

USB - RS485 Isolated Converter Industrial Grade

Sunrom Part#
1430

Industrial grade, 1KV isolation, 600W TVS & ESD lightning protection, LED indicators, Wall & Panel mountable, USB 2.0, EMI, EMC, IEC compliance specifications

User's
Manual

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A quality product, proudly made in India by

SUNROM Electronics

<http://www.sunrom.com/m/1430>

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Introduction

Our USB-RS485 converters have been designed to convert bidirectional USB to RS485 interface.

It can act as Modbus master for industrial communication and control implementation.

A virtual serial port is created in the PC to access the serial line. LEDs indicate power on and data transmit and receive status.

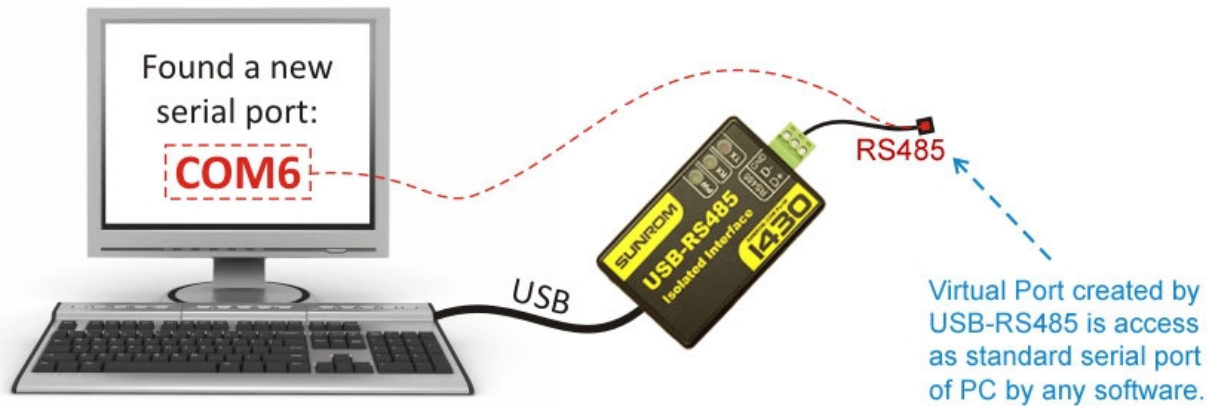


Figure 1 After connecting, “a virtual serial port” is created in your PC. Within the system it acts like a standard serial COM port.

Features

- ARM 32-bit controller for 24x7 Stable Industrial Operation
- Galvanic Isolated Interface for Power and Data
- Powered from USB, No external power is needed
- ESD Protection from USB
- Lightning and Surge Protection
- LEDs indicate power, transmit and receive
- Pluggable Terminal design for easy replacement
- High quality Mini-USB Cable with Ferrite for noise suppression
- Easy to mount on wall or panel
- Easy to use with standard software which works with serial ports
- Automatically Data switching from transmit to receive without any delay
- Zero Configuration - Adapts serial port settings from PC software automatically.

Applications

- Communication with RS485 device and a PC
- PC protection against overvoltage
- Interruption of ground loops

Specifications

Parameter	Value
Working Voltage	5V DC from USB Cable supplied with unit
Current Consumption	125 mA
Max. Data Transfer	500 kbps (All standard baud rate supported)
Controller Chipset	ARM 32 Bit
USB Driver	Single Driver supports Windows 32-64 bit OS like XP/NT/Vista/7/8/10 (No driver required on Linux)
Transmit/Receive	Automatically Data switching without delay
Temperature range	-40 to +85 °C (-40 to 185 F)
Configuration	No configuration needed. Unit automatically configured baud rate and settings as per PC software.
Terminating Resistor	Built in 120 Ohms resistance
USB Port	Mini-B (MiniUSB) type built in to the unit
Degree of Protection	IP 30
Box Dimension	45x70x18mm
Box Material	ABS Black

Module Pin Details

Pin	Details
GND	Signal Ground - Optional for Shielding, Not used in communication
D+/A	Bidirectional Data Pin RS485 Standard
D-/B	Bidirectional Data Pin RS485 Standard

Installation

Step: 1 - Install USB Driver

It is recommended to install USB Driver before connecting device to your PC.

Visit the link's download for USB Driver <http://www.sunrom.com/m/1430>

Once Install you can view the installed com port by going to **Device Manager>Ports** or **Start > Device and Printers**

The USB driver setup work for both Windows 32 bit and Windows 64 bit OS.

Normally your system assigns a unique COM Port to the device. If required for your software optionally you can change that by going to **Device Manager > Ports > Properties > Advanced**

Step: 2 - Use a software to test

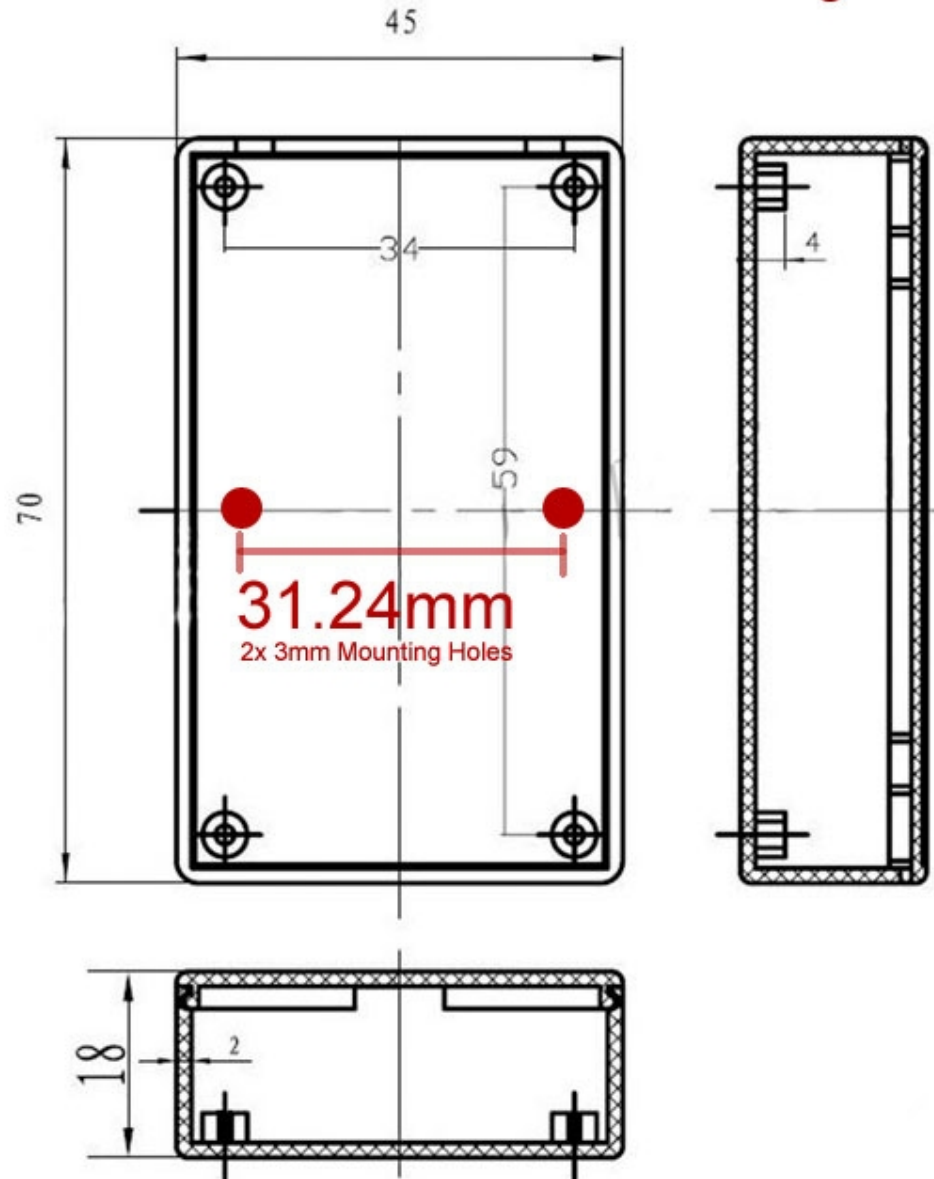
You can use any software like Terminal to test data communication

<https://sites.google.com/site/terminalbpp/>

Product Dimensions

Dimensions in mm

Dimension for Wall and Panel Mounting



Support

Sunrom Electronics offers free technical support (www.sunrom.com/contact) for customers, until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!

Technical Support is available by email only and scope is limited to problem faced during use of the use of product and does not cover end user programming and hardware troubleshooting.

Each product passes through strict quality checks before it reaches you. So if something is not working out right, the first thing to doubt is the connections or programming of your hardware.

Disclaimer

Sunrom Electronics assumes no responsibility or liability for any errors or inaccuracies that may appear in the present document. Specification and information contained in the present document are subject to change at any time without notice.

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