PoE
SWITCH
INDUSTRIAL

ORing

Quick Installation Guide
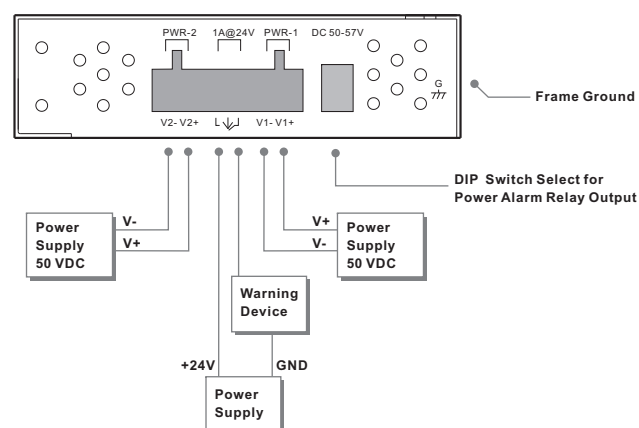
IPS-1080A

Industrial Unmanaged PoE Switch

Introduction

IPS-1080A is slim type unmanaged PoE Ethernet switch with P.S.E. function. **IPS-1080A** supports Power over Ethernet, a system to transmit electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. **IPS-1080A** switch has 8X10/100Base-T(X) P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE setup. The wide operating temperature range from -40℃ to 70℃ can satisfy most of operating environment. Therefore, the switch is one of the most reliable choices for PoE Ethernet application.

Features

▷ **Provide 8x10/100Base-T(X) PoE (P.S.E.) ports**
▷ **Supports IEEE 802.3at compliant PoE and total power budget is 120Watts with maximum 30Watts per port**
▷ **Support auto-negotiation and auto-MDI/MDI-X**
▷ **Support store and forward transmission**
▷ **Support flow control**
▷ **Support surge protection technology**
▷ **Warning system by relay output**
▷ **Slim type rigid IP-30 housing design**
▷ **DIN-Rail and wall mounting enabled**

Power Connection Guide

● DIP Switch Function

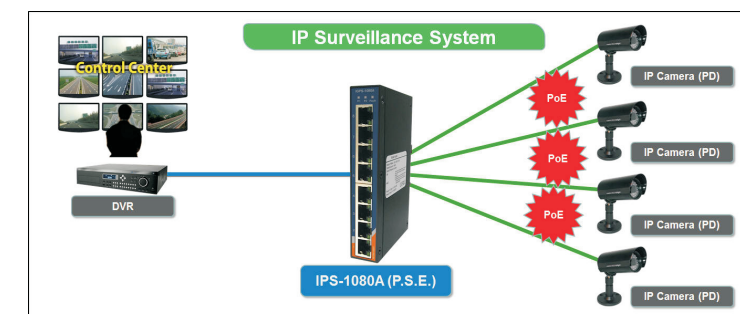| DIP-1	DIP-2	Description
OFF	OFF	Power failure relay alarm disabled
ON	OFF	PWR-1 failure, relay alarm enabled
OFF	ON	PWR-2 failure, relay alarm enabled
ON	ON	PWR-1 or PWR-2 failure, relay alarm enabled

Specifications

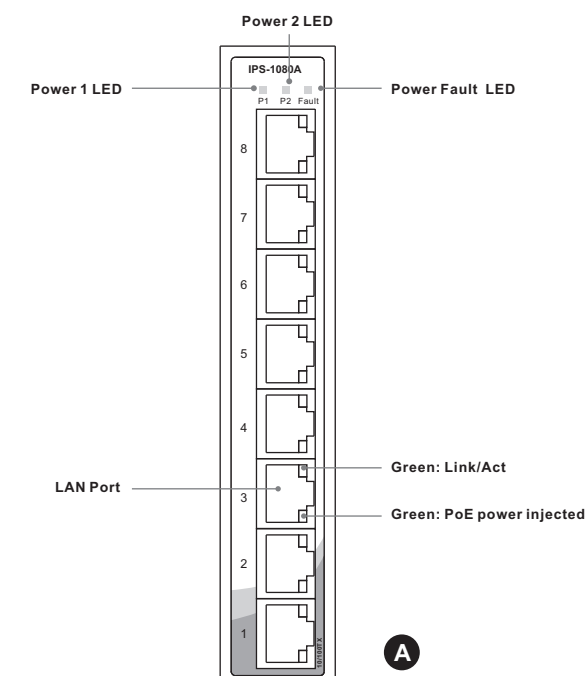| ORing Switch Model	IPS-1080A
Physical Ports	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX with P.S.E.	8
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3x for Flow control IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.)
MAC Table	2048 MAC addresses
Processing	Store-and-Forward
LED Indicators	
Power indicator	Green: Power LED x2
Fault indicator	Amber: Indicate PWR1 or PWR2 failure
10/100Base-T(X)RJ45 Port Indicator	Green for port Link/Act. Green for PoE power injected.
Fault Contact	
Relay	Relay output to carry capacity of 1A at 24 VDC
Power	
Redundant Input power	Dual DC inputs 50-57VDC on 6-pin terminal block
Power consumption(Typ.)	4.5 Watts (power consumption of P.S.E. is not included)
Overload current protection	Present
Reverse polarity protection	Not Present
Physical Characteristic	
Enclosure	IP-30
Dimension (W x D x H)	26.1 (W) x 94.9 (D) x 144.3 (H) mm (1.03 x 3.74 x 5.68 inches)
Weight (g)	395g
Environmental	
Storage Temperature	-40 to 85℃ (-40 to 185℉)
Operating Temperature	-40 to 70℃ (-40 to 158℉)
Operating Humidity	5% to 95% Non-condensing
Regulatory Approvals	
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950-1
Warranty	5 years

Practical Operation

IPS-1080A can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, there are two redundant power inputs at terminal block to avoid interruption caused by power down. When the primary DC power input fails, the backup power input will take over immediately to guarantee a non-stop operation.
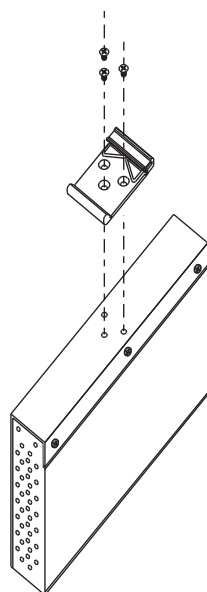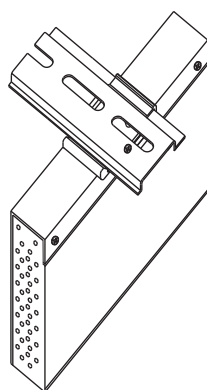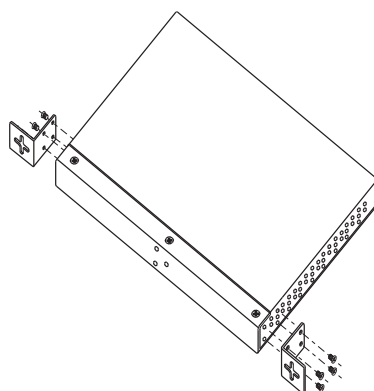
● Connections of Ethernet devices

Front Panel

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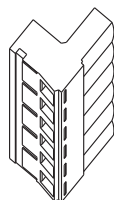
Installation

- **DIN-Rail Install Step**
- **Wall-mounted Install Step**

Accessory
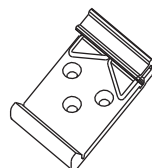
① 6-Pin Terminal block

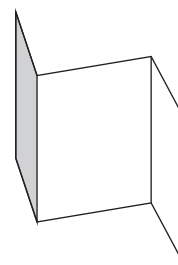② Dust Cover (RJ-45)

③ Round Screw (M3 X3)

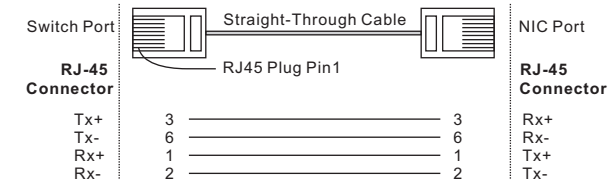④ Wall-mounted kit (for Slim Type)

⑤ 25mm DIN-Rail kit

⑥ QIG

Packing list

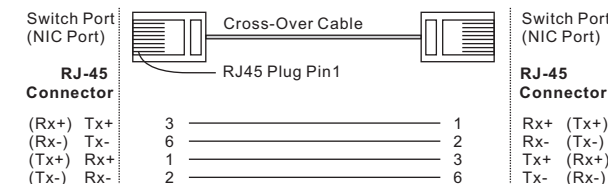| Model name	Front Panel	Model Description	Accessory
IPS-1080A	Ⓐ	Industrial 8-port slim type unmanaged PoE Ethernet switch with 8x10/100Base-T(X) P.S.E.	①X 1, ②X 8, ③X 8, ④X 2, ⑤X 1 , ⑥X 1

Communication Connections

10/100Base-T(X) Ethernet Connection

■ RJ45 (8-pin) to RJ45 (8-Pin) Straight-Through Cable Wiring

Switch Port	Straight-Through Cable	NIC Port
RJ-45 Connector	RJ45 Plug Pin1	**RJ-45 Connector**

Tx+	3 ——— 3	Rx+
Tx-	6 ——— 6	Rx-
Rx+	1 ——— 1	Tx+
Rx-	2 ——— 2	Tx-

■ RJ45 (8-pin) to RJ45 (8-Pin) Cross-Over Cable Wiring

Switch Port (NIC Port)	Cross-Over Cable	Switch Port (NIC Port)
RJ-45 Connector	RJ45 Plug Pin1	**RJ-45 Connector**

(Rx+) Tx+	3 ——— 1	Rx+ (Tx+)
(Rx-) Tx-	6 ——— 2	Rx- (Tx-)
(Tx+) Rx+	1 ——— 3	Tx+ (Rx+)
(Tx-) Rx-	2 ——— 6	Tx- (Rx-)

Pin Definition

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

RJ45 Pin Definition	
Pin No.	**Description**
# 1	TD+ with PoE Power input +
# 2	TD- with PoE Power input +
# 3	RD+ with PoE Power input -
# 6	RD- with PoE Power input -

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RoHS FC CE