

# JetCon 2301

## Industrial Fast Ethernet to Fiber Media Converter



- One port 10/100 TX to 100 FX media converter
- Link Loss Forwarding far-end fault detection technology
- System Fault Relay Output
- Support 1.2KV Hi-PoT isolation protection
- Power redundancy with wide range input, DC24V (12~48V)
- Reverse power polarity protection
- Aluminum case with IP-31 grade protection
- -10~70°C operating temperature for hazardous environment applications



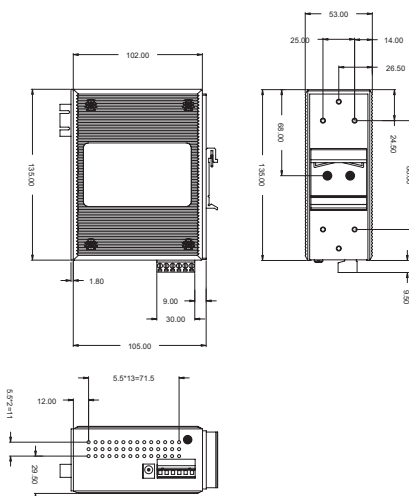
### Overview

JetCon 2301 is a 1-port media converter qualified for extended distance transmission under harsh environment.

For the easy maintenance and time-saving, JetCon2301 features remote Link Loss Forwarding technology which provides remote link down signal forwarding, acknowledging link events occurred on each end of JetCon2301 to main server. To activate forwarding mode and LLF functions, simply adjust DIP switch then reset the converter, the reconfigurations will be applied. Single-mode and Multi-mode fiber optic ports meet your needs for long distance transmission up to 30KM.

When you are ready to install JetCon 2301, you will find out that it can be easily wall mounted and be mounted directly on DIN rail. JetCon 2301 has two DC24V inputs, and it is also compatible with range from DC12V~48V. Dual power inputs and built-in reverse polarity protection are designed as the redundant power system to ensure your power continuity. With IP 31 rigid aluminum case, 1.5KV Hi-PoT isolation protection, CE/FCC regulatory approvals, and 5-year global warranty, JetCon 2301 series are your reliable choices for hazardous applications.

### Dimensions (Unit –mm)



## Specification

### Technology

**Standard:** IEEE802.3 10BASE-T

IEEE802.3u 100BASE-TX/100BASE-FX

IEEE802.3x Flow Control and Back pressure

**Processing:** Store and Forward switching architecture

**Link Lose Forwarding:** Tx to Fiber-If Tx port link breaks down, JetCon 2301 will force the fiber port to disconnect.

Fiber to Tx-If fiber port link breaks down, JetCon 2301 will force the Tx port to disconnect.

### Interface

**Number of Ports:** 1 x 10/100 Base-TX with Auto MDI/MDI-X and Auto Negotiation functions

1 x 100 Base-FX, supports Full/Half duplex and set by DIP Switch

**Connector:** 10/100 Base-TX: RJ-45

100 Base-FX: Duplex SC

**Power:** Embedded in 6-pin terminal block connector

**Relay:** Embedded in 6-pin terminal block connector

**Core:** RJ-45 connector: supports CAT-3, CAT-4, CAT-5 unshielded twisted pair or shielded twisted pair cable. The link distance is maximum 100 meters.

SC connector: supports multi-mode or single-mode optical fiber

Multi-mode fiber: 50/125um or 62.5/125um, max. distance 2KM

Single-mode fiber: 8/125um, 9/125um or 10/125 um, max. distance 30KM

### Fiber Transceiver:

JetCon2301-m, Multi-mode: 2KM max. distance

Wave-length: 1310nm

Min Tx Power:-19dBm

Max Tx Power:-14dBm

Min. Rx Sensitivity:-14dBm

Max Rx Sensitivity:-31

Link budget:12dBm

JetCon2301-s, Single-mode: 30KM max. distance

Wave-length:1310nm

Max Tx Power:-8dBm

Min Tx Power:-15dBm

Max Rx Sensitivity:-34dBm

Min Rx Sensitivity: -8dBm

Link budget:19dBm

**Configuration DIP Switch:** DIP 1: Enabling Port Alarm (ON)/ Disabling Port Alarm (OFF)

DIP 2: Enabling LLF (ON)/ Disabling LLF (OFF)

DIP 3: Fiber Full-Duplex (ON)/ Fiber Half-Duplex (OFF)

DIP 4: TX port Auto-Negotiation (OFF) / 100Base-TX Full Duplex (ON)

**Diagnostic LED:** System: Power (Green), Power 1 (Green), Power 2 (Green), Fault (Yellow)

Fiber port: Link/Activity (Green), Full/Half Duplex (Yellow)

TX port: 100Mbps (Green), Link (Green), Full Duplex (Yellow)

**LED Indicators:** Power (Green), Power1 (Green), Power2 (Green), Fault (Orange)

Fiber: Link/Activity (Green), Half/Full Duplex (Green)

TX: 10/100 (Green), Link (Green), Full Duplex (Orange)

**Alarm:** Relay output for port break and power failure

### Power Requirements

**Power Supply:** 24 VDC (12 to 48 VDC)

**Reverse Polarity Protection:** Present

**Power Consumption:** 4.6W

### Mechanical

**Hi-Pot:** 1.2KV testing passed for port to port and port to power

**Installation:** DIN Rail or Wall Mount

**Casing:** IP31 protection, aluminum case

**Dimensions:** 54 mm (W) x 135 mm (H) x 105mm (D)

### Environmental

**Operating Temperature:** -10~ 70°C (14 ~ 158°F)

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

**Storage Temperature:** -40 ~ 85°C (-40 ~ 185°F)

### Regulatory Approvals

**EMI:** FCC Class A, EN55022 Class A

**EMC:** EN61000-4-2, EN61000-4-3, EN61000-4-4

EN61000-4-5, EN61000-4-6, EN61000-4-8, EN610004-11

**Safety:** UL, cUL, CE/EN60950

**Shock:** IEC 60068-2-27

**Free fall:** IEC 60068-2-32

**Vibration:** IEC 60068-2-6

**MTBF:** 225,855 Hours, MIL-HDBK-217F standard

**Warranty:** 5 years

## Ordering Information

### JetCon 2301-m Industrial Fast Ethernet to Fiber Media Converter,Multi-mode / 2KM

Includes:

- JetCon 2301-m
- Wall mount kit
- Quick Installation Guide
- CD User manual

### JetCon 2301-s Industrial Fast Ethernet to Fiber Media Converter,Single-mode / 30KM

Includes:

- JetCon 2310-s
- Wall mount kit
- Quick Installation Guide
- CD User manual