Industrial USB Communication Converter

MDA-8001
USB to Isolated RS-485 Converter

**Feature**

- No External Power Supply required
- Fully Compliant with the USB 1.1/2.0 (High Speed)
- 3000 VDC Isolation Protection on the RS-485 side
- ESD Protection for the RS-485 & USB Data Line
- Automatic RS-485 Direction Control
- Driver Supports Windows XP/Vista (32/64-bit)/7 (32/64-bit)/Linux/ Mac

**System Specification**

<table>
<thead>
<tr>
<th>Communication</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USB</td>
<td>USB 1.1 and 2.0 standards</td>
</tr>
<tr>
<td></td>
<td>Type B Connector</td>
</tr>
<tr>
<td>RS-485</td>
<td>Data+, Data-</td>
</tr>
<tr>
<td></td>
<td>5-Pin Terminal Block</td>
</tr>
<tr>
<td>Baud Rate</td>
<td>300 ~ 115200 bps</td>
</tr>
<tr>
<td>Transfer Distance</td>
<td>Max. 1,200 m at 9.6 kbps</td>
</tr>
<tr>
<td></td>
<td>Max. 400 m at 115.2 kbps</td>
</tr>
<tr>
<td>Max. Devices Supported</td>
<td>256</td>
</tr>
</tbody>
</table>

**LED Indicator**

- Power Indicator: 1
- Communication Indicator: 1

**Isolation**

- Voltage: 3000V DC

**Power**

- Input Range: +5 VDC from USB
- Consumption: Approx. 0.4W

**Environment**

- Operating Temperature: -25 ~ +75 °C
- Storage Temperature: -40 ~ +85 °C
- Humidity: 10 ~ 95% RH, Non-condensing

**Internal I/O Structure**

USB to UART Chip ➔ Auto Transceiver Control ➔ 3750 Vrms Photo-Isolation ➔ RS-485 Driver ➔ DATA+, DATA-

**Applications**

MDA-8001 USB to RS-485 Converter ➔ USB ➔ HMI ➔ MDA-8000 Series ➔ Temperature Controller ➔ PLC

**Pin Assignments**

- **USB**
  - 1: DATA +
  - 2: DATA -