USB to RS-232/485/422 Interface Converter

Features

- Point to point/four-wire full duplex
- Point to multi-point/four-wire full duplex
- Point to point/two-wire half-duplex
- Point to point/two-wire half-duplex
- When the converter is wired as full-duplex or half-duplex, a matching resistor (120 ohm 1/4W) should be connected at the terminal of the line to prevent signal reflection and interference
- Compliant with USBV.1, 1.0, 2.0 standard and ELA RS-485, RS-422S standard
- Supports WinXP/7/8/8.1/10 etc.

Specification

| USB Signal | VCC, DATA+, DATA-, GND, FG |
| RS-232 Signals | RXD, TXD, DTR, DSR, RTS, CTS |
| RS-485 Signals | T/R+, T/R-, GND |
| RS-422 Signal | T/R+, T/R-, RXD+, RXD-, GND |

- Working Mode: 232 Full Duplex, Asynchronous Work, Point-to-Point or Multi-Point, 2-Port Half Duplex, 4-port Full Duplex
- Direction Control: Data Flow Direction Automatic Control Technology, Automatic Control of Data Transmission Direction
- Baud Rate: 300 ... 921.6 Kbps, Automatic Detection of Serial Signal Rate
- Load Capacity: Support Point to Multi-Point, Each Converter Can Allow the Connection of 256 RS-422 or RS-485 Interface Devices
- Transmission Distance: RS-232 end 5 Meters, USB Port no More than 5 Meters; RS-485/422 End 1200 Meters
- Interface Protection: Surge Protection, ±15 kV Electrostatic Protection
- Interface Form: USB Class A Plug, DB9 Plug
- Signal Approval: 2 Signal Approval Lights Send (TXD) or (RXD) 1 power indicator (POWER)
- Transmission Medium: Twisted Pair or Shielded Wire
- Dimensions: 1m*36mm*16mm (L*W*H)
- Operating Temperature: -40 ... 85°C
- Relative Humidity: 5 ... 95%
- Transmission Distance: 0 ... 1200m (485/422)

Pin Definition Description

<table>
<thead>
<tr>
<th>DB9 Male (PIN)</th>
<th>Output Signal</th>
<th>RS-232 Full Duplex Wiring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>RXD</td>
<td>RXD</td>
</tr>
<tr>
<td>3</td>
<td>TXD</td>
<td>TXD</td>
</tr>
<tr>
<td>4</td>
<td>DTR</td>
<td>DTR</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>GND</td>
</tr>
<tr>
<td>6</td>
<td>DSR</td>
<td>DSR</td>
</tr>
<tr>
<td>7</td>
<td>RTS</td>
<td>RTS</td>
</tr>
<tr>
<td>8</td>
<td>CTS</td>
<td>CTS</td>
</tr>
<tr>
<td>9</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### USB to RS-232/485/422 Interface Converter

#### DB9 Male(PIN) | Output Signal | RS-422 Full Duplex Wiring | RS-485 Half-Duplex Wiring
--- | --- | --- | ---
1 | T/R+ | Transmitting(A+) | RS-485 (A+)
2 | T/R- | Transmitting(B-) | RS-485 (B-)
3 | RXD+ | Receiving(A+) | N/A
4 | RXD- | Receiving(B-) | N/A
5 | GND | GND | GND
6 | N/A | N/A | N/A
7 | N/A | N/A | N/A
8 | N/A | N/A | N/A
9 | N/A | N/A | N/A

- USB-A: USB signal input and pin assignment diagram

![USB-A Diagram](image)

**Art Nr.**

RND 405-00002