

JetCon 2401

Industrial Serial to Fiber Media Converter

- Extend serial signal through fiber cable
- PTP or SFR transmission mode
- RS-232/RS-422/RS-485 all in one design
- Converter serial to Multi-mode or Single mode fiber.
- 15KV ESD Line Protection
- Baud rate up to 921.6Kbps
- IP 30 Case Protection
- 12~48V Power input with polarity reverse protection
- DIN-Rail Mount



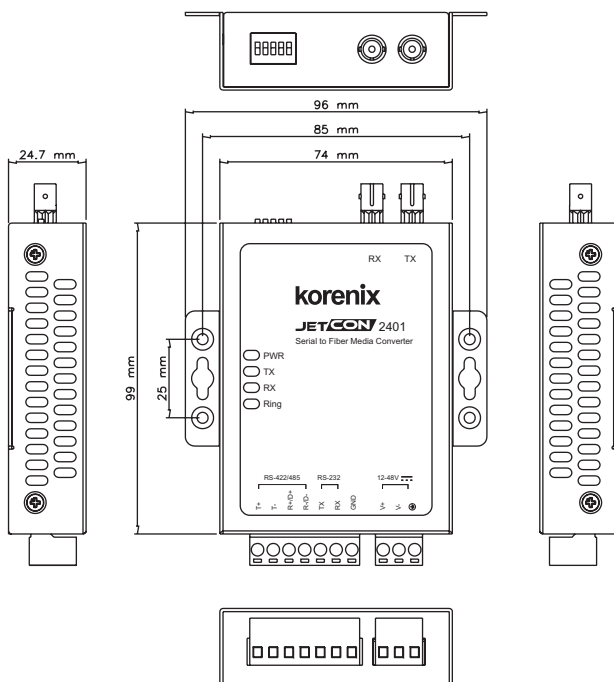
Overview

JetCon2401 is a Multi-serial to fiber media converter which adopts RS-232/RS-422/RS-485 triple mode circuits with auto baud rate and direction control. It extends the serial signal link distance to 5KM (JetCon2401-m Multi-mode Optical Fiber) or 40KM (JetCon2401-s Single-mode Optical Fiber) and also provides good immunity of EMI/EMS.

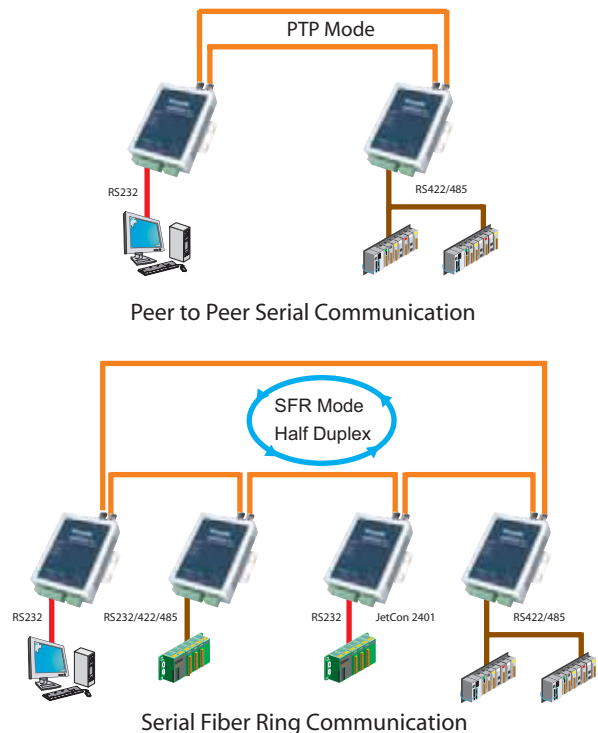
To ensure nonstop transmission in hazardous environment, JetCon2401 supports wide operating temperature range, -20°C~70°C model (JetCon2401).

Further more, JetCon2401 supports wide range power input (DC/AC) and DIN rail mount for quick and easy installation.

Dimensions (unit=mm)



Application



Specifications

Technology

Standard:

EIA/TIA-232 RS-232 (ITU-7 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-wire, RS-485 2/4-wire

Architecture:

PTP mode: Peer To Peer wiring in Full or Half Duplex
SFR mode: Serial Fiber Ring in Half Duplex

Interface

Number of Ports:

1 x RS-232/RS-422/RS-485 serial port
1 x Fiber TX port, 1 x Fiber RX port

Connectors:

Serial port: 7-pin removable terminal block
Fiber port: Two ST connectors
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

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

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

Configuration DIP Switch:

Switch 1 and 2: serial interface mode selection.
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
Casing: IP-30 grade aluminum metal case

Dimensions:

96mm (W) x 24.7mm(H) x 99mm (L)

Weight:

0.24Kg with package
0.135Kg without package

Environmental

Operating Temperature: -20 to 70°C
Operating Humidity: 5% to 95% (Non-condensing)
Storage Temperature: -40 to 80°C
Storage Humidity: 5%~ 90% (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: Level 3, Criterion performance A
EN61000-4-3: Level 3, Criterion performance A
EN61000-4-4: Level 3, Criterion performance A
EN61000-4-5: Level 3, Criterion performance A
Safety: CE/EN60950
Shock: IEC60068-2-27
Free Fall: IEC60068-2-32
Vibration: IEC60068-2-6
Warranty: 3 Years

Ordering Information

JetCon2401-m Industrial Serial to Fiber Media Converter/ST, Multi-mode/ 5KM

Includes:

- Industrial Serial Media Converter, Multi-mode
- Quick Installation Guide

JetCon2401-s Industrial Serial to Fiber Media Converter/ST, Single-mode/40KM

Includes:

- Industrial Serial Media Converter, Single-mode
- Quick Installation Guide