

# CyberX Industrial 5-Port PoE+ Gigabit Ethernet Switch Quick Installation Guide

#### Introduction

The CyberX Industrial 5-Port PoE+ Gigabit Ethernet Switch is a reliable networking solution offering Power-over-Ethernet (PoE), full Gigabit Ethernet ports to support power-demanding and high-bandwidth network devices.

## **Key Features and Benefits**

- Provides 5 port 10/100/1000Base-T(X) PoE (P.S.E.) output
- Supports P.S.E. based on IEEE 802.3at standard with up to 30 Watts per port
- Supports store-and-forward transmission
- Supports auto-negotiation and auto-MDI/ MDI-X
- Wide operating temperature range from -40 C to 70 C

DIN-Rail and wall mounting built-in

04-0839A

# **Package Contents**

- CyberX Industrial 5-Port PoE+ Gigabit Ethernet Switch
- 6-Pin terminal block
- 5x Dust covers for RJ-45 port
- 8x Round screws (M3x3)
- 2x Wall mount plates (for slim type)
- Quick installation guide

# Layout

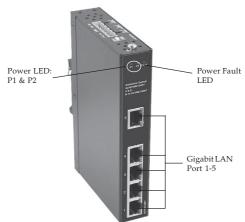


Figure 1: Front View

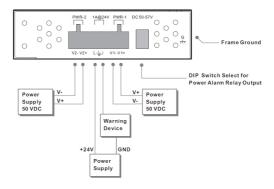


Figure 2: Top View (Terminal Block)

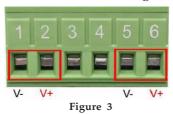
#### **Terminal Block**

To reduce the damage due to a power failure, the terminal block provides two 50VDC power inputs. If one power source fails, the switch will automatically switch to the secondary power source. In addition, in the event of a power failure, the contacts for the alarm output will also open and the **Power Fault LED** along with the corresponding **P1** or **P2** LED will light up.

# **Power Input Wiring**

Follow the steps below to connect your power sources.

1. Insert the positive and negative wires into V- and V+ contacts, see Figure 3.



2. Tighen the wire-clamp screws to prevent the wires from becoming loose, see Figure 4.



Figure 4

# **Alarm Wiring (Optional)**

Insert your alarm's wires to contact 3 and 4, see Figure 5. If either of the power sources fails the alarm will sound. **Note**: The maximum input power is 24V, 1A.



Figure 5

### **DIP Switch**

DIP-1	DIP-2	Description
OFF	OFF	Power failure relay alarm disabled
ON	OFF	PWR-1 failure, relay alarm enabled
OFF	ON	PWR-2 failure, relay alarm enabled
ON	ON	PWR-1 or PWR-2 failure, relay alarm enabled

Table 1: DIP switch function for power alarm relay output

### **LED Indicators**

LED	Color	Description	
P1	Green	On	Power input 1 is active
F1		Off	Power input 1 is inactive
P2	Green	On	Power input 2 is active
P2		Off	Power input 2 is inactive
	Red	On	Power input 1 or 2 is inactive
Power Fault		Off	Power inputs 1 and 2 are both
			active, or no power is present
Ports 1 to 5	Green	On	Connected to network
		Flashing	Networking is active
(Upper LED)		Off	Not connected to network
Ports 1 to 5	Green	On	PoE power injected
(Lower LED)		Off	Not PoE power

Upper LED

Table 2: LED Indicators

# **Pin Assignment**

# 10/100 Base- T(X) PoE P.S.E. Port

RJ45 Pin Definition				
Pin No.	Description			
# 1	Rx+ with Vdc+			
# 2	Rx- with Vdc+			
# 3	Tx+ with Vdc-			
# 6	Tx- with Vdc-			

Table 3

### 1000 Base- T(X) PoE P.S.E. Port

RJ45 Pin Definition				
Pin No.	Description			
# 1	BI_DA+ with PoE Power input +			
# 2	BI_DA- with PoE Power input +			
# 3	BI_DB+ with PoE Power input -			
# 4	BI_DC+			
# 5	BI_DC-			
# 6	BI_DB- with PoE Power input -			
# 7	BI_DD+			
# 8	BI_DD-			

Table 4

#### **Communication Connections**

#### 1000 Base-T PoE P.S.E. Port

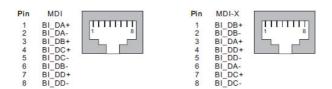


Figure 6: RJ45 (8-pin, NDI) Ports Pinout (left) & RJ45 (8-pin, MDI-X) Port Pinouts (right)

## 10/100 Base-T(X) PoE P.S.E. Port

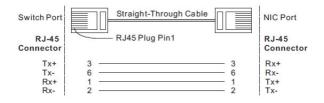


Figure 7: RJ45 (8-pin) to RJ45 (8-pin) Straight-Through Cable Wiring

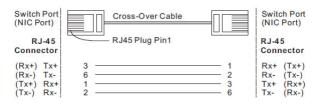
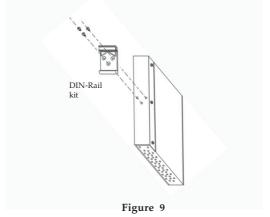


Figure 8: RJ45 (8-pin) to RJ45 (8-pin) Cross-Over Cable Wiring

#### Hardware Installation

### **DIN-Rail Mounting**

1. The DIN-Rail kit is attached to the switch by default. Make sure the screws holding the DIN-Rail Kit onto the switch are tight.



2. Insert the top of the DIN rail clip onto the DIN rail track, then lightly push the bottom of the switch to snap to the DIN rail track into place, see **Figure 10** on the next page.

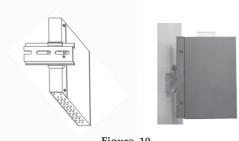


Figure 10

# **Wall or Panel Mount Plate Mounting**

Use the provided Wall Mount Plate to mount the switch to the wall or panel mount, see Figure 11. **Note**: Remove the DIN Rail Kit from the switch first before attaching the wall mount plates to the switch.

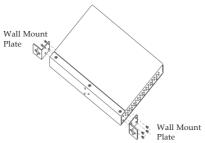


Figure 11

# **Application**

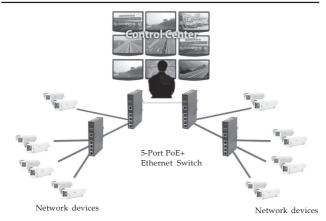


Figure 12

- The switch provides 5 10/100/1000
  Base-T(X) PoE outputs supplying up to 30
  Watts per port to support powerdemanding devices without the hassle of
  using additional power adapters.
- Wide operating temperature range supports networking operations in most indoor and outdoor environments.

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# **Technical Support and Warranty**

QUESTIONS? SIIG's Online Support has answers! Simply visit our web site at *www.siig.com* and click Support. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and a technical support analyst will promptly respond.

SIIG offers a 5-year manufacturer warranty with this product. This warranty covers the original purchaser and guarantees the product to be free of any defects in materials or workmanship for five (5) years from the date of purchase of the product.

SIIG will, at our discretion, repair or replace (with an identical product or product having similar features and functionality) the product if defective in materials or workmanship. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Please see our web site for more warranty details.

If you encounter any problems with this product, please follow the procedures below. A) If it is within the store's return policy period, please return the product to the store where you purchased from.

B) If your purchase has passed the store's return policy period, please follow the steps below to have the product repaired or replaced.

#### Step 1: Submit your RMA request.

SHC Inc

Go to www.siig.com, click Support, then REQUEST A PRODUCT REPLACEMENT to submit a request to <u>SIIG RMA</u> or fax a request to <u>510-657-5962</u>. Your RMA request will be processed, if the product is determined to be defective, an RMA number will be issued.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All accessories that came with the original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will
  refuse to accept any shipping package, and will not be responsible for a product
  returned without an RMA number posted on the outside of the shipping
  carton.
- You are responsible for the cost of shipping to SIIG. Ship the product to the following address:

ono, me	
6078 Stewart Avenue	
Fremont, CA 94538-3152,	USA
RMA #:	

 SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

#### About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading manufacturer of IT connectivity solutions (including Serial ATA and Ultra ATA Controllers, FireWire, USB, and legacy I/O adapters) that bridge the connection between Desktop/Notebook systems and external peripherals. SIIG continues to grow by adding A/V and Digital Signage connectivity solutions to our extensive portfolio. SIIG products offer comprehensive user manuals, many user-friendly features, and are backed by an extensive manufacturer warranty. High quality control standards are evident by the overall ease of installation and compatibility of our products, as well as one of the lowest defective return rates in the industry. SIIG products can be found in computer retail stores, mail order catalogs, through major distributors, system integrators, and VARs in the Americas and the UK, and through e-commerce sites.

#### PRODUCT NAME

CyberX Industrial 5-Port PoE+ Gigabit Ethernet Switch with 4x High-Power PSE Ports- Wide Temperature

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

#### FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE

SIIG, Inc.

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