

USB to 5V Serial UART Cable, FTDI Chipset



Features

- Enables USB-to-Serial TTL conversion/bridging
- Connects to device (Microcontroller) UART or I/O
- Data transfer rates from 300K to 3M baud at TTL levels
- I/O includes TX, RX, RTS, CTS, VCC, and GND
- USB 2.0 full speed compatible
- Supports 7 or 8 Data bits, 1 or 2 Stop bits, and parity setting of None, Even, Odd, Mark, or Space
- Data Flow controlled by RTS/CTS or XON/XOFF
- internal EEPROM with allocated user writable area
- FTDIChip-ID™ Security feature supported
- PCB assembly powered by USB Bus
- External Logic powered from USB Port at +5V or +3V
- Factory Set for +3.3V CMOS drive outputs and 5V safe TTL inputs
- Operating Temperature ranging from -40C to +85C
- OHCI, UHCI, and EHCI host controller compatible
- Zero-Cost Royalty Free Drivers and Virtual Comm Port Software
- Drivers (USB and DLL software interface) supports: W98, 98SE, ME, Win2K, Win2003, WinXP, Win2008, WinXP-64, Win7, Win7-64, WinVista, WinVista64, WinXP-Embedded, WinCE v4.2, v5.0, v6.0, and Linux 2.4+
- Virtual Comm supports: W98, 98SE, ME, Win2K, Win2003, WinXP, Win2008, WinXP-64, Win7, Win7-64, WinVista, WinVista64, WinXP-Embedded, WinCE v4.2, v5.0, v6.0, MAC OS8, OS9, OSX, and Linux 2.4+
- Available lengths up to 6-Foot (1.8 m)
- Available in either Black or Translucent USB connector shell overmold

Description

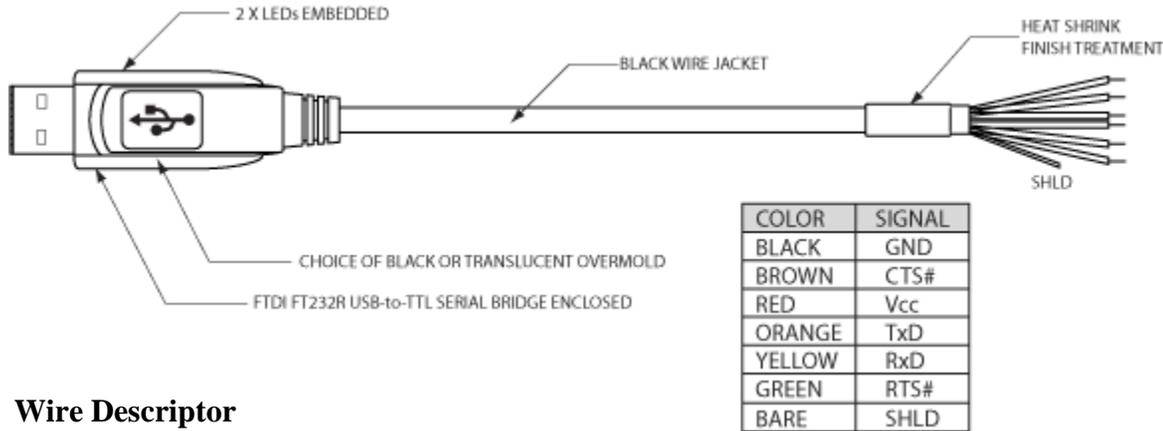
The RN-SRL-FTD5V is a USB-to-Serial TTL bridge cable available in Black or Translucent overmold USB-A male connectors, having connection-ready 6 conductor tinned-leads at the opposite end. Each cable is made up to a 6 foot length (1.8m), with a heat-shrink finish treatment. At the core of each cable assembly is the RN-SRL-FTD5V-DGL USB-to-Serial TTL Bridge Board Module (PCB Assembly) designed to accommodate a quick and easy means to interconnect to devices having TTL level Serial interfaces which require conversion to USB.

The RN-SRL-FTD5V-DGL cable assembly is assembled with a fixed TTL level of +5V, and are RoHS compliant.

Deriving its power from the USB bus connection, the RN-SRL-FTD5V-DGL is USB 2.0 Full Speed Compatible and inherently complies with all of the FTDI-FT232R documented features and specifications. It also includes support for data transfer rates of up to 3Mbaud and supports the FTDIChip-ID™ feature as well. This feature involves the factory-installed unique internal serial number for use in cases where security is an issue, and where password protection is required for applications involving file transfer processes and other security applications. Each RN-SRL-FTD5V (Translucent) is equipped with two LEDs preconfigured as data transmission activity indicators for the TX (RED) and RX (GREEN) signal lines. Redefining the fixed function purpose of either or both LEDs may be possible through use of third party software and utilities.

Software drivers are zero-cost and royalty-free and readily available from various online sources as well as from our support site:

<http://rovingnetworks.com/support.php>

Mechanical Details –Wire Descriptor

Wire Descriptor

| Wire Color | Connection | Function | Description |
|------------|-----------------|----------|-----------------------------|
| Black | GND | GND | Ground Supply |
| Brown | CTS# | Input | Clear to Send – Handshake |
| Red | V _{cc} | Output | +5V output |
| Orange | TxD | Output | Transmit Async Data Output |
| Yellow | RxD | Output | Receive Async Data Input |
| Green | RTS# | Input | Request to Send – Handshake |
| Bare | SHLD | SHLD GND | Shield Ground |

Operating Parameters

| Parameter | Reference | Min. | Typ. | Max. | Conditional Notes |
|-----------------|----------------------|-------|------|-------|-------------------------------------|
| V _{CC} | Output Power Voltage | 4.25V | 5.0V | 5.25V | Value depends on mating Device Port |
| I _o | Output Power Current | -- | | -75mA | <2.5mA during suspend mode |
| T | Operating Temps. | -40C | | +85C | |

I/O Pin characteristics

| Pin Characteristics | Reference | Min. | Typ. | Max. | Conditional Notes |
|---------------------|----------------------------|------|------|------|--------------------|
| V _{oh} | Output Voltage High | 3.2V | 4.1V | 4.9V | Current source=6mA |
| V _{ol} | Output Voltage Low | 0.3V | 0.4V | 0.6V | Current source=6mA |
| V _{in} | Input Switching Threshold | 1.0V | 1.2V | 1.5V | |
| V _{Hys} | Input Switching Hysteresis | 20mA | 25mA | 30mA | |

Ordering Information

| Part Number | Description |
|------------------|---|
| RN-SRL-FTD5V-BLK | USB to 5V serial UART cable, FTDI chipset, Black housing, 1.8 meter cable length, tin leads |
| RN-SRL-FTD5V-CLR | USB to 5V serial UART cable, FTDI chipset, Clear housing, LED status, 1.8 meter cable length, tin leads |

Related Products

| Part Number | Description |
|------------------|---|
| RN-SRL-PRO3V-BLK | USB to 3V serial UART cable, Prolific chipset, Black housing, 1.8 meter cable length, tin leads |
| RN-SRL-PRO3V-CLR | USB to 3V serial UART cable, Prolific chipset, Clear housing, LED status, 1.8 meter cable length, tin leads |

Custom Configurations

The TTL to serial cables are available in the following custom options for both, the FDTI and PROLIFIC versions with extended lead times.

| Parameter | Description |
|------------------|--|
| Length | 12, 24, 36, 48, 60 or 72 inches |
| End Terminations | <ul style="list-style-type: none"> • Tinned Lead • 8-pin, 2mm pitch, keyed • 6-way, 0.1 in pitch • Audio Jack, Male • PICAXE-DB9-F • PICAXE-3Pin • PICAXE-Audio Jack-Male |

Copyright © 2011 Roving Networks. All rights reserved.

Roving Networks reserves the right to make corrections, modifications, and other changes to its products, documentation and services at any time. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete.

Roving Networks assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using Roving Networks components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

Roving Networks products are not authorized for use in safety-critical applications (such as life support) where a failure of the Roving Networks product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [USB Cables / IEEE 1394 Cables](#) category:

Click to view products by [Microchip](#) manufacturer:

Other Similar products are found below :

[68768-0173](#) [FNY-W6003-01](#) [88764-0800](#) [13805532](#) [148700-1](#) [17-200621](#) [17-250051P](#) [954](#) [AC102012-2](#) [IP-USB1\(C10\)S-RW](#)
[CABLE/RTP/USB/DT](#) [RS232-GTD](#) [USBFTVX2SA2N03A](#) [USBFTV2SA2N03A](#) [1689404-1](#) [FTP-629Y401](#) [FTP-628Y402](#) [943301-001](#)
[FNY-W6022](#) [FNY-W6003-03](#) [1310-1015-05](#) [1310-1018-04](#) [1310-1019-04](#) [UA-30AMFM-SL7B02](#) [UA-30AMFM-SL7B01](#) [UA-30AFM-](#)
[LD7B03](#) [UA-30AMFM-SL7B03](#) [USBAPSCC7202A](#) [UES-1001A160](#) [UES-1003A160](#) [USBFTVX7SA2N20A](#) [USBFTVX2SA2N20A](#)
[USBFTV2PEMSA2N10A](#) [FTP-629Y602](#) [USBCAMCM100](#) [USB A/F*2 to 2.54 2*5P-SH L=400mm](#) [EP-CBUSB10P2FLT](#) [1310-1033-01](#)
[1310-1037-04](#) [ASR-USB](#) [68784-0075](#) [17-241361](#) [17-230471](#) [217B-BC02](#) [USB-29](#) [19800-010500-200-RS](#) [USB+MINI DIN 6P WITH BKT](#)
[088738-8100](#) [106413-4410](#) [106413-4405](#)