

JetCon 1201/1201i-3KV

USB to RS-422/RS-485 Serial Converter



- USB to RS_485 /RS_422 Serial Converter
- USB 1.1/1.2/2.0 compatible
- 921.6 Kbps High Speed Serial
- 12Mbps USB Data Throughput
- 120Ω Line Terminator Build-in.
- 32 x RS-485 devices connection
- 15KV Human Body ESD protection
- 3KV isolation, 600W Serial Port surge protection
- -30~75°C wide operating temperature

- Industrial Intelligent NMS
- Rackmount PoE Plus Switch
- Industrial PoE Plus Switch
- Industrial 12-24V PoE Switch
- Industrial PoE Switch
- Rackmount L3/L2 Switch
- Gigabit Managed Switch
- Managed Ethernet Switch
- Entry-level Switch
- Wireless Outdoor AP
- Embedded PoE/Router Computer (LINUX)
- Industrial Communication Computer (WIN/LINUX)
- Ethernet/PoE/ Serial Board
- Ethernet I/O Server
- Media Converter**
- Serial Device Server
- SFP Module
- Din Rail Power Supply

Overview

As digital technology advances and light-weight design popular, more and more computer equipment does not support the traditional serial communication interface, and only equipped USB (Universal Serial Bus technology) interface. It simplifies and unifies the digital design and supports numbers of communication interfaces by USB Hub connection. The USB interface expands the I/O connection in easily, flexible and

economic; But, it also erected fences to traditional equipment with serial RS-232/422/485 interface for Factory Automation. Therefore, to integrate and engage new system with traditional automatic equipment by a USB to Serial converter becomes popular now. Through the USB to Serial solution, like as JetCon 1201 and JetCon 1201i, the system integrator can easily deploy new control system with traditional equipment.

Various OS platform support

The USB/ Serial converter supports several operating systems, with the driver installation and BIOS auto assign address and interrupt the software can easily mapping to each USB/ Serial converter and approach

software's performance. The supported operating software includes Microsoft windows based, Linux system and Mac system. With properly driver install, the serial converter will be start service for you.

Long Distance, Multiple Point Serial Communication – RS-422 / RS-485

The JetCon 1201 and 1201i-3KV are USB to Serial Converter which are support one USB 2.0 and one RS-422 / RS-485 serial interface in 5-pin removable terminal block connector. The serial interface provides the link ability of with terminal block connector for balanced multipoint communication system, and supports 4-wire RS-422, 4-wire RS-485 (multi-drop RS-422), 2-wire RS-485, and build-in 120 ohm line terminator.

Therefore, it does not need attach extra resistor to get better reliability, just switches the DIP-Switch. It DIP-Switch configuration includes several functions - communication mode, 120 ohm line terminator, multi-drop communication, and RS-485 ECHO. Uses the design of DIP-Switch, it makes JetCon 1201 / JetCon 1201i-3KV becomes an easy USB/Serial solution for the field site industrial application.

Higher Electrical Magnetic Immunity

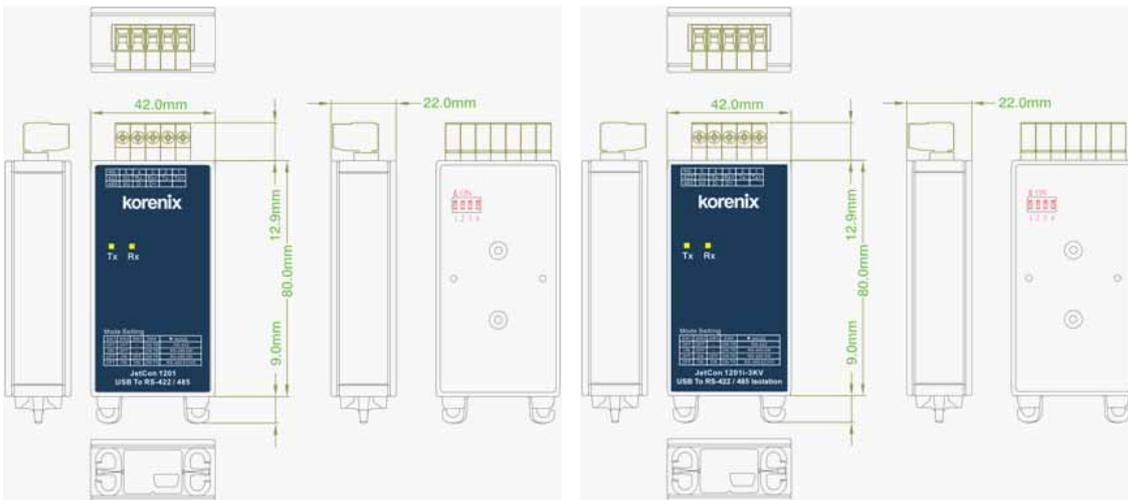
In some application environment, it is very sensitive for the electrical magnetic interference. The noise may be conducted or emitted by power system or data signal system. Therefore, the JetCon 1201 series support

15KV electrical static discharge protection on the USB and serial interface, and 3KV isolation between USB and Serial interface for the hashed environment (JetCon 1201i-3kv).

Applications



Dimensions (Unit = mm)



Specifications

Technology

Standard: TIA/EIA RS-422, TIA/EIA RS-485

System performance

Forwarding Rate:

USB 2.0 Slave with 12Mbps data throughput

RS-422 / RS-485 baud rate up to 921.6Kbps

FIFO Buffer: Transmit Buffer: 128 Bytes

Receive Buffer: 256 Bytes

Interface

Connector: USB: Mini USB slave , B-Type

Serial: DB-9, Female

Cable for Serial Interface: RS-422 / RS-485: Twisted Pair Cable.

Operating Mode: Select and Control by DIP Switch setting. Build-in 120ohm line terminator resistor and configured by DIP Switch.

Connection Distance: USB:5 Meters

4-wire RS-422 mode: 1500 meters (4,900 feet)

2/4-wire RS-485 mode: 1200 meters (4,000 feet), Max 32 Nodes.

Serial Parameters: Length of Data bit: 7, 8 bits

Stop bit:1,2

Type of parity check: None, Even, Odd, Space, Mark

Serial Signal: RS-422: TX+, TX-, RX+, RX-, Signal GND.

RS-485 (4-Wire): TX+, TX-, RX+, RX-, Signal GND

RS-485 (2-Wire):Data+, Data-, Signal GND

DIP Switch: Serial communication mode selection (DIP-Switch 1,2),RS_485 ECHO mode selection (DIP-Switch 3), Line Terminator selection (DIP-Switch 4)

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

Isolation Protection: 3KV insulation between USB Host interface and RS-422/ RS-485 serial interface

Mechanical

Installation: DIN Rail mount

Case: Plastic Case with IP-30 protection

Dimension: 101.9 mm(H) x 42.0mm (W) x 22.0mm (D)

Weight: JetCon 1201: 0.22kg with package

JetCon 1201i-3KV:0.225kg without package

Environmental

Operating Temperature: -30°C~75°C

Operating Humidity: 0% ~ 90% non-condensing

Storage Temperature: -40°C~ 80°C

Storage Humidity: 0%~ 95%, non-condensing

Regulatory Approvals

EMC: CE, FCC A

MTBF: JetCon 1201:295,000 Hours, MIL-HDBK-217F

JetCon 1201i-3KV:264,000 Hours, MIL-HDBK-217F

Warranty: 3 Years

Industrial
Intelligent
NMS

Rackmount
PoE Plus
Switch

Industrial
PoE Plus
Switch

Industrial
12-24V
PoE Switch

Industrial
PoE Switch

Rackmount
L3/L2 Switch

Gigabit
Managed
Switch

Managed
Ethernet
Switch

Entry-level
Switch

Wireless
Outdoor AP

Embedded
PoE/Router
Computer
(LINUX)

Industrial
Communication
Computer
(WIN/LINUX)

Ethernet/PoE/
Serial Board

Ethernet
I/O Server

**Media
Converter**

Serial Device
Server

SFP Module

Din Rail
Power Supply

Ordering Information

JetCon 1201 USB to RS-422/RS-485 Serial Converter, -30~75°C

JetCon 1201i-3kv USB to RS-422/RS-485 Serial Converter, 3KV isolation,-30~75°C operating Temp.

Includes:

- JetCon 1201 or JetCon 1201i-3KV
- DIN rail kit
- USB Mini B Type to USB A type Cable 100cm x 1
- Quick Installation Guide
- Driver CD