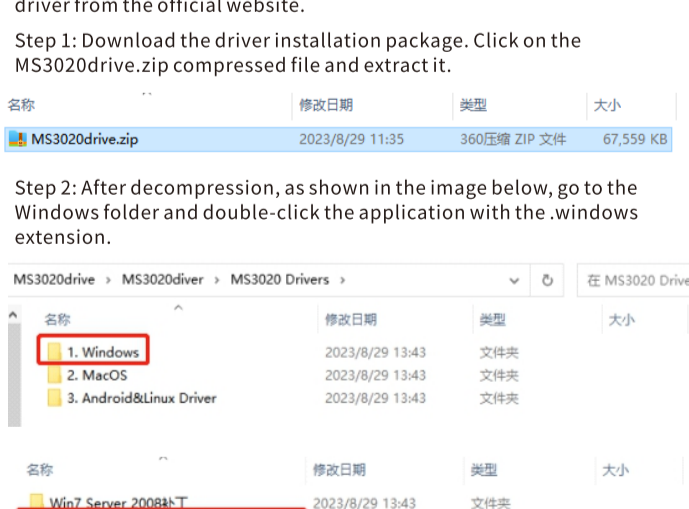


第五步:电脑中接入产品设备,在设备管理器中查看端口号是否显示。



Win7/Windows Server 2008安装注意事项

Win7 或者 Windows Server 2008 在部分机型上会弹出无法验证的驱动,需要手动点击“始终安装此驱动程序软件”,如下图所示:



如果Win7以及Server2008仍然驱动显示签名错误(黄标),需要安装Win7两个补丁:

windows6.1-kb4474419-v3-x64.msu, windows6.1-kb4490628-x64.msu, 安装补丁以后需要重启电脑。补丁目录为“Win7 Server 2008 补丁”。

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。

IOT5092 (MS) USB to RS485 Push-button Terminal Block Isolated Serial Port Module

Please read the product manual carefully before using the product.

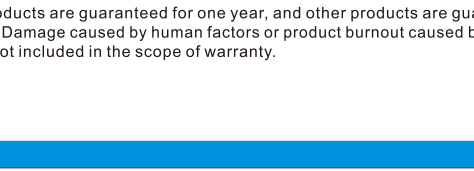
I. Product Overview

With the continuous development of PC devices, USB interfaces are gradually replacing various low-speed peripheral interfaces of older PCs. However, many important devices in industrial environments still use RS485 interfaces. Therefore, many users use USB-to-RS485 converters to achieve data transmission between PCs and RS485 devices. This universal USB-to-RS485 converter requires no external power supply, is compatible with the RS485 standard, and can convert single-ended USB signals to RS485 signals. The converter has an internal zero-delay automatic transceiver conversion chip, and a unique I/O circuit automatically controls the data flow direction. It can achieve half-duplex (RS485) 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. Functional Parameters

1. A USB-to-RS485 isolated serial communication module suitable for industrial equipment communication.
2. Full-speed USB device interface design, compatible with USB V2.0/V1.1.
3. RS485 communication baud rate up to 3Mbps, half-duplex communication mode.
4. The product has transmit/receive signal indicator lights to monitor communication status.
5. The product has isolation protection, isolation level: 2500Vrms pulse or 500VDC continuous.
6. Integrated ESD protection: ±20KV IEC1000-4-2 air gap discharge; ±15KV IEC1000-4-2 contact discharge;
7. The product is suitable for industrial equipment such as POS systems, card readers, CNC machines/tools, and engraving machines;
8. Supports Windows/Mac/Linux operating systems.

III. Interface Description



Number	Port and other definitions	Illustrate
1	RS485_A	RS485_A signal input terminal
2	RS485_B	RS485_B signal input terminal
3	NC	NC
4	NC	NC
5	GND	Signal reference ground/power output ground

IV. Product Connection Diagram

V. Product Accessories

1. Product 1 piece
2. DuPont wire 1 piece

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 the new driver.
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), and therefore 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 RS485 output 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. MS Series Serial Cable Driver Operation Guide

Scan the QR code included with the product to download and install the driver from the official website.

Step 1: Download the driver installation package. Click on the MS3020drive.zip compressed file and extract it.

Step 2: After decompression, as shown in the image below, go to the Windows folder and double-click the application with the .windows extension.

Step 3: In the pop-up installation dialog box, click Next and Install until completion.

Step 4: After the installation process is complete, click Finish in the dialog box to end the installation.

Step 5: Connect the product device to the computer and check if the port number is displayed in Device Manager.

Windows 7/Windows Server 2008 Installation Notes

On some Windows 7 or Windows Server 2008 models, a driver verification error may pop up. You need to manually click "Always install this driver software", as shown in the image below:

If the driver still displays a signature error (yellow label) on Windows 7 and Server 2008, you need to install two (Windows 7) patches:

windows6.1-kb4474419-v3-x64.msu, windows6.1-kb4490628-x64.msu. After installing the patches, you need to restart your computer. The patch directory is "Win7 Server 2008 Patches".

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.