Universal Serial Bus (USB) has become the connectivity workhorse of today’s PCs, replacing the familiar serial port. However, many commercial and industrial devices still use the RS-485 interface. To connect these devices to modern PCs, you need a simple and reliable conversion solution. The 485USB9F-2W and 485USB9F-4W offer this solution in a space saving, USB port powered package.

Simply install the drivers and plug the converter into an available USB port on your computer or USB hub. The device will show up as an additional COM port in the Windows Device Manager which is fully compatible with your Windows applications. Choose the 485USB9F-2W for RS-485 2-wire applications or the 485USB9F-4W for RS-485 4-wire applications. Locked serial number versions are also available. A one meter USB cable is included.

**PRODUCT FEATURES**

- Connect RS-485 devices to your USB port
- Perfect for field service applications
- Small – fits easily into any laptop bag
- USB port powered
- USB 2.0 (12 Mbps) compatible
- RS-485 data rates up to 921.6 kbps
- Supports Windows XP, 7 (32/64 bit), 8 (32/64 bit), 8.1 (32/64 bit), 10 (32/64 bit)

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>485USB9F-2W</td>
<td>USB to RS-485 2-Wire Converter</td>
</tr>
<tr>
<td>485USB9F-4W</td>
<td>USB to RS-485 4-Wire Converter</td>
</tr>
<tr>
<td>485USB9F-2W-LS</td>
<td>USB to RS-485 2-Wire Converter (Locked Serial Number)</td>
</tr>
<tr>
<td>485USB9F-4W-LS</td>
<td>USB to RS-485 4-Wire Converter (Locked Serial Number)</td>
</tr>
</tbody>
</table>

**ACCESSORIES**

USBAMBM-3F - 3 ft. USB Cable (one included)

**Locked Serial Numbers Explained**

We configure our single-port USB to serial converters in two ways. In standard format, each product has a unique serial number. “Locked serial” format uses the same serial number that is associated with a model type.

If your converter will always be used with the same computer, the standard serialized model is all you need. If the converter is shared among several computers, like field service laptops, the locked serial number model lets you plug and play without having to worry about matching the two.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SERIALIZED</th>
<th>LOCKED SERIAL NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every unit is assigned a unique COM port</td>
<td>✔</td>
<td>-</td>
</tr>
<tr>
<td>Same type model numbers share the same COM port</td>
<td>-</td>
<td>✔</td>
</tr>
<tr>
<td>Ideal applications</td>
<td>Fixed Locations</td>
<td>Field Service</td>
</tr>
</tbody>
</table>

When ordering Locked Serial Number versions, add a “-LS” to the item number. Serialized and Locked Serial Number versions available for the same price.

All product specifications are subject to change without notice.
USB to RS-485 Mini-Converters
485USB9F-2W & 485USB9F-4W

SPECIFICATIONS

SERIAL TECHNOLOGY
RS-485 2-Wire Data A(-), Data B(+), Ground
RS-485 4-Wire TDA(-), TDB(+), RDA(-), RDB(+), Ground
Connector DB9 Female
Data Rate Up to 921.6 Kbps

USB TECHNOLOGY
Connector USB Type B Female
Standard 2.0 (Backward Compatible)
Data Rate 12 Mbps

POWER
Source USB Port
Input Voltage 5 VDC
Consumption ~ 0.5 W (Low power device, draws less than 100 mA)

SOFTWARE
Driver CD Windows XP, 7 (32/64 bit), 8 (32/64 bit), 8.1 (32/64), 10 (32/64)

MECHANICAL
Dimensions 5.8 x 3.2 x 1.6 cm (2.3 x 1.3 x .6 in)
Enclosure In-line mounted, plastic
Weight 0.23 lbs (104.3 g) with USB Cable

ENVIRONMENTAL
Operating Temp 32 to 158°F (0 to 70 °C)
Storage Temp -40 to 185 °F (-40 to 85 °C)
Op Humidity 0 to 95 % (Non-condensing)
MTBF 2-Wire 2130833 hours
MTBF 4-Wire 1869313 hours
MTBF Method Parts Count Reliability Prediction

MECHANICAL DIAGRAM

APPROVALS / CERTIFICATIONS

EU 2014/30/EU Electromagnetic Compatibility Directive
2011/65/EU Reduction of Hazardous Substances Directive

EMC EN 55022:2010 + AC Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement
EN 61000-6-1 Generic Immunity Standard for Residential, Commercial and Light-Industrial Environments
EN 61000-4-2 Electro-Static Discharge (ESD) Immunity
EN 61000-4-3 Radiated Field Immunity (RFI)
EN 61000-4-4 Electrical Fast Transients (EFT) Burst Immunity
EN 61000-4-5 Surge Immunity
EN 61000-4-6 RF Conducted Immunity

PINOUT: DB9 FEMALE CONNECTOR

5 4 3 2 1
9 8 7 6

PIN 485USB9F-2W 485USB9F-4W
1 Not Used Not Used
2 Data A(-) RDA(-)
3 Data B(+) TDB(+)
4 Ground Ground
5 Not Used Not Used
6 Ground Ground
7 Data B(+) RDB(+)
8 Data A(-) TDA(-)
9 Not Used Not Used

BB SmartWork powered by ADVANTECH