BeiJer
ELECTRONICS

JetCon 1301 Series Industrial Media Converter
Quick Installation Guide V1.6

Overview

JetCon 1301 Industrial Media Converter, conforming IEEE 802.3 and 802.3u standard, supports 1 10/100Base TX plus one 100FX Fast Ethernet Fiber port. JetCon 1301 adopts slim and compact industrial design to save rail space of compact system requirement. In order to survive under harsh environment, JetCon 1301 chooses industrial-grade aluminum case with IP30 standard protection. The 4-Pin DIP switch can configure JetCon 1301 to operate in switch mode or pure converter mode. The JetCon1301 "-w" model extends support for wide operation temperature. To extend the link distance and network infrastructure, JetCon1301-s equips with a transceiver for large power budget for single mode fiber to reach 30KM link distance. JetCon1301 is recommended to be powered by DC24V (18~32V) from the 2-pin terminal block. For JetCon1301-48V, it is recommended to be powered by DC48V (36~60V). The power input provides polarity reverse protection to avoid system damage.

Package Check List

▸ JetCon 1301 Industrial Media Converter

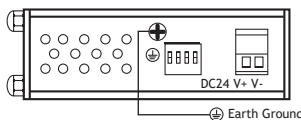▸ Quick Installation Guide

Installation

Mount the unit

Din-Rail mount: Mount the din-rail clip screwed on the rear of JetCon 1301 on the DIN rail

Grounding JetCon 1301

There is one grounding screw on the bottom side of JetCon1301. Connect the frame grounding of JetCon1301 to the grounding surface to ensure safety and prevent noise.

DC24 V+ V-

⏚ Earth Ground

Wiring the Power Inputs

1. Insert the positive and negative wires into the V+ and V- contact on the terminal block connector.

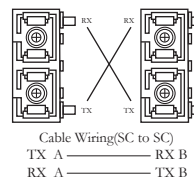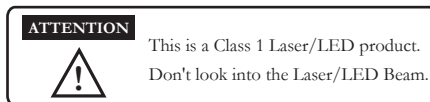2. Tighten the wire-clamp screws to prevent the power wires from being loosened.

V+   V-

Accept 24AWG wire. JetCon1301 provide polarity reverse protection

Notes: The recommended working voltage is DC24V

Connecting to Network

1. **Connecting the Ethernet Ports:** Connect one end of an Ethernet cable into the UTP port of JetCon 1301, while the other end is connected to the attached networking device. UTP port support auto MDI/MDIX function. The LNK / ACT LED will turn on and flash to indicate RJ-45 port link and the packets received and transmitted from RJ-45.

2. **Connecting the Fiber Port:** Connect the fiber port on your JetCon 1301 to another Fiber Ethernet device, by following the figure below. Wrong connection or fiber cable type will cause the fiber port not working properly.

> **ATTENTION**
> ⚠️
> This is a Class 1 Laser/LED product. Don't look into the Laser/LED Beam.

Cable Wiring(SC to SC)
TX A ——————— RX B
RX A ——————— TX B

DIP Switch Settings for Alarm Relay Output

Pin Nr. #	Status	Description	Alarm Switch
Pin1	ON	Enable Link Loss Forwarding function.	ON ▮▮▮▮ 1 2 3 4
	Off	Disable Link Loss Forwarding function (Default).	
Pin2	ON	Set RJ-45 in 100Mbps Full Duplex mode.	
	Off	Set RJ-45 in Auto-Negotiation mode.(Default).	
Pin3	ON	Set Fiber port in Half duplex mode.	
	Off	Set Fiber port in Full duplex mode.(Default).	
Pin4	ON	Set JetCon1301 in pure converter mode.	
	Off	Set JetCon1301 in Switch converter mode.(Default).	

Note: After adjust the DIP-switch, please reboot the unit to activate the new settings.

Note: The Link Loss Forwarding function only works when two JetCon 1301 devices are connected via fiber.

JetCon 1301 工业级光电信号转换器，符合 IEEE 802.3 和 IEEE 802.3u 标准，提供 1个 10/100Base TX 和 1 个 100FX 界面。JetCon 1301 采用小巧的工业级外形设计，可以除系统安装空间狭小的顾虑。为了适应工业现场恶劣的作业环境，JetCon 1301 密闭的铝制外壳符合 IP30 工业防护标准。JetCon 1301 的 4-Pin 拨码开关可是设置 JetCon 1301 采用交换机工作模式或是单纯的光电转换器工作模式。JetCon1301 "w" 系列还能使用宽温的工作环境。为了延长通讯距离扩大网络覆盖面积，JetCon1301-s配备高功率预算的收发器，单摸光口支持最大传输距离为 30Km。JetCon1301 使用 2-pin 接线端子，建议供电范围 DC24V（18~32V）。JetCon 1301-48V 建议供电范围 DC48V(36~60V)。JetCon1301 还具备电源极性反接保护。
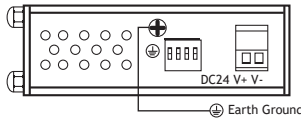
产品清单

▸ JetCon 1301工业信号转换器

▸ 快速安装向导

安装配件

导轨安装: 将导轨夹用螺丝钉固定JetCon1301后面，然后卡上导轨。

JetCon 1301设备接地

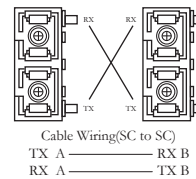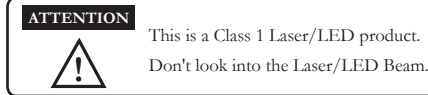在JetCon1301底部有一个地线连接螺丝。将JetCon1301地线螺丝接地，可以确保设备使用安全，并可防干扰。设备未接地，因自然因素造成损害，将不予以修复。

DC24 V+ V-

⏚ Earth Ground

电源连接

1. 将电源线正负极插入产品底部接线端子V+ 和V- 接脚。

2. 将线夹拧紧，防止DC电源线脱落。

备注：建议供电范围：DC24V

V+ V-

连接 24AWG 电源线，JetCon1301 提供极性反接保护

网络连接

1. **连接以太口：**双绞线的一端连接 JetCon 1301 RJ-45 电口，另一段连接网络设备。RJ-45 电口支持自适应 MDI/MDIX。此时 LNK / ACT 指示灯会亮起，信号灯闪烁表示此 RJ-45 电口有数据正在传递。

2. **连接光口：**光纤线一端连 JetCon 1301 光口，另一端接设备，如下图所示连接模式。错误的连接会致使光口不能正常工作。

ATTENTION	This is a Class 1 Laser/LED product. Don't look into the Laser/LED Beam.

⚠️

Cable Wiring(SC to SC)
TX A ——————— RX B
RX A ——————— TX B

DIP拨码开关设定

Pin Nr. #	状态	描述	Alarm Switch
Pin1	ON	启动 LLF(Link Loss Forwarding) 功能	ON
	Off	关闭 LLF(Link Loss Forwarding) 功能 (默认)	
Pin2	ON	设定 RJ-45 为 100Mbps 全双工模式	
	Off	设定 RJ-45 为自适应模式 (默认)	1 2 3 4
Pin3	ON	设定光口为半双工模式	
	Off	设定光口为全双工模式 (默认)	
Pin4	ON	设定 JetCon1301 为单纯的光电转换器模式	
	Off	设定 JetCon1301 为交换式的光电转换器模式 (默认)	

备注: 更改DIP拨码开关设置以后，请重启设备让新设置生效。

备注: LLT功能仅在使用光纤连接的成对JetCon 1301上正常运作。

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注意! 请勿于电源开启时插拔接线端子，避免产生生火花造成系统损坏。

此产品保证完全符合欧盟2003年1月27日电气和电子设备危害物质限制委员会限用指令2002/95/EC (RoHS)及2011/65/EU(RoHS 2.0)。