

Quick Installation Guide

IGPS-1080-24V

Industrial Unmanaged Gigabit PoE Switch

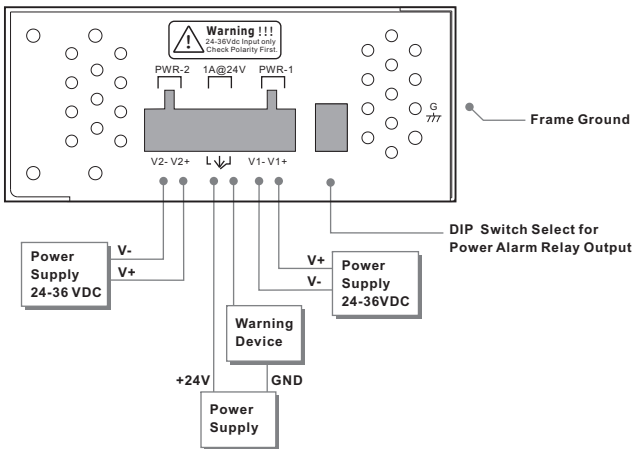
Introduction

IGPS-1080-24V is an unmanaged Gigabit PoE Ethernet switch with P.S.E. function. **IGPS-1080-24V** 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. **IGPS-1080-24V** supports wide range 24~36VDC power inputs and generates 50VDC P.S.E. power output per port. **IGPS-1080-24V** PoE switch has 8X10/100/1000Base-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°C to 70°C can satisfy most of operating environment. Therefore, the switch is one of the most reliable choices for PoE Ethernet application.

Features

- > Provide 8x10/100/1000Base-T(X) PoE (P.S.E.) ports
- > Support P.S.E. compliant with on IEEE 802.3at standard up to 30 Watts per port
- > Support dual wide range 24~36VDC power inputs for power redundancy
- > Support auto-negotiation and auto-MDI/MDI-X
- > Support store and forward transmission
- > Support flow control
- > 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

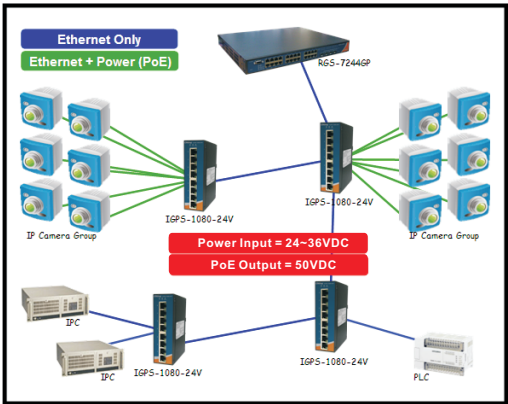
Specifications

ORing Switch Model	IGPS-1080-24V	IGPS-1080-24V-I
Physical Ports		
10/100/1000Base-T(X) P.S.E. Port in RJ45 Auto MDI/MDIX	8	
Technology		
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T IEEE 802.3x for Flow control IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.)	
MAC Table	4096 MAC addresses	
Processing	Store-and-Forward	
LED Indicators		
Power indicator	Green: Power LED x2	
Fault indicator	Amber: Indicate PWR1 or PWR2 failure	
10/100/1000Base-T(X) RJ45 port indicator	Green for port Link/Act. Green for PoE power injected.	
DIP-Switch		
DIP-Switch 1	Power-1 failed warning : (ON) enable, (OFF) disable	
DIP-Switch 2	Power-2 failed warning : (ON) enable, (OFF) disable	
Fault contact		
Relay	Relay output to carry capacity of 1A at 24 VDC	
Power		
Redundant Input power	Dual DC inputs 24-36VDC on 6-pin terminal block	Dual isolated DC inputs 24-36VDC on 6-pin terminal block
Power consumption(Typ.)	7.8 Watts	
Maximum available PoE power	120 Watts	
Overload current protection	Present	
Reverse polarity protection	Present	
Physical Characteristic		
Enclosure	IP-30	
Dimension (W x D x H)	41(W)x94.9(D)x144.3(H) mm (1.62x3.74x5.68inch.)	
Weight (g)	452 g	
Environmental		
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Operating Temperature	-40 to 70°C (-40 to 158°F)	
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	

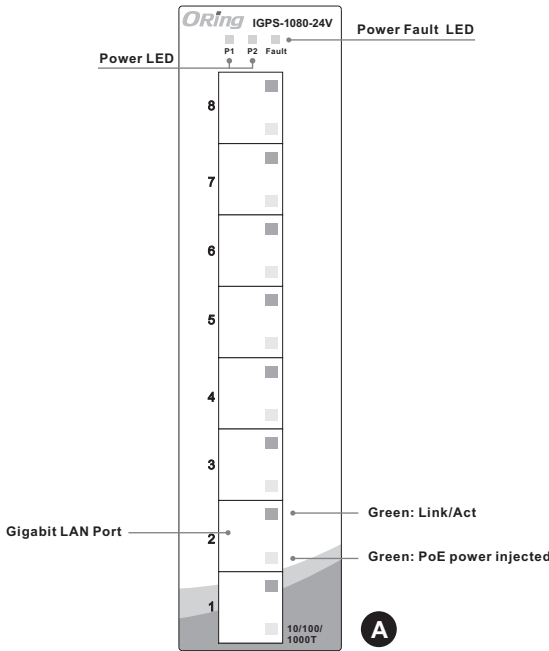
Practical Operation

IGPS-1080-24V can be used in connecting several PoE P.D. Ethernet devices like IP-Camera or other Ethernet devices. In addition, there are two different 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

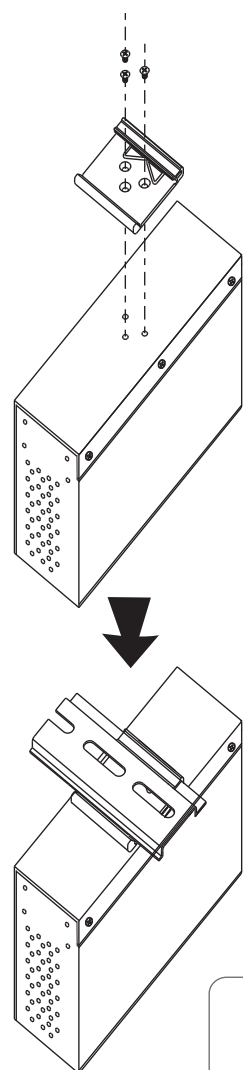


Front Panel

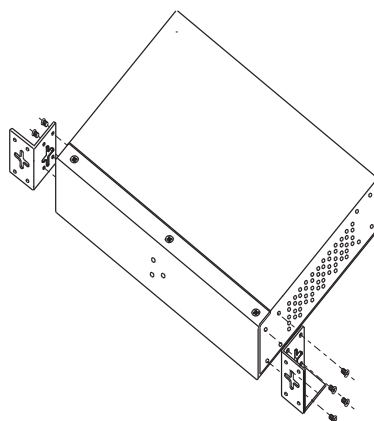


Installation

DIN-Rail Install Step



Wall-mounted Install Step



ORing

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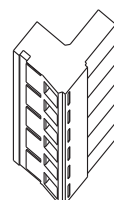


FC CE

ORing Industrial Networking Corp.
TEL: +886-2-2218-1066 Website: www.oring-networking.com
FAX: +886-2-2218-1014 E-mail: support@oring-networking.com

Accessory

① 6-Pin Terminal block



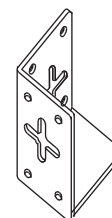
② Dust Cover (RJ-45)



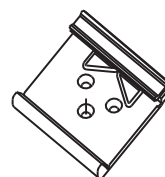
③ Round Screw (M3 X3)



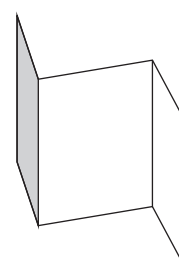
④ Wall-mounted kit



⑤ 40mm DIN-Rail kit



⑥ QIG



Packing list

Model name	Front Panel	Model Description	Accessory
IGPS-1080-24V	A	Industrial 8-port unmanaged Gigabit PoE Ethernet switch with 8x10/100/1000Base-T(X); P.S.E., 24VDC power inputs	① X 1, ② X 8, ③ X 8, ④ X 2, ⑤ X 1, ⑥ X 1
IGPS-1080-24V-I	A	Industrial 8-port unmanaged Gigabit PoE Ethernet switch with 8x10/100/1000Base-T(X); P.S.E., 24VDC power inputs with isolation	① X 1, ② X 8, ③ X 8, ④ X 2, ⑤ X 1, ⑥ X 1

Communication Connections

1000Base-T Ethernet Connection

RJ45 (8-pin, MDI) Port Pinouts

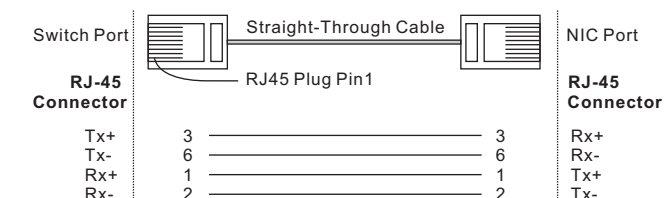
Pin	MDI
1	BI_DA+
2	BI_DA-
3	BI_DB+
4	BI_DC+
5	BI_DC-
6	BI_DB-
7	BI_DD+
8	BI_DD-

RJ45 (8-pin, MDI-X) Port Pinouts

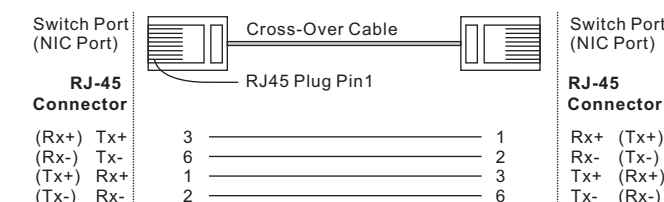
Pin	MDI-X
1	BI_DB+
2	BI_DB-
3	BI_DA+
4	BI_DD+
5	BI_DD-
6	BI_DA-
7	BI_DC+
8	BI_DC-

10/100Base-T(X) Ethernet Connection

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



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



PoE Pin Definition

10/100Base-T(X) P.S.E. RJ-45 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 -

1000Base-T P.S.E. RJ-45 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-