



**User Manual:
PC-PIGE401C-M
PC-PIGE401C-S
Industrial Switch with PoE+**

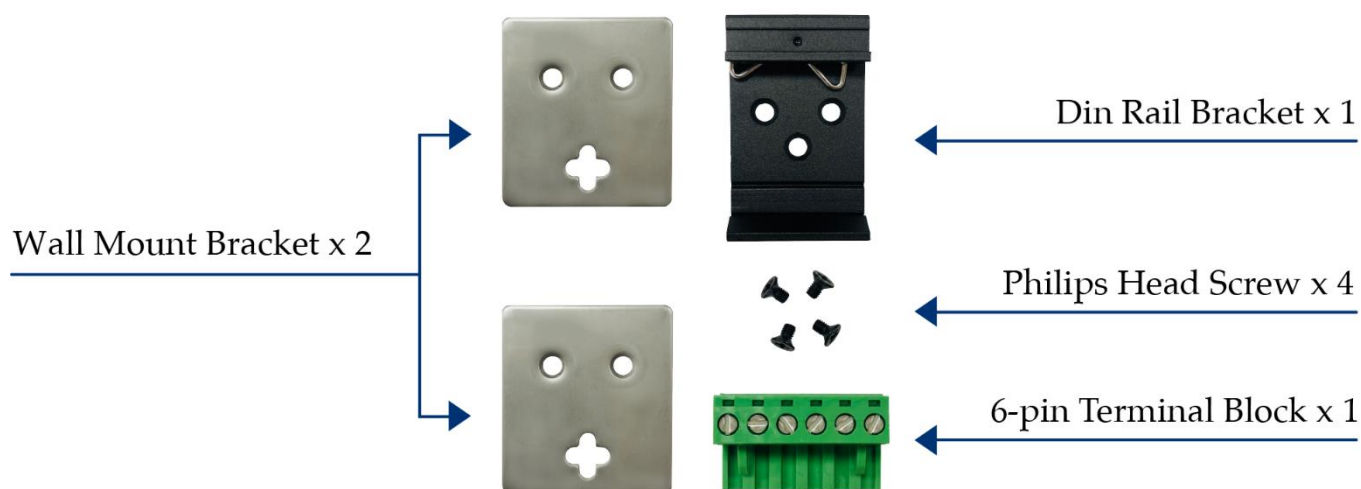
Version 3.2021

Introduction

This rugged designed high power industrial PoE+ switch is equipped with our high efficiency Cold Design technology, accepting input voltages from 48-56VDC to meet IEEE802.3af/at standard and reducing excessive heat problems to a minimum. It is equipped with 4 x 10/100M TX PSE ports to provide 15/30Watts (Max36W) power for IEEE802.3af/at. The additional fiber uplink port(s) can be used for fiber redundancy to cascade to your other devices to expand your network application. It has been rigorously tested for your security, transportation and telco applications.

Installation package

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



Power connection

This unit comes with a 6 pin terminal block. It can be operated from 48-56VDC power source. Always make sure your input voltage is within this supported voltage range for each model..

WARNING -- Any exceeded input voltage will not make this unit function and may damage this unit.

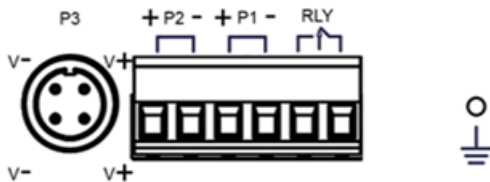
This unit comes with 3 power input sources. P1, P2, and P3.

To connect power: Follow the printed polarity for P1+, P1-, P2+, P2-, and ground. Connect positive wires to P1+ and/or P2+, connect negative wires to P1- and/or P2-, and connect the neutral wire to the ground screw as shown.

Power DIN: This unit contains an extra P3 port for power DIN. This power DIN can power the unit via external power adapter.

Relay: This unit includes an additional 24V@1A relay circuit for special purpose. When 2 powers are connected, the relay is in OPEN mode. If only one of the power sources is connected, the relay changes to SHORT mode. This relay will only work with P1 and P2. It is independent from P3.

Power connecting procedure:



STEP 1 – Pull out 6 pin terminal block.

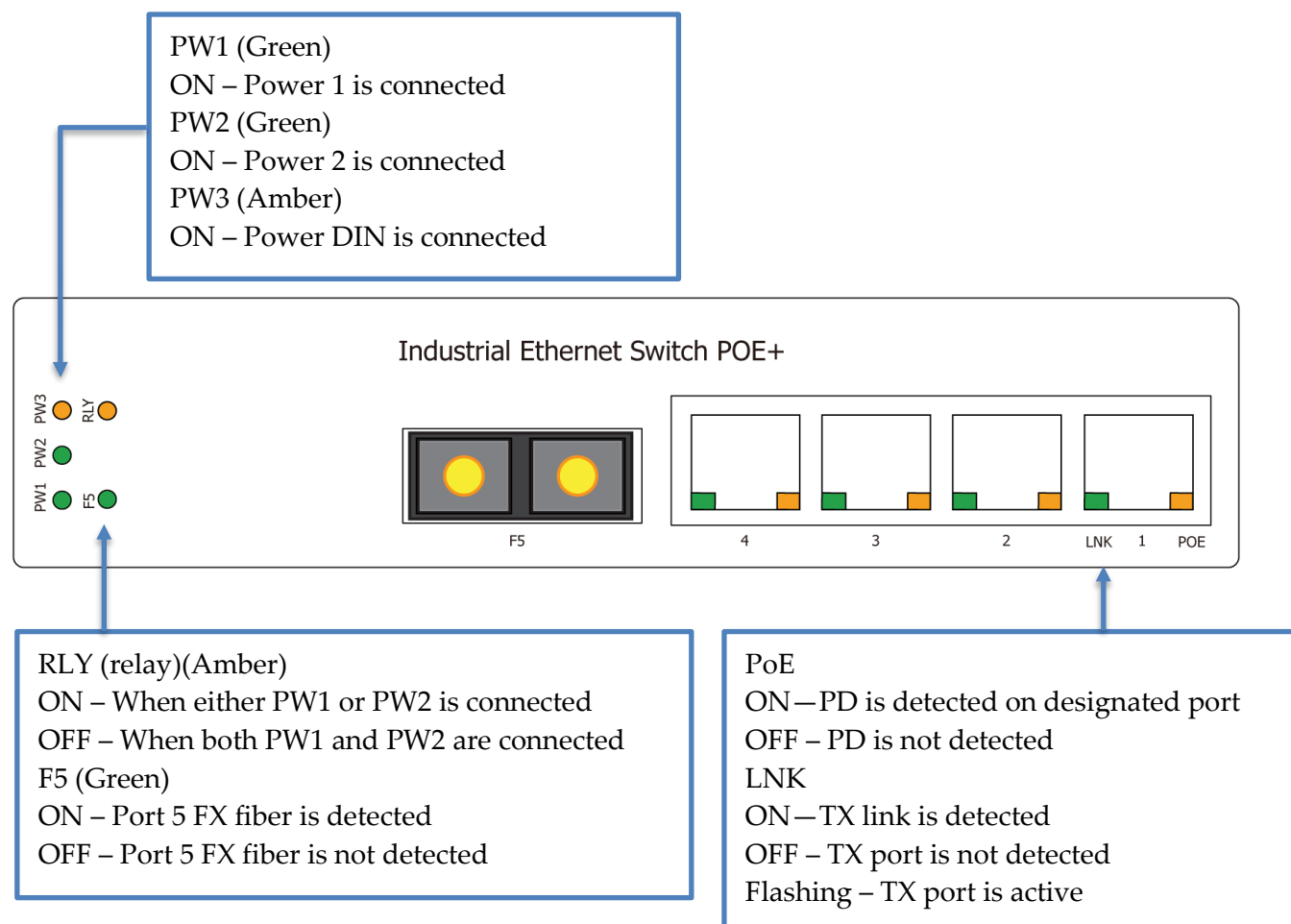
STEP 2 – Connect wire to P1+, P1-, P2+, P2-, and the neutral wire to the ground screw.

STEP 3 – Plug connected 6 pin terminal block back into place. Or connect the P3 power DIN from external power adapter.

WARNING -- Always SHUT OFF power source to connect power wire.

WARNING -- Always ground the power source to maintain a clean power input. Cheaply made power supplies create too much noise and will cause the power input to fluctuate when connect to this unit. To avoid this, always ground the power source to maintain a clean power input.

LED indicator



Specifications

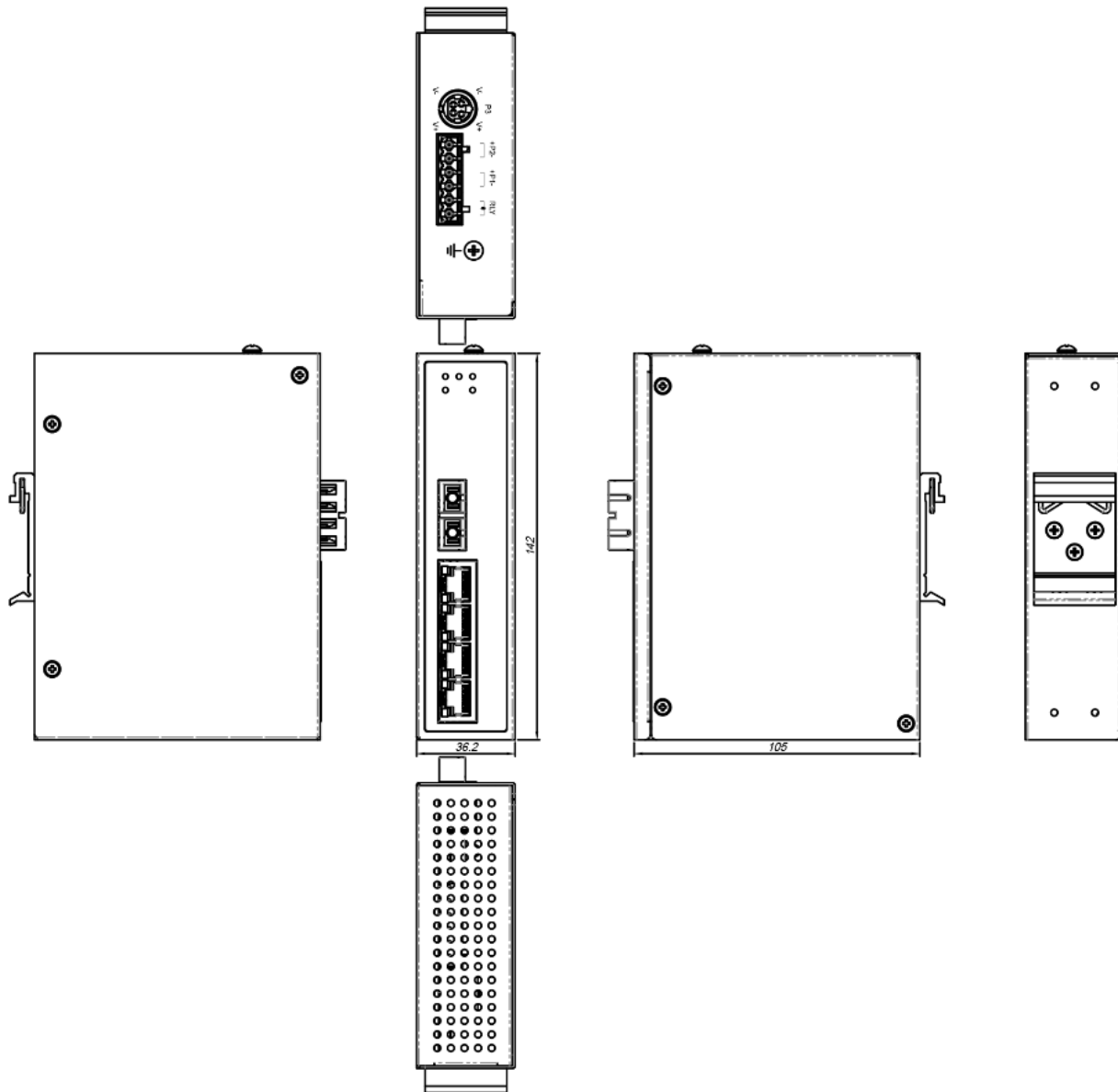
IEEE Standard	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX Fast Ethernet
	IEEE 802.3x Flow Control and Back Pressure
	IEEE 802.3af for PoE
	IEEE 802.3at for PoE+
Switch Architecture	Back-plane (Switching Fabric): 1.0/1.2Gbps
Data Processing	Store and Forward
Flow Control	IEEE 802.3x Flow Control and Back Pressure
MAC address Table Size	1K
Packet Buffer Size	1M
Network Connector	4 x RJ-45 10/100BaseT(X) auto negotiation
	4 x 10/100M PoE+ 802.3at/af PSE port
	1 x 100M SC SM 30km port
Network Cable	Auto MDI/MDI-X function, Full/Half duplex
	UTP/STP above Cat.5e Cable
	EIA/TIA-568 10-ohm (100m)
	PC-PIGE401C-M:
	Fiber Cable (Multi-mode):
	50/125um,62.5/125um Max. Distance: 2km
Protocol	PC-PIGE401C-S:
	Fiber Cable (Single-mode):
	9/125um Max. Distance: 30km
	CSMA/CD
	PW1(Power 1) Green
LED	PW2(Power 2) Green
	PW3(Power 3) Amber
	RLY(Relay) Amber
	TX/RJ-45 port:
	Green --- LNK (Link/Active)
	Amber --- POE link
Reserve polarity protection	FX Fiber port:
	Link (Green)
	Active (Flash)
Overload current protection	Present
Power Supply	Redundant Dual DC 12V-56V Power Input,
	Switch input 12-56VDC
	POE input 48-56VDC
Power Consumption	3.76W@48 VDC full load, Without POE
Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC,
	Relay in open circuit mode when 2 powers are connected.
	In short circuit mode when only one power supply is connected

POE Power	Input Voltage 48VDC-56VDC PoE power per port 30watts. Maximum 36Watts with 56VDC input. Maximum total power 126Watts with 56VDC input
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	-40°C to 75°C
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C to 85°C
MTBF (mean time between failure)	>500,000 hrs (MIL-HDBK-217F) at 25°C
Housing	Rugged Metal ,IP30 Protection
Case Dimension (L X W X D)	142 x 36.2 x 105 mm (LxWxD)
Installation mounting	DIN Rail and Wall Mount options included

Certifications

Safety	LVD EN62368-1
EMC/EMS	CE, FCC, VCCI
EMI	FCC Part 15 Subpart B Class A
EN 60068-2-6	Vibration
EN 60068-2-27	Shock
EN 60068-2-32	Free Fall

Housing Dimension (mm)



NOTE:

Housing dimension is for purpose of showing product Length, Width, Height, din-rail, and terminal block's position and dimension. Please reference the LED Indicator Page for correct port order.