

JetCon 2401 / 2401-w

Industrial Serial to Fiber Media Converter

Best Buy



CE FC  RoHS



- 3-in-1 RS232/422/485 to serial fiber media converter
- Easy mode change without resetting
- Supports Multi-mode 5KM, Single-mode 40KM
- PTP or SFR transmission mode for serial fiber ring communication
- Auto baud rate and direction control
- High level immunity with 15KV ESD protection
- Two-way 120 ohm line terminator
- Supports biasing resistor
- Dual modes for power input, AC 24V(12~32V)/ DC 24V(12~48V)
- -20~70°C operating temperature for hazardous environment applications (-40~70°C wide operating temperature available by request)

Overview

JetCon 2401 is a 1-port RS232/422/485 serial to fiber media converter with extended fiber transmission. Single-mode and Multi-mode fiber optic ports meet your needs for long distance transmission up to 40KM. JetCon 2401 will automatically detect the data baud rate of the connected full-duplex serial device, ranging from 300 to 921,600bps. By moving up the DIP switch, JetCon 2401 supports an auto setting function without system power reset to change serial interface, fiber wiring architecture and termination of receiver and transmission line. Also JetCon 2401

is specially designed for applications requiring good immunity of EMI/EMS such as power substation, rail and traffic control signification systems under severe electromagnetic interference and wide temperature range.

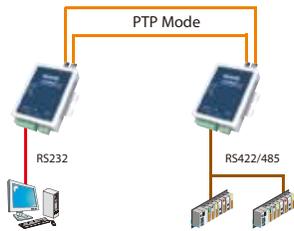
JetCon 2401 can be easily wall mounted as well as be mounted directly on DIN rail. AC 24V(12~32V) or DC 24V(12~48V) is available for different operating environments. With IP 30 rigid aluminum case, CE/FCC regulatory approvals, and 5-year global warranty, JetCon 2401 is your reliable choice for hazardous applications.

Application

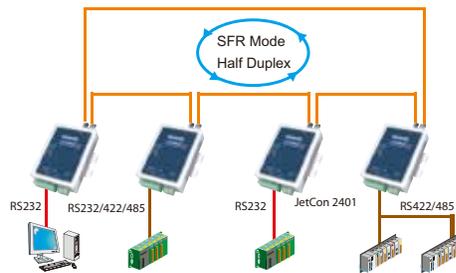
The JetCon 2401 supports two transmission configurations, Peer to Peer in full duplex and Serial Fiber Ring (SFR) in half duplex. In a Peer-to-Peer configuration, two fibers are required between the two converters, one for data in each direction (RX and

TX). To expand the number of connected serial devices users can apply the SFP configuration mode and connect the fiber transmitter to the rest of the slaves and eventually back to the master node.

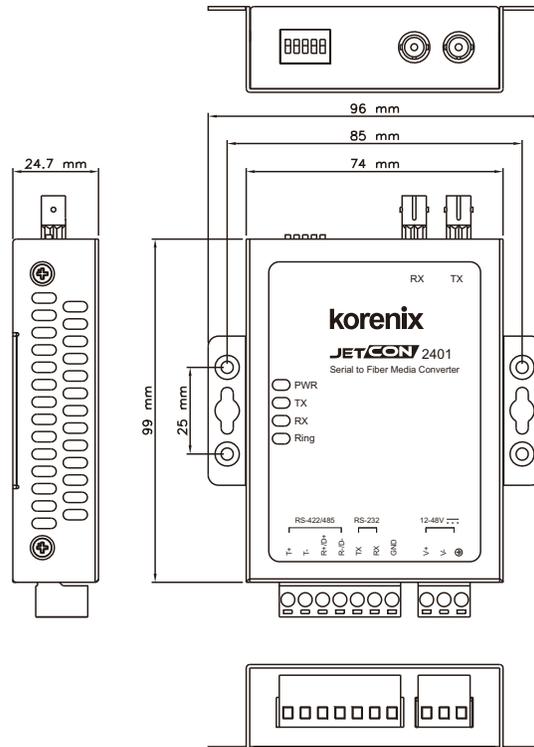
Peer to Peer Serial Communication (PTP)



Serial Fiber Ring Communication (SFR)



Dimensions (Unit = mm)



- 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

Specification

Technology

Standard:

EIA/TIA-232 RS-232 (ITU-T v.28)
EIA/TIA-422 RS-422 (ITU-T v.11)
EIA/TIA-485 RS-485 (ISO/IEC8284)

Serial Interface:

RS-232 2-wires, RS-422 4-wires, RS-485 2/4-wires

Architecture: PTP mode: Peer To Peer wiring with full or half duplex mode.

SFR mode: Serial Fiber Ring with half duplex mode

Interface

Number of Ports:

1 x RS-232/RS-485/RS-422 serial port
1 x Fiber Transmit port, 1 x Fiber receive port

Connectors:

Serial port: 7-pin removable terminal block

Fiber port: 1 x Duplex ST

Power input: 3-pin removable terminal block with earth ground

Transmit Baud Rate: 300bps to 921.6Kbps

Link distance:

RS-232: 50 feet

RS-422: 4000 feet

RS-485: 4000 feet

Multi-mode fiber: 50/125um or 62.5/125um, max. distance 5KM

Single-mode fiber: 8/125um, 9/125um max. distance 40KM

Fiber Transceiver:

JetCon2401-m, Multi-mode:

Distance: 5KM @ 62.5/125um multi mode cable with 3dbm/km attenuation

Wave-length: 820nm

TX Power: -12dBm (Min) ~ -9dBm (Max)

RX Sensitivity: -28dBm (Min)

Link budget: 16dBm

JetCon2401-s, Single-mode:

Distance: 40KM@9/125um single mode cable with 0.35dbm/km attenuation

Wave-length: 1310nm

TX Power: -9dBm (Min) ~ -8dBm (Max)

RX Sensitivity: -27dBm (Min)

Link budget: 18dBm

Serial signal:

RS-232: TxD, RxD, Signal Ground.

RS-422: TxD+, TxD-, RxD+, RxD-, Signal Ground

RS-485 4 wires: TxD+, TxD-, RxD+, RxD-, Signal Ground.

RS-485 2 wires: Data+, Data-, Signal Ground.

Configuration DIP Switch:

Switch 1 and 2: serial interface mode select.

Switch 3: RX 120ohm terminator Disable (off)/Enable (on)

Switch 4: TX 120ohm terminator Disable (off)/Enable (on)

Switch 5: PTP mode (off) / SFR mode (on).

Diagnostic LED:

Power LED: Power 1 (Green)

TX (Green): Serial port is on transmitting data.

RX (Yellow): Serial port is on receiving data.

Ring mode (Green): Working on SFR (Serial Fiber Ring) mode.

Power Requirements

System Power: Positive or negative power system.

DC 24V (12~48V) with reverse polarity protection.

AC 24V (AC12~32V, 50/60Hz)

Provides 0.65A over current protection

Power Consumption: 1.5Watts @ 24V(Maximum)

Mechanical

Installation: DIN-Rail mount or desktop

Case: IP-30 grade aluminum metal case

Dimension: 24.7mm(H) x 74mm (W) x 99mm (D) with DIN

Weight:

0.24kg with package

0.135kg without package

Environmental

Operating Temperature: -20 ~70°C

(JetCon 2401-mw/2401-sw -40~70°C)

Operating Humidity: 5% ~ 95% (non-condensing)

Storage Temperature: -40 ~ 80°C

Storage Humidity: 5%~ 95% (non-condensing)

Regulatory Approvals

EMI: FCC Class B; CE/EN55022:2003, class B; CE/EN61000-3-2:2001 Harmonic Test CE/EN61000-3-3:1995 Flicker test

EMS:

EN61000-4-2:1998, ESD Testing, Level 3

EN61000-4-3:1998, RS testing, Level 3

EN61000-4-4:1995, EFT testing, Level 3

EN61000-4-5:1995, Surge test, Level 3

EN61000-4-6:1996, CS testing, Level 3

Shock: IEC60068-2-27

Vibration: IEC60068-2-6

Free Fall: IEC60068-2-32

Warranty: 5 Years

Ordering Information

JetCon 2401-m Industrial Serial to Fiber Media Converter, ST, Multi-mode/5KM

JetCon 2401-s Industrial Serial to Fiber Media Converter, ST, Single-mode/40KM

Includes:

- JetCon 2401-m / 2401-s
- Quick Installation Guide