

# **USB to RS-485 Adapter**

**User's Manual**

# Table of contents

<b>Safety instructions</b> .....	<b>3</b>
<b>Copyright</b> .....	<b>3</b>
<b>Trademarks</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>4</b>
<b>Features</b> .....	<b>4</b>
<b>Package contents</b> .....	<b>4</b>
<b>System requirements</b> .....	<b>5</b>
<b>Product overview</b> .....	<b>6</b>
<b>Pin assignment</b> .....	<b>7</b>
<b>Installation</b> .....	<b>8</b>
- On Windows Vista®/Windows 7® .....	8
- On Windows 2000®/ Windows XP® .....	10
- Verify the driver on Windows OS.....	11
- On MAC OS®.....	12
<b>Specification</b> .....	<b>15</b>
<b>Regulatory compliance</b> .....	<b>16</b>
- FCC conditions.....	16
- CE .....	16
- WEEE information .....	16

Before attempting to connect, operate or adjust this product, please save and read the User's Manual completely. The style of the product shown in this User's Manual may be different from the actual unit due to various models.

## **Safety instructions**

Always read the safety instructions carefully:

- Keep this User's Manual for future reference
- Keep this equipment away from humidity
- If any of the following situation arises, get the equipment checked by a service technician:
  - The equipment has been exposed to moisture.
  - The equipment has been dropped and damaged.
  - The equipment has obvious sign of breakage.
  - The equipment has not been working well or cannot get it to work according to the User's Manual.

## **Copyright**

This document contains proprietary information protected by copyright. All right are reserved. No part of this manual may be reproduced by any mechanical, electronic or other means, in any form, without prior written permission of the manufacturer.

## **Trademarks**

All trademarks and registered trademarks are the property of their respective owners or companies.

# Introduction

USB-to-RS485 converter provides an easy way to connect serial ports as needed for systems. USB-to-RS485 functions as a converter between a USB port and standard serial ports. We can easily connect this converter to the USB port on your PC or USB hub and get access to any RS-485 devices such as PDAs, scanners, printers, etc. This device is suitable for portable devices, equipments and sales-end applications.

## Features

- Compliant with USB 2.0 version specification, Full Speed USB data transmission rate up to 12Mbps
- No extra I/O or IRQ required
- Serial port transmission rate can up to 128 Kbps
- 512 byte FIFO, Hardware and Software flow control support
- Support USB plug-and-play
- USB bus-power, no external power adapter required
- 15V ESD immunity to all serial signals
- Supports Windows 2000<sup>®</sup>, Windows XP<sup>®</sup>, Windows Vista<sup>®</sup>, Windows 7<sup>®</sup> and Mac OS<sup>®</sup> 10.6

## Package contents

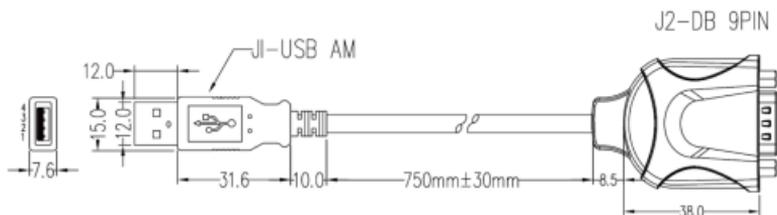
- USB Serial Converter x1
- CD (Driver & User's Manual) x1

# **System requirements**

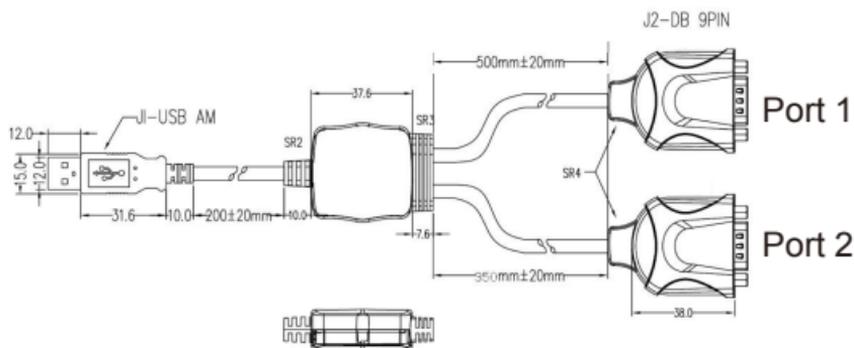
- IBM compatible computer or Mac
- Windows 2000<sup>®</sup>, Windows XP<sup>®</sup>, Windows Vista<sup>®</sup> 32/64-bit, Windows 7<sup>®</sup> and Mac 10.x
- Built-in USB port computer
- 64 MB RAM or higher
- Pentium 233 MHz or higher

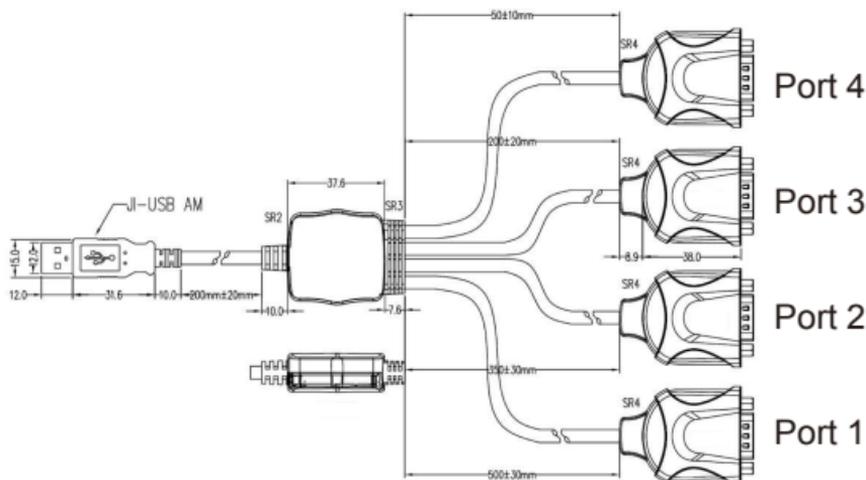
# Product overview

## FB1310

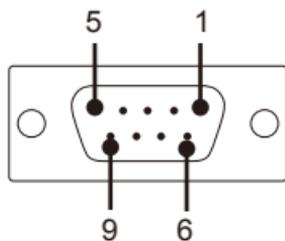


## FB1320





## Pin assignment



Pin	RS-485 (2-wire)
1	Data-(A)
2	---
3	---
4	---
5	GND
6	Data+(A)
7	---
8	---
9	---

SC will enable 120 ohm terminal resistor

# Installation

## On Windows Vista®/Windows 7®

---

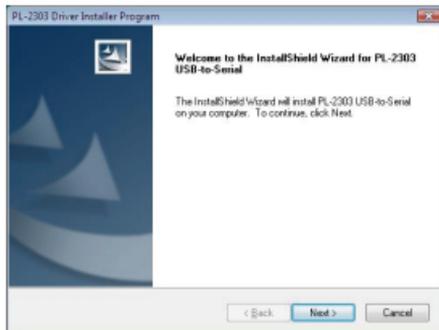
**Caution: DO NOT** connect USB to Serial Converter to computer before installing driver.

---

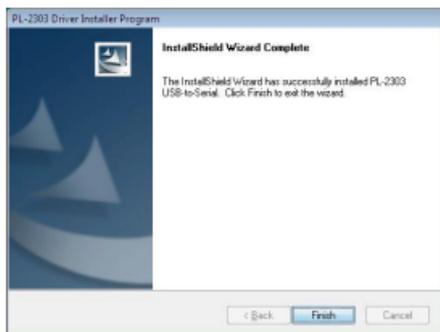
1. Insert the provided CD into your disc drive. Please locate and double-click the Run Setup.exe file under E:\Driver where E is your disc drive letter.



2. Click <Next> to install the driver.



3. Click <**Finish**> to complete the installation.



4. When the installation is completed, connect the USB to Serial Converter to an available USB port.

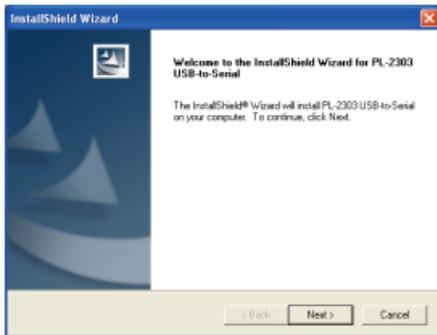
# On Windows 2000® / Windows XP®

---

**Caution: DO NOT** connect USB to Serial Converter to computer before installing driver.

---

1. Insert the provided CD into your disc drive. Click **<Next>** to install the driver.



2. Click **<Finish>** to complete the installation.

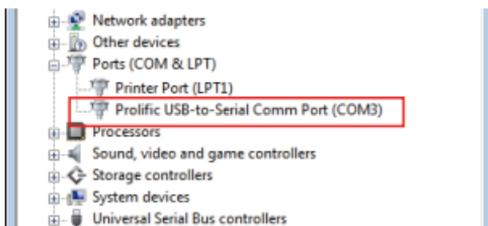


3. When the installation is completed, connect the USB to RS485 Converter to an available USB port.

## Verify the driver on Windows OS

To verify your installation, launch Device Manager as following:

1. Under Windows 2000® / Windows XP® Operating system:  
Right-Click My Computer and select **Properties** > **System** > **(Hardware)** > **Device Manager**.
2. Under Windows Vista® / Windows 7® Operating system:  
Right-Click **My Computer** and select **Properties** > **Device Manager**.



**Note:** If there is a  (question) or  (exclamation) mark appears behind “Prolific USB-to Serial Comm Port”, it means the driver did not install properly. Please delete the item and install the driver again.

# On MAC OS®

---

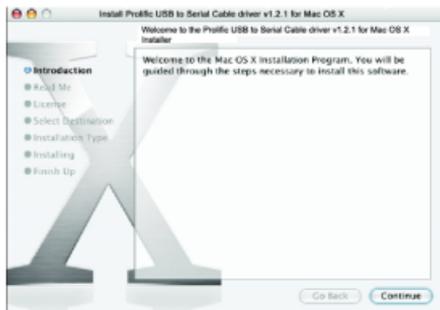
**Caution: DO NOT** connect USB to Serial Converter to computer before installing driver.

---

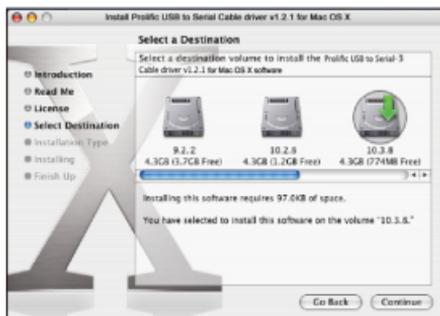
Support Mac Driver Installation:

- Mac OS® X v10.1 and later for PowerPC Mac
- Mac OS® X v10.4 and later for Intel Mac

1. Insert the provided driver CD into your CD-ROM drive. Double-click the CD and navigate to the directory of \Driver\Mac\Mac\_OS X 10.x\PL2303\_1.2.1 (📀 icon)
2. Click <**Continue**> to install the driver.



3. When the screen below appears, choose the destination volume that you want to install and click **<Continue>**.



4. Click **<Install>**.



5. Please enter the password as prompted.



6. Select **Continue Installation** to install the software when the screen below prompted.



7. Click **<Restart>** to reboot the Mac.



8. Connect the converter to an available USB port to your Mac.
9. To verify the installation, go to **Apple System Profiler > Extensions**, and the **ProlificUsbSerial** will be listed.

# Specification

Item	Description
<b>Serial Ports</b>	1 x RS-485 (FB1310)
	2 x RS-485 (FB1320)
	4 x RS-485 (FB1340)
<b>Connector</b>	DB9 male
<b>FIFO</b>	512 bytes
<b>ESD Protection</b>	15KV ESD
<b>Serial Communication Speed</b>	75bps to 128Kbps
<b>Interface</b>	USB 2.0
<b>Interface Connector</b>	USB-A female
<b>Power Requirement</b>	Bus-Power
<b>Operation Temperature</b>	0°C to 50°C
<b>Operation Humidity</b>	5~95%RH
<b>OS supported</b>	Windows 98SE <sup>®</sup> , Windows ME <sup>®</sup> , Windows 2000 <sup>®</sup> , Windows XP <sup>®</sup> , Windows Vista <sup>®</sup> , Windows 7 <sup>®</sup> , Mac OS <sup>®</sup> X 10.x
<b>Compliance</b>	FCC,CE

Specification is subject to change without further notice

# Regulatory compliance

## FCC conditions

This equipment has been tested and found to comply with Part 15 Class B of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received and include interference that may cause undesired operation.

## CE

This equipment is in compliance with the requirements of the following regulations: EN 55 022: CLASS B

## WEEE information

For EU (European Union) member users: According to the WEEE (Waste electrical and electronic equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.



USB to RS-485 Adapter  
User's Manual



0805v1