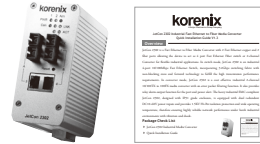


Overview

JetCon 2302 is a Fast Ethernet to Fiber Media Converter with 2 Fast Ethernet copper and 2 fiber ports allowing the device to act as 4 port Fast Ethernet Fiber switch or 2-channel Converter for flexible industrial applications. In switch mode, JetCon 2302 is an industrial 4-port 10/100Mbps Fast Ethernet Switch, incorporating 3.2Gbps switching fabric with non-blocking store and forward technology to fulfill the high transmission performance requirements. In converter mode, JetCon 2302 is a cost effective industrial 2-channel 10/100TX to 100FX media converter with an error packet filtering function. It also provides relay alarm output function for the port and power alert. The heavy industrial EMC compliant JetCon 2302, designed with IP31 grade enclosure, is equipped with dual redundant DC10~60V power inputs and provides 1.5KV Hi-Pot isolation protection and wide operating temperature, therefore ensuring highly reliable network performance under harsh industrial environments with vibration and shock.

Package Check List

- ▶ JetCon 2302 Industrial Media Converter
- ▶ Quick Installation Guide



Installation

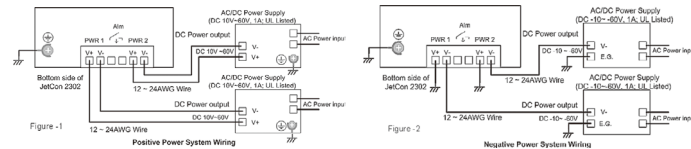
Mount the unit

Din-Rail mount: Mount the din-rail clip on the rear of JetCon 2302 on the DIN rail. For information about the DIN Rail installation, please refer to user's manual.



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 DC wires from being loosened.
3. Both of the redundant power inputs accept negative or positive type power source; the negative power source is commonly used in telecom applications. See the figure-1 and figure-2 for the power wiring.



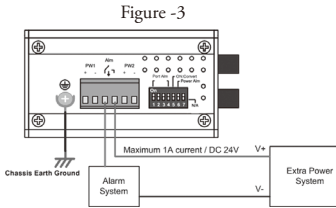
Note: The recommended working voltage is DC24V (DC10~ 60V); both power inputs should apply with the same power system; either positive or negative.

Wiring the Relay Output and Chassis Grounding

The relay output alarm contacts are in the middle of the terminal block connector as shown in the figure below.

By inserting the wires and setting the DIP switch of the respective Port Alarm to "ON", relay output alarm will detect any port failure and form a short circuit. The alarm relay output is "Normal Open". Please refer to Figure -3 for the relay wiring architecture.

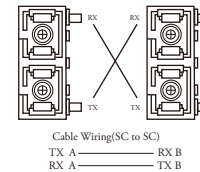
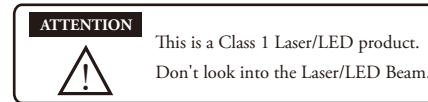
In an industrial environment there might be a lot of devices that generate electromagnetic noise, such as AC motors, electric welding machines and power generators. These devices will generate electric noise or surges that might disturb communication. To prevent these interferences, the JetCon 2302 should be well earthed.



Connecting to Network

1. Connecting the Ethernet Port: Connect the Ethernet RJ-45 port to another networking device by properly twisted cable (UTP or STP). If the port is well linked with partner, the Link LED (Green) will turn on and the Activity LED will start blinking slowly when the packets are transmitting and receiving. The RJ-45 ports support MDI/MDI-X function.

2. Connecting the Fiber Port: Connect the fiber port to fiber link partner by proper fiber cable as shown in the Figure-4. Ensure that both of connected fiber ports are the same type and use exactly optical fiber cable.



Operating Mode Selection

The JetCon 2302 is not only a 4-port Switch, but it is also a 2-channel Fast Ethernet Media Converter. It is configured by the DIP switch and activated through the power resetting or the reset button. To understand the functions of the Switching and converter modes, refer to the table below:

	Switching mode	Converter mode
Data exchange	Yes	No. Port 1, 3 grouped as a single channel A Port 2, 4 grouped as a single channel B
Forward Technology	Store and forward	Store and forward
Port Event Alarm	Fully supported	Fully supported

DIP Switch Setting

Pin No. #	Status	Description
DIP 1-4	ON	Port link down event alarm enabled.
	Off	Port link down event alarm disabled. (Default)
DIP 5	ON	Enabled Converter mode
	Off	Switch mode. (Default)
DIP 6	ON	Enabled power event alarm
	Off	Disabled power event alarm (Default)
DIP 7	Not available	

DIP Switch Setting

Indicators	LED color	Description
Ethernet RJ-45	Green	Green on: the port is linked well with partner
	Yellow	Green blinking: the port is transmitting packet.
Fiber	Green	Green on: the port is linked well with partner.
	Yellow	Green blinking: the port is transmitting packet.
PWR 1,2	Green	Green on: the power is on applying.
Alm	Red	Red on: port link down or power off event occurred, and the alarm relay output conductors formed a short circuit.
Con.	Green	Green on: the device is setting on the converter mode.

Support

5 Years Warranty

Each of Korenix's product line is designed, produced, and tested with high industrial standard. Korenix warrants that the Product(s) shall be free from defects in materials and

workmanship for a period of five (5) years from the date of delivery provided that the Product was properly installed and used.

This warranty is voided if defects, malfunctions or failures of the warranted Product are caused by damage resulting from force measure (such as floods, fire, etc.), other external forces such as power disturbances, over spec power input, or incorrect cabling; or the warranted Product is misused, abused, or operated, altered and repaired in an unauthorized or improper way.

Attention! To avoid system damage caused by sparks, please DO NOT plug in power connector when power is on.

The product is in compliance with Directive 2002/95/EC and 2011/65/EU of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronics equipment (RoHS Directives & RoHS 2.0)

Korenix Customer Service

KoreCARE is Korenix Technology's global service center, where our professional staffs are ready to solve your problems at any time Korenix global service center's e-mail is KoreCARE@korenix.com.

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导言

JetCon 2302不仅是一款紧凑型4口千兆以太网交换机，同时也是一个双通道千兆光电信号转换器，可灵活应用在不同领域中。在交换模式下，JetCon 2302是一款4口快速以太网交换机，拥有3.2Gbps无阻塞交换矩阵及存储转发交换技术，满足高品质数据传输需求。在转换器模式下，JetCon 2302是一款2通道千兆光电信号转换器，支持端口故障检测，维护轻松便捷。JetCon2302满足NEMA-TS2标准，采用IP31工业防护等级的外壳设计，不仅支持DC10~60V冗余电源输入，还支持1.5KV Hi-Pot高压隔离保护，支持-40~75°C工作环境，能确保在恶劣环境下提供高可靠度、高性能的数据传输服务。

产品清单

- ▶ JetCon 2302工业信号转换器
- ▶ 快速安装向导



安装

安装配件

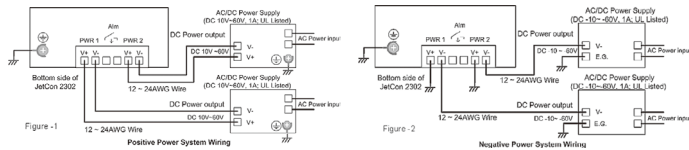
导轨安装：将导轨夹固定在JetCon 2302的背面，然后卡上导轨。更多导轨安装信息，请参考用户操作手册。



电源线连接

1. 将电源线正负极插入产品底部接线端子的V+和V-接口。
2. 将线夹螺丝拧紧，防止DC电源线脱落。

3. 两路冗余电源支持正负极电源输入，负极电源输入通常使用在电信业中。电源线配线请参考图1及图2。



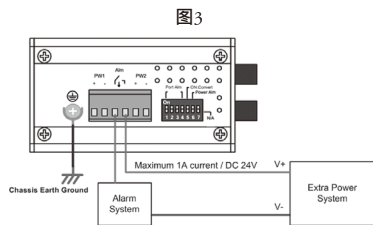
备注：建议供电范围：DC24V (DC10~60V)；两路电源输入需有相同的系统电源型态(正极或负极)。

继电器报警输出和地线连接

继电器报警系统接脚位于接线端子中部，如右图所示。继电器报警输出配线结构，请参考图3。接线后并将其DIP拨码开关拨到“ON”，继电器报警功能即开始侦测端口是否有误。此功能为常开。

在工业环境下，有许多产生电磁干扰的设备，例如AC电动机、电子焊接机、发电机，而这些设备产生的电噪声及尖波，可能使网络通讯受到影响。

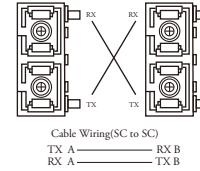
将地线螺丝接地，确保设备安全，防止电气干扰。设备未接地，因自然因素造成损害，将不予以修复。



网络连接

1. **连接以太网口**：使用合适的双绞线(UTP或STP)连接JetCon 2032 RJ-45电口和另一台网络设备。当Link LED灯显示绿色，且Activity LED灯开始闪烁，表示设备已正确连接且有数据正在传递。RJ-45电口自适应MDI/MDI-X。

2. **连接光口**：使用光纤线连接JetCon 2302光口及其它光口设备，如图所示。并确保两个光口是同类型，且使用相同的光纤线缆。



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

选择工作模式

JetCon 2302不仅是一款4口交换机，同时也是一个两通道快速光电信号转换器，可通过DIP拨码开关切换不同的工作模式。当完成设定后，请重启电源或按重置键让新设置生效。交换机模式与转换器模式的功能比较，请参考下表：

	交换机模式	转换器模式
数据交换	可	不可 Port 1, 3组成独立的信道A进行数据传输 Port 2, 4组成独立的信道B进行数据传输
转发技术	存储转发	存储转发
端口事件报警	支持	支持

DIP 拨码开关设置

DIP 拨码开关	状态	描述
DIP 1-4	ON	启动端口连线情况报警
	Off	关闭端口连线情况报警(默认)
DIP 5	ON	转换器模式
	Off	交换机模式(默认)
DIP 6	ON	启动电源事件报警
	Off	关闭电源事件报警(默认)
DIP 7	No function	

LED指示灯

指示灯	LED 颜色	说明
以太网 RJ-45	绿灯	绿灯亮：此端口正常连接
	黄灯	绿灯闪烁：有数据正在传递
光口	绿灯	绿灯亮：此端口正常连接
	黄灯	黄灯闪烁：有数据正在传递
PWR 1,2	绿灯	绿灯亮：电源使用中
继电器报警	红灯	红灯亮：断线或断电的情况发生，造成继电器报警短路
转换器模式	绿灯	绿灯亮：设定JetCon 2302为转换器模式

客户服务

5年质保

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然而，自然外力(火、水、雷灾)所造成的产品故障，或其它外部因素如电源干扰、不当电源输入、不当接线等造成的损坏，不列入产品保固范围；此外，产品被误用、未经授权的修理及修改等行为将造成保固条款失效。

注意！ 请勿于电源开启时插拔接线端子，以避免产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日电气和电子设备有害物质限制委员会所提出的限用指令2002/95/EC(ROHS禁令)及2011/65/EU(RoHS 2.0)。

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Granted Invention: I 344766
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Granted Invention: I 376118
Granted Invention: I 393317
Granted Invention: I 398066
Granted Invention: I 398125
Utility Model: M 339841
Utility Model: M 339840