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User Manual
DY-G8080-4P

Industrial Gigabit 8 Port POE+ Switch, with: 4 x 10/100/1000M TX & 4 x 10/100/1000M PSE IEEE802.3af/at, Input Power 48-56 Volts DC

FCC MARKING

This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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.

CE MARKING

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

The company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.
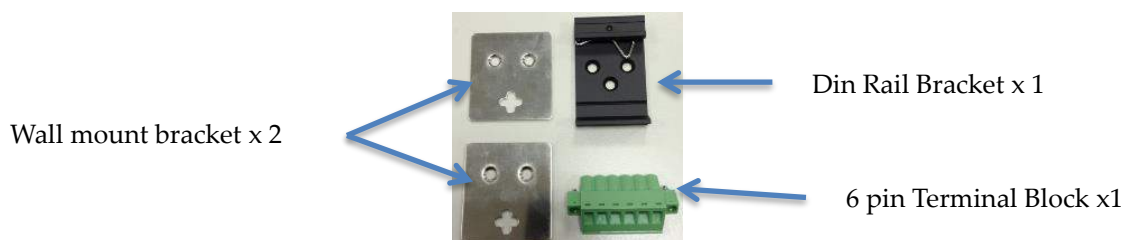
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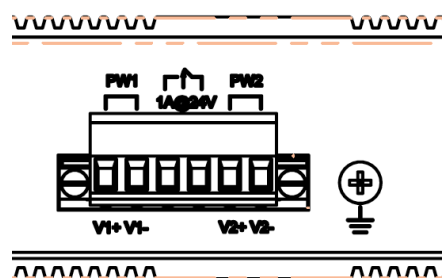
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Installation package

This unit can be installed by din-rail mounted or wall-mounted. Din-rail brackets and wall-mounted bracket are included.

Wall mount bracket x 2

Din Rail Bracket x 1

6 pin Terminal Block x1

Power connection

This industrial Gigabit 8 port POE switch is equipped with 8 port 10/100/1000M PSE, each port can deliver 30W POE power. It comes with a 6-pin terminal block. It connected to a 48-56VDC power source. Always Make sure to use 56VDC for IEEE802.3at or 30W power connection.

WARNING – any exceeded input voltage will not make this unit function and may damage this unit.

To make power connection – Follow the printed polarity for V1+, V1-, V2+, V2-, and ground. Connect positive wire to V+, connect negative wire to V-, also connect neutral wire to the ground screw as shown.

Relay -- You may use 24V@1A relay connection to your external device for special purpose. When 2 powers are connected, the relay is in OPEN mode. When any power source fails, the relay change to SHORT status.

Power connecting procedure:
STEP 1 – Pull out 6 pin terminal block.
STEP 2 – Connect wire to V1+, V1-, or V2+, V2-, and Ground the neutral wire to the ground screw.
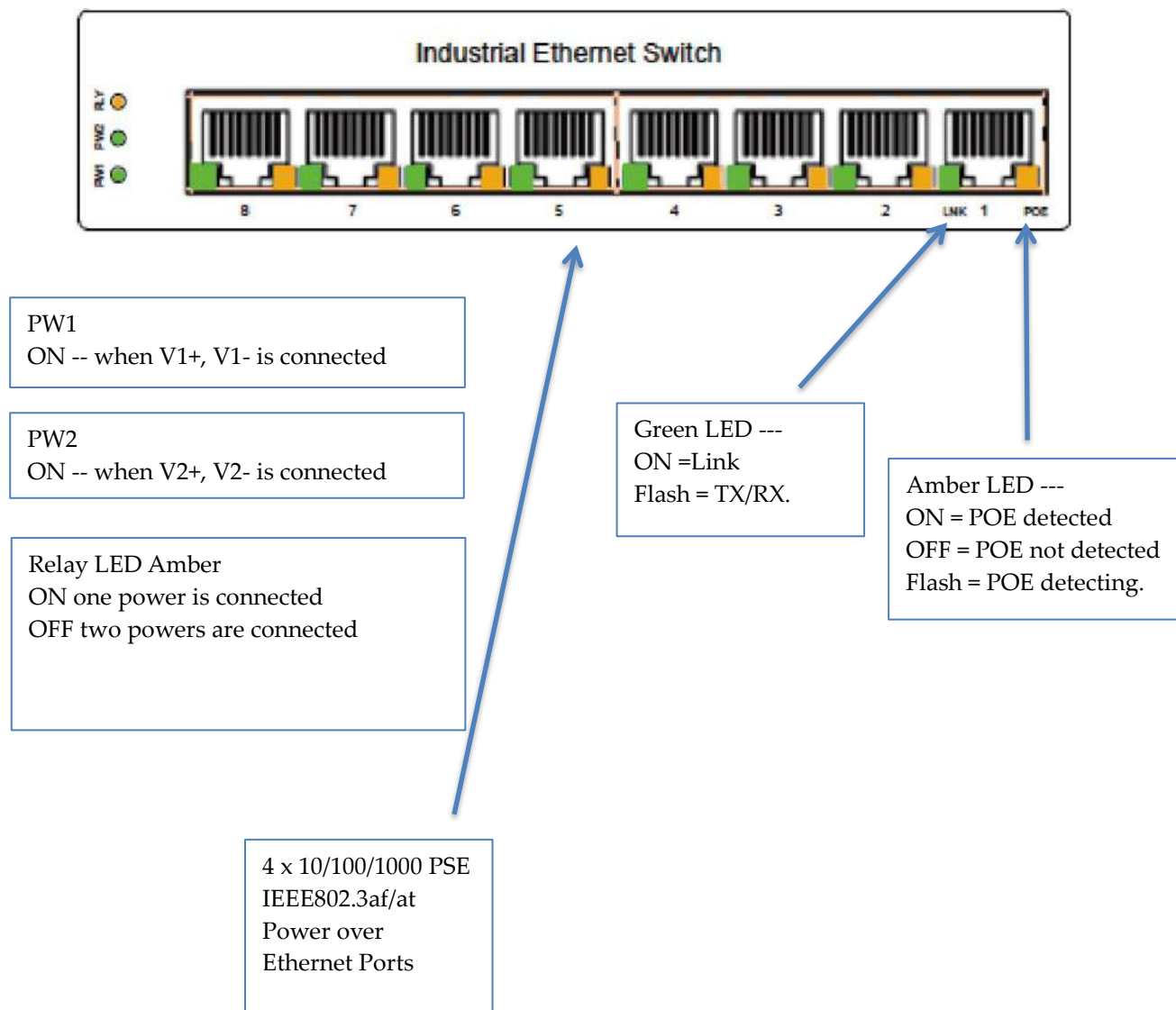STEP 3– Plug back 6 pin terminal block to its place.

WARNING –
Always ground the power source to maintain a clean power input. Due to too many cheap made power supplies, it creates too much noise, and it will cause the power input fluctuates when connect to this unit. To avoid this, always ground the power source to gain a clean power input.

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LED indicator

Industrial Ethernet Switch

RLY
PW2
PW1

8   7   6   5   4   3   2   LNK 1   POE

PW1
ON -- when V1+, V1- is connected

PW2
ON -- when V2+, V2- is connected

Relay LED Amber
ON one power is connected
OFF two powers are connected

Green LED ---
ON =Link
Flash = TX/RX.

Amber LED ---
ON = POE detected
OFF = POE not detected
Flash = POE detecting.

4 x 10/100/1000 PSE
IEEE802.3af/at
Power over
Ethernet Ports

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Specification:

IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3z 1000Base-X Gigabit Ethernet IEEE802.3x Flow Control and Back Pressure, IEEE802.3af for POE IEEE802.3at for POE+
Switch Architecture	Back-plane (Switching Fabric): 16Gbps
Data Processing	Store and Forward
Flow Control:	IEEE 802.3x Flow Control and Back Pressure
Jumbo Frame	9KB
MAC address Table Size	8K
Packet Buffer Size	1M
Network Connector:	8xRJ-45 10/100/1000BaseT(X) auto negotiation, 4 Gigabit POE+ 802.3at/af PSE ports Auto MDI/MDI-X function, Full/Half duplex
Network Cable	UTP/STP above Cat.5e Cable EIA/TIA-568 10-ohm (100m)
Protocol	CSMA/CD
LED	PW1(Power 1) Green, PW2(Power 2) Green, SW(relay) Amber, TX/RJ-45 port: LNK (Link/Active) Green, Amber: POE Detected
Housing	Military Grade Aluminum
Reserve polarity protection	Yes
Overload current protection	Yes
Power Supply	Redundant Dual DC 48-56 Volts Power Input POE input 48-56 Volts DC / Surge Protected
Power Consumption	5.76 Watts @48 Volts DC full load, Without POE

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Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @ 24 Volts DC, Relay in short circuit mode when 2 powers are connected. in open circuit mode when only one power supply is connected
POE power	POE power per port 30watts. Maximum 36Watts Maximum total power 126 Watts with 56 Volts DC input, Supports IEEE802.3af/at (Ports Surge Protected)
Removable Terminal Block	Provide 2 Redundant power, Alarm relay contact ,6 Pin Wire range: 0.34mm^2 to 2.5mm^2 Solid wire (AWG):12-24/14-22 Stranded wire(AWG): 12-24/14-22 Torque:5lb-In/0.5Nm/0.56Nm Wire Strip length: 7-8mm
Operating Temperature	-20℃~70℃ fully tested. (DY model -40°C to +85 °C)
Operating Humidity	5% to 97% (Non-condensing)
Storage Temperature	-40℃~85℃
MTBF (mean time between failure)	510,304 hrs. (MIL-HDBK-217F) at 25°C
Housing	Military Grade Aluminum, IP30 Protection
Case Dimension (L x W x D)	142mmx36.2mmx105mm (L x W x D)
Installation mounting	DIN Rail mounting and Wall Mounting

Certifications:

EN55022/24	ITE equipment
EN55011	Industrial, Scientific and Medical (ISM) equipment
Safety	IEC EN60950-1
EMC/EMS	CE, FCC, VCCI
EMI	FCC Part 15 Subpart B Class A, CE EN 55022 Class A
EN 50155 / EN 60068-2-6	Vibration
EN 50155 / EN 60068-2-27	Shock
EN 50155 / EN 60068-2-32	Free Fall
American Certified Ethernet	Cyber Secure Video & Data All Ports Surge Protected

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This industrial 8 port high power POE+ switch is designed for 44 ~ 56 Volts DC input power. Applications include: IP surveillance, Traffic Monitoring, Law Enforcement, Sensor Cabinets, Weather Cabinets and a broad range of other applications. The device comes with 4 ports POE PSE to power up 15W or 30W powered devices (PD). It can be used as a standalone device for buses, trucks, and other vehicles for Surveillance purposes. It has been rigorously field tested for your Security, Transportation, Sensor and Telecommunications applications. American Certified Ethernet.

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Housing Dimensions