

# korenix

A Beijer Electronics Group Company

## JetNet 3906G Industrial PoE Switch Quick Installation Guide V1.1

### Overview

The JetNet 3906G is a compact size PoE Switch with DC power boosting technology that input DC 12-36V and boost voltage to DC 48V for PoE application. It adopts 4 ports Gigabit Ethernet PoE interfaces with 30W forwarding ability, and the whole system PoE Power feeding ability is up to 110Watts in 65°C environment with DC 24 V input, and 60Watts in 70°C environment with DC 12V input. There are additional one Gigabit RJ-45 and one 100Mbps / 1000Mbps SFP Fiber Socket for system uplink. For more product information please visit Korenix Web site - [www.korenix.com](http://www.korenix.com).

Note: According to UL IEC 60950-1 criterion, the operating temperature of JetNet 3906G is -40-50°C.

### Package Check List

- ▶ JetNet 3906G with DIN Rail Clip x 1
- ▶ Quick Installation Guide x 1
- ▶ 6-Pin removable terminal block x 1  
(attached on the Switch)



### Installation

#### Mounting & Installing the Unit

The DIN rail clip is attached on the rear side of JetNet 3906G. Please install the unit in a standard 35mm EN50022 DIN Rail.

**Note:** The unit is designed for in-building installation only and is not intended to be connected to exposed (outside plant) networks.

**Warning:** There are 2 warning labels stick on the JetNet 3906G metal housing to remind the metal parts are hot and should install system at restricted access location.

#### ATTENTION

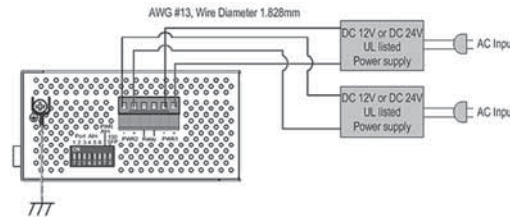


Do not touch hot surface except for maintenance staff.

#### Powering the Unit

There is one 6-Pin removable terminal block attached on the Switch, it includes 2 sets of power inputs and 1 alarm output. The typical input voltage for JetNet 3906G are DC 12V or DC 24V which are supported by battery or other, and the input range is from DC 12V to DC 36V with polarity reverse protection. The JetNet 3906G is intended to use in the environment where without AC source except DC 12V or DC 24V.

Therefore, to carry the DC current safely that the wire AWG number should be smaller than or equal to AWG #13 or the cable's diameter should be at least 1.828mm. The system powering architecture is shown as figure below.



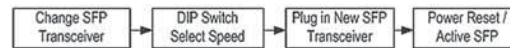
**Note:** the operating temperature range is from -40°C ~75°C, when the system is in the frozen condition of -40°C than 15 hours, it may need perform power-on twice to ensure the DC booster gets ready to offer enough current to activate the PoE system.

**Note:** the enclosure surface temperature of JetNet 3906G will increase over 70°C, when it performs PoE power feeding. So, it is recommended the JetNet 3906G should be installed in the control box, to prohibit non-professionals touch and maintenance.

#### Connecting and Configure the SFP Transceiver port # 6

The SFP link speed is configured by DIP-Switch and active by system reset. Once change the fiber link speed, the system needs to reset power. Otherwise, the fiber port will not be active.

Below flow chart is for SFP transceiver speed type change.



**Note:** the DIP-Switch #8 is for 100Mbps SFP selection which is located at the bottom side. The default setting is off for 1000Mbps SFP fiber link.

#### Connecting the Gigabit PoE port # 1-4 and Uplink port #5

The Port #1-4 supports IEEE 802.3at PoE standard, and offers 2-Event PoE behavior. Thus, those PoE ports can offer 15W/30W power, and the system offers 60W with DC12V input under 70°C, or 110W with DC 24V under 65°C operating environment. Both of RJ-45 port #5 and SFP port #6 are independent interfaces for extra different uplink network media.

#### Connecting & Active Event Alarm Output

The system offers 1 Dry relay output for power and port link down events. Those events are controlled and activated by one 8-pin DIP-Switch which is located at the bottom side. Select and click the DIP-Switch to on, then the relative alarm monitoring function will be enabled.

For more operational information, please visit the Korenix Web site - [www.korenix.com](http://www.korenix.com) and get detailed product specifications from the hyper link

<http://www.korenix.com/downloads.htm>

### 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 majeure (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 electronic 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](mailto:KoreCARE@korenix.com).

For more information and documents download please visit our website: <http://www.korenix.com/downloads.htm>

## 导言

JetNet 3906G是一款具有电源升压功能的紧凑型交换机，把直流12-36V输入转换成直流48V输出供PoE使用。它采用四个具有30W转发能力的千兆以太网PoE接口，在65°C的高温环境下，输入24V直流整个系统的PoE电源供给能力高达110W，在70°C的高温环境下，仅有12V直流输入也能达到60W的电源供给能力。此外，它还具有一个千兆的RJ-45接口和一个100Mbps/1000Mbps的SFP光纤插座供系统上行链接。想获得更多信息请登录Korenix官方网站 - [www.korenix.com](http://www.korenix.com)。

注意:根据UL IEC 60950-1 标准，JetNet 3906G的操作温度范围是-40~50°C。

## 产品清单

- ▶ JetNet 3906G交换机+DIN导轨夹具 x 1
- ▶ 快速安装手册 x 1
- ▶ 六针可拆卸端子排 x 1 (附在交换机上)



## 安装

### 安装交换机

DIN导轨夹具附着在JetNet 3906G交换机的背面。请把导轨夹具安装在标准的35mm EN50022 DIN的导轨上。

注意: JetNet 3906G交换机设计于室内安装，请不要安装在暴露（室外）的网络中。

警告: JetNet 3906G交换机的金属外壳上有两处警示标签来提示金属外壳会发热，所以请把系统安装在限制进入的地点。

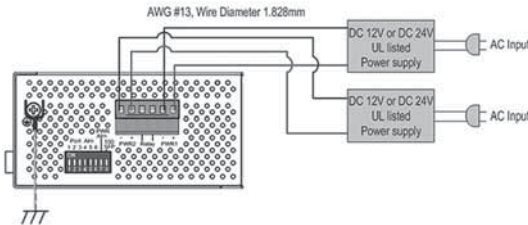
### ATTENTION



除了专业的维护人员，请不要接触发热的金属表面。

### 交换机通电

交换机带有一个6针可插的端子块，它包含了2组电源输入端口和一个报警输出端口。交换机的典型输入电压是DC 12V或DC 24V，可以通过电池或其他设备提供，而JetNet 3906G交换机的电压输入范围是DC 12V-DC 36V，并且具备电源极性反接保护功能。JetNet 3906G交换机应用在没有交流电源、只有DC 12V或DC24V电源的苛刻环境。因此，为了确保直流电流应用安全，导线AWG编号应小于等于AWG#13，或者导线直径至少1.828mm。系统电源构建注意事项见以下描述：



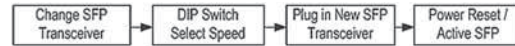
注意: 操作温度范围是-40°C ~75°C。当系统处在-40°C冰冻环境下超过15小时，它可能需要执行二次通电来确保直流升压器产生足够的电流以激活PoE系统。

注意: 当用于PoE电源供给时，JetNet 3906G交换机的表面温度可能超过70°C。因此，建议将JetNet 3906G交换机安装在控制箱内，并禁止非专业人员进行维护和接触。

### 连接和配置SFP收发端口# 6

SFP链接速度由DIP开关来配置，通过系统复位激活。当修改光纤的链接速度，系统需要重置电源。否则，光纤端口不会被激活。

以下流程图显示了SFP收发器速度类型的变化：



注意: 位于底侧DIP开关#8是用来选择100Mbps SFP。

默认设置在off状态，用于1000Mbps SFP光纤链接。

### 连接千兆PoE端口# 1-4 和上行端口#5

端口#1-4支持IEEE 802.3at PoE标准并提供两种PoE工作模式。因此，这些PoE端口能提供15W/30W两种电源，在70°C的高温环境下，仅有12V直流输入系统也能提供60W的电源。在65°C的高温环境下，输入24V直流整个系统的PoE电源供给能力高达110W。RJ-45端口#5和SFP端口#6都是独立接口，用于连接外部不同的上行网络媒介。

### 连接和事件报警输出

系统为电源故障和连接失败提供一个干触点输出，输出由位于底部的8针DIP开关来控制。选择并点击DIP开关到on的状态，相应的报警检测功能就被激活。

想获得更多信息，请登录Korenix网站 - [www.korenix.com](http://www.korenix.com)。

详细的产品说明请链接 - [http://www.korenix.com.cn/support\\_downloads.htm](http://www.korenix.com.cn/support_downloads.htm)

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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日电气和电子设备危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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业务服务: [sales@korenix.com](mailto:sales@korenix.com)

官网: [www.korenix.com](http://www.korenix.com)

## Korenix Technology Co., Ltd.

(A Beijer Electronics Group Company)

Tel: +886-2-89111000

Fax: +886-2-29123328

Business service: [sales@korenix.com](mailto:sales@korenix.com)

Customer service: [koreCARE@korenix.com](mailto:koreCARE@korenix.com)

[www.korenix.com](http://www.korenix.com)

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