

JetCon 1301

Industrial Mini Fast Ethernet to Fiber Media Converter

- Slim-sized for Industrial Din-rail Application
- Convert 10/100TX Port to Fiber Optic Network
- Support 10/100Base-TX Auto MDI/MDI-X and Auto Negotiation
- Support Switch and pure-converter mode
- Extreme low data forwarding latency
- Link Loose Forwarding
- 18~27VAC or 18~32VDC Power Input by 2-pin Terminal Block
- IP 30 Case Protection
- DIN-Rail Mount



Overview

Korenix JetCon1301 is a compact sized and rugged industrial fast Ethernet media converter, which supports one 10/100TX Fast Ethernet copper and one Fast Ethernet fiber port and with wide power range either AC (18~27) or DC(18~32V), and wide operating temperature (-20~70°C). The JetCon1301 also provides different operating features than before, like pure converter mode, switch mode, TP forced speed and Link Loose forwarding. With those features, it can guarantee the packet never to be lost and alarm the link event to the IT engineer immediately. Especially the pure converter mode, it will not check the packet format and just forward the signal to link partner when its setting is on pure converter mode and this

operating mode is designed for special devices that use proprietary communication protocol.

The JetCon1301 meets IEEE802.3 10Base-T, IEEE-802.3u 100Base-TX, IEEE802.3u 100Base-FX and IEEE802.1x flow control standards and is compatible with most of Ethernet devices. JetCon1301 delivers 2 types of mode for multi-mode and single-mode fiber. The single mode model can link partner to reach 30KM far and multi-mode 4KM via different type of optical fiber. For your network architecture, JetCon1301 is the best choice of all media converter with stability, inerrability, and convenience of networking.



Specifications

Technology

Standard:

IEEE802.3 10Base-T
IEEE802.3u 100Base-TX
IEEE802.3u 100Base-FX
IEEE802.3x flow control

Packet transfer mode:

- Switch mode: Forwards the received data only after receiving the frame completely. The forwarding latency depends on the packet length, which supports from 64 to 1600 Bytes.
- Pure converter mode: Directly transfer Ethernet signal without any frame check.

Link Lose Forward:

When the copper link of the converter fails, the LLF function will inform the remote converter to shut off the copper link and herefore alert the link down event to the management system. JetCon1301 provides 1 DIP Switch to enable or disable LLF. When LLF is enabled, JetCon 1301 will automatically link down the copper port if the FX port link is off.

Interface

Number of Ports:

1 x 10/100 Base-TX with Auto MDI/MDI-X function, 1 x 100BaseFX

Connectors:

10/100 Base-TX: RJ-45
100Base-FX: Duplex SC

Power: 2-pin terminal block

Cables:

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 4KM
Single-mode fiber: 8/125um, 9/125um or 10/125 um, max. distance 30KM

Fiber Transceiver:

JetCon1301-m, Multi-mode: 4KM max. distance
Wave-length: 1310nm
Min Tx Power:-19dBm
Max Tx Power:-14dBm
Min Rx Sensitivity:-30dBm
Link budget:11dBm
JetCon1301-s, Single-mode: 30KM max. distance
Wave-length:1310nm
Max Tx Power:-8dBm
Min Tx Power:-15dBm

Min Rx Sensitivity:-34dBm

Link budget:19dBm

Port Alarm DIP Switch:

DIP 1: Link loose forwarding Enable /Disable.
DIP 2: RJ-45 Auto-Negotiation/Forced 100Mbps Full Duplex
DIP 3: Fiber Full Duplex/Half Duplex
DIP 4: Switch/Pure Converter mode.

Diagnostic LED:

System: Power (Green)
RJ-45 port: Link/Activity (Green)
Fiber port: Link/Activity(Green)

Power Requirements

System Power:

2 pins terminal block for power input.
DC 24V (18~32V) with reverse polarity protection.
AC 18~27V, 47~63Hz

Power Consumption: 3.5 Watts @ DC 24V(Maximum)

Mechanical

Installation: DIN-Rail mount

Casing: IP-30 protection, aluminum case

Dimensions:

70mm(H) x 30mm (W) x 89mm (D) (with DIN rail clip)
70mm(H) x 30mm (W) x 80mm (D) (without DIN rail clip)

Weight:

374g with package
292g without package

Environmental

Operating Temperature: -10 to 70°C

Operating Humidity: 0% to 90% (Non-condensing)

Storage Temperature: -40 to 80°C

Storage Humidity: 0%~ 90% non-condensing

Regulatory Approvals

EMI: FCC Class A, CE/EN55022

EMC Immunity Interface:

EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6,
EN61000-4-8, EN61000-4-11

Safety: CE/EN60950

Shock: IEC60068-2-27

Vibration: IEC60068-2-32

Free Fall: IEC60068-2-32

MTBF: 200000 hours @ 25°C

Ordering Information

JetCon1301-m Industrial Fast Ethernet to Fiber Media Converter, SC, Multi-mode/ 4KM

Includes:

- Industrial Fast Ethernet Media Converter, Multi-mode
- Quick Installation Guide

JetCon1301-s Industrial Fast Ethernet to Fiber Media Converter, SC, Single-mode/ 30KM

Includes:

- Industrial Fast Ethernet Media Converter, Single-mode
- Quick Installation Guide