JETCON

JetCon 1101 / 1101i

USB to RS-232C Serial Converter

- USB / RS-232 DTE and DCE Connection
- Fully RS-232C Signals with Hand-shaking
- USB 1.1/1.2/2.0 compatible
- 921.6 Kbps High Speed Serial
- 12Mbps USB Data Throughput
- 15KV Human Body ESD protection
- 5KV Isolation for Medical Electrical Equipment
- -30~75°C wide operating temperature

Overview

As digital technology advances and light-weight design requirements, more and more computer equipment does not support the traditional communication interface and change to USB (Universal Serial Bus technology) interface. The USB technology simplifies digital system design and support more number of communication interfaces, but also erected fences to traditional equipment isolation. Will challenge many automated control integration industry, the integration of old and new equipment, and approached full system function. Through the JetCon 1101 and JetCon1101i USB to Serial RS-232 Converter, the system integrator will be able to reduce the system integrate troubles, and make integration becomes easy and simply.
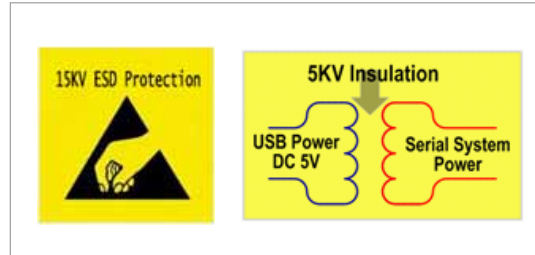
Fully Function USB/ RS-232C Serial Converter

The JetCon 1101 / JetCon 1101i supports USB 2.0 interface and supports one RS-232C serial interface with 921.6Kbps throughput. It provides RS-232 handshaking mechanism for flow control function enabled to connect Data Communication Equipment, like as PSTN modem, or Programmable Logic Control device which needs flow control. The serial interface supports fully communication parameters which can be configured by operating system- Windows, Macintosh and Linux systems.

Higher Electrical Magnetic Immunity

In some application environment, it is very sensitive for the electrical magnetic interference. The noise may conducted or emitted by power system or data signal system. Therefore, the place like as research Lab, Hospital is usually restricted to connect equipment with non certified device. The JetCon 1101i provides 5KV isolation design on the USB and the power system, which provides more safety connection for adding serial communication on sensitive equipment which with USB extension port only.
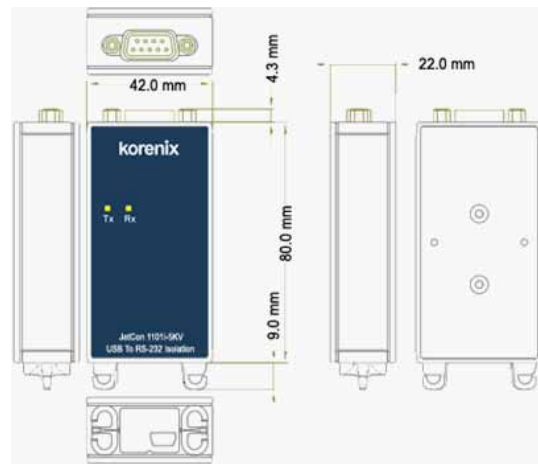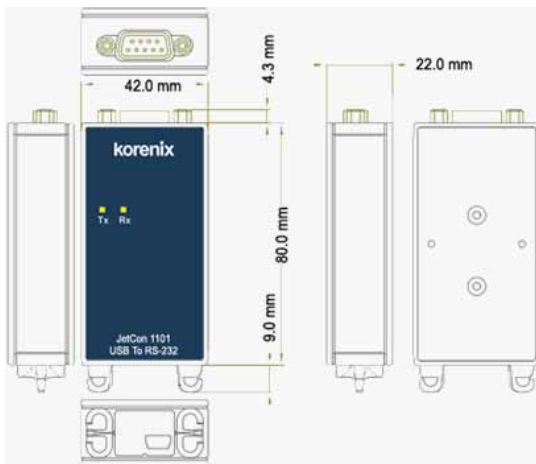

Applications

The following diagram shows the host computer communicates with programmer logic controller via the USB interface, and the JetCon1100 provides USB to serial port convert function. It offers the logical com mapping to physical serial port function.

Dimensions (Unit = mm)

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Specifications

Technology
Standard: EIA/TIA-232, RS-232 (ITU-T v.28)

System performance
Forwarding Rate:
USB 2.0 Slave with 12Mbps data throughput
RS-232 baud rate up to 921.6Kbps
FIFO Buffer: Transmit Buffer: 128Bytes
Receive Buffer: 256Bytes

Interface
Connector: USB: Mini USB slave , B-Type
Serial: DB-9, Female
Connection Distance: USB:5 Meters
RS-232 Serial: 15 Meters
Serial Parameters: Length of Data bit: 7, 8 bits
Stop bit:1,2
Type of parity check: None, Even, Odd, Space, Mark
Type of Flow Control: RTS/ CTS, XON/ XOFF
Serial Signal: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
System LED: TX Blinking (Green): Transmitting Data
RX Blinking (Amber): Receiving Data

Operating System Support
Windows: XP, 2003, Vista, 2008, Win 7
Macintosh: System 8, 9
Linux: 2.4, 2.6

Power Requirements
System Power: Obtain from USB Host interface
JetCon 1101 power consumption: 0.2W, 5V/40mA (Max)
JetCon 1101i-5KV power consumption:0.27W, 5V/55mA (Max)
Isolation System power: JetCon1101i-5KV supports 5KV insulation voltage between USB Host interface and RS-232 interface

Mechanical
Installation: DIN Rail mount
Case: Plastic Case with IP-30 protection
Dimension: 93.3 mm (H) x 42 mm (W) x 22 mm (D)
Weight: JetCon 1101: 0.22kg with package
JetCon 1101i:0.225kg with package

Environmental
Operating Temperature: $-30^{o}C \sim 75^{o}C$
Operating Humidity: 0% ~ 90% non-condensing
Storage Temperature: $-40^{o}C \sim 80^{o}C$
Storage Humidity: 0%~ 95%, non-condensing

Regulatory Approvals
EMC: CE, FCC Class A
MTBF: JetCon 1101: 323,000 Hours ,MIL-HDBK-217F
JetCoon 1101i-5KV: 228,600 Hours, MIL-HDBK-217F
Warranty: 3 Years

Ordering Information

JetCon 1101   **USB to RS-232C Serial Converter, -30~75°C operating temperature**

JetCon 1101i-5KV **USB to RS-232C Serial Converter, 5KV isolation,-30~75°C operating temperature**

Includes:

- JetCon 1101 / JetCon 1101i-5KV
- DIN rail kit
- USB Mini B Type to USB A type Cable 100cm x 1
- Quick Installation Guide
- CD Driver/Manual