



User Manual: PC-PIGE502-B-2

Industrial 7 port Gigabit PoE Switch

Version 06.2026

Introduction

This Industrial PoE+ Switch is equipped with a super voltage booster which allows low input voltages from 12VDC to be boosted up to 56VDC to meet IEEE802.3at requirements. Besides, our high efficiency Cold Design technology massively reduces the excessive heat problem to a minimum. This unit was designed for IP surveillance, traffic monitoring, and for a broad range of applications. It's reliable and able to withstand more abuse. It has been rigorously tested for your security, transportation, and telco applications. It can be used as a stand-alone device or can be cascaded/daisy-chain to other devices to cover a wider area through SFP connection.

Installation package

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

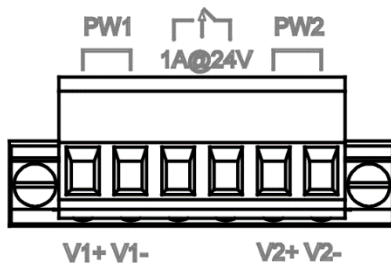
NOTE – If your application necessitates a change of the mounting method, please ensure that all holes are securely fastened with screws to maintain the enclosure's IP50 rating

Power connection

This unit provides a 6-pin terminal block. It can be operated using 12-56VDC power source. Always make sure your input voltage is within this supported voltage range.

To connect power: This unit supports two power inputs. Follow the printed polarity for V1+, V1-, V2+, V2- and ground. Connect the positive wires to V1(2)+, connect the negative wires to V1(2)-, and connect a wire from the unit's chassis ground to the earth ground.

RELAY: This unit includes an additional 1A@24V relay circuit for special purposes. 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.



Power Connecting Procedure:

STEP 1 – Pull out the 6-pin terminal block.

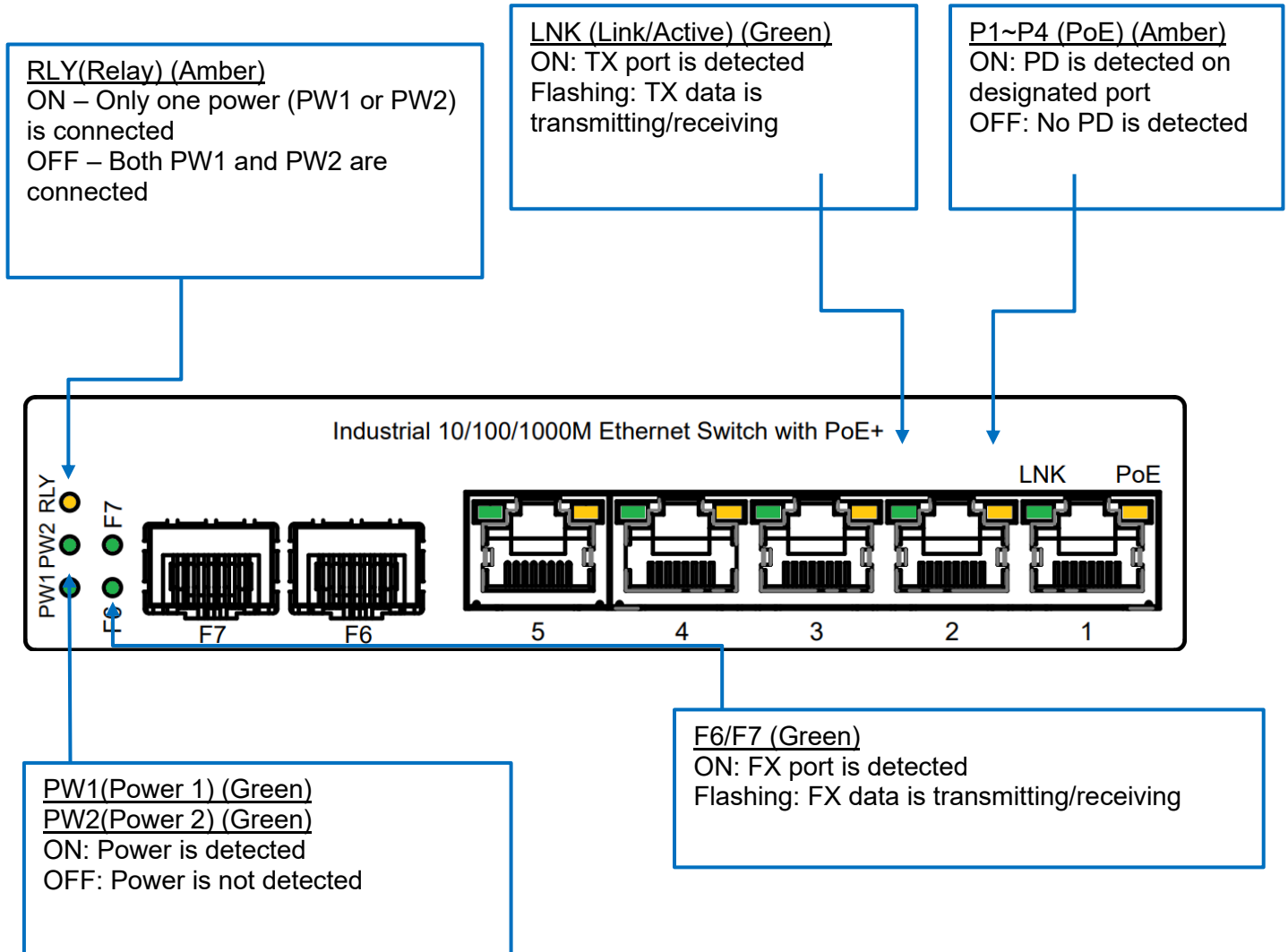
STEP 2 – Connect wire to V1+, V1-, V2+, V2- and Ground.

STEP 3 – Plug the connected 6-pin terminal block back to its place and fasten the screws.

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 connected to this unit. To avoid this, always ground the power source to maintain a clean power input.

LED Indicator



Specifications

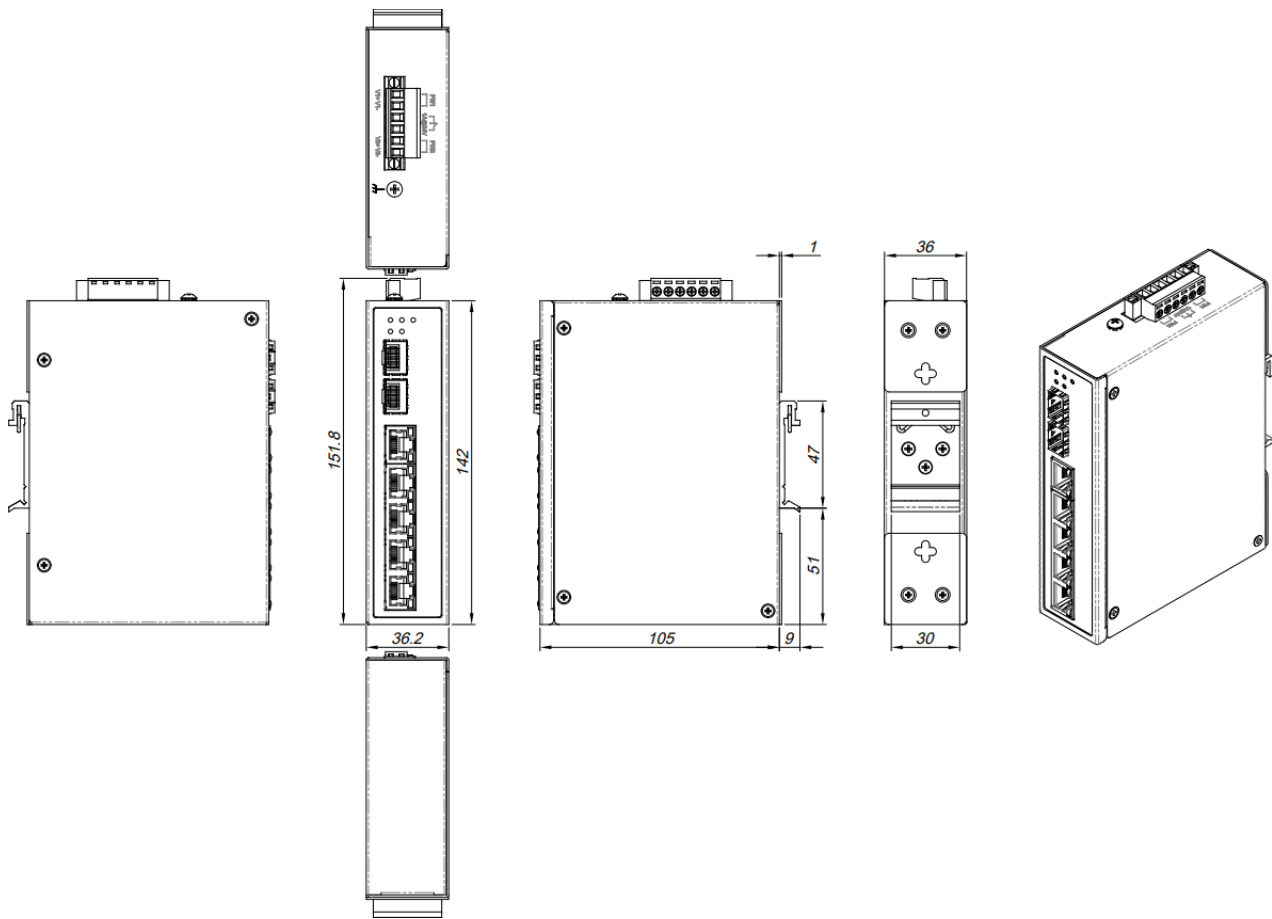
IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3z 1000Base-X Gigabit Ethernet IEEE 802.3x Flow Control and Back Pressure IEEE 802.3af PoE IEEE 802.3at PoE+
Switch Architecture	Back-plane (Switching Fabric): 14 Gbps
Data Processing	Store and Forward
Flow Control:	IEEE 802.3x Flow Control and Back Pressure
Jumbo Frame	9 KB
MAC Address Table Size	4 K
Packet Buffer Size	2 Mbits
Network Connector	5 x RJ-45 10/100/1000BaseT(X) auto negotiation, Auto MDI/MDI-X function, Full/Half duplex 4 x Gigabit 802.3af/at PSE port 2 x SFP 1000M BaseX
Network Cable	UTP/STP Cat.5e or above Cable EIA/TIA-568 (100m)
Protocol	CSMA/CD
LED	PW1(Power 1) (Green)
	PW2(Power 2) (Green)
	ON: Power is detected OFF: Power is not detected
	RLY(Relay) (Amber)
	ON – Only one power (PW1 or PW2) is connected OFF – Both PW1 and PW2 are connected
	TX/RJ-45 port:
LED	LNK (Link/Active) (Green)
	ON: TX port is detected Flashing: TX data is transmitting/receiving
	P1~P4 (PoE) (Amber)
	ON: PD is detected on designated port OFF: No PD is detected
	SFP Fiber port:
	F6/F7 (Green) ON: FX port is detected Flashing: FX data is transmitting/receiving
Reverse Polarity Protection	Present

Overload Current Protection	Present
Power Input	Redundant Dual DC 12V-56V Power Input
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
Power Consumption	4.1 W@12 VDC full load, Without PoE
PoE power	PoE power per port 30watts. Maximum total power 60W at 12VDC power input, Maximum total power 120Watts at 24VDC and 48VDC power 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 Stranded wire (AWG): 12-24 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)	508,869.4900 hrs (Telcordia (Bellcore), GB) at 50°C
Housing	Rugged Aluminum, IP50 Protection
Case Dimension (L X W X D) mm	142 x 36.2 x 105 mm (L x W x D)
Installation mounting	DIN Rail or Wall Mount

Certifications

Safety	LVD (EN62368-1)
EMC	CE (EN55032/EN55035), FCC
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 6KV; Air: 8KV IEC 61000-4-4 EFT: Power: 2KV; Signal: 2KV IEC 61000-4-5 Surge: Power: 2KV; Signal: 2KV
Vibration	EN 60068-2-6
Shock	EN 60068-2-27
Free Fall	EN 60068-2-32

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 refer to the LED Indicator Page for correct port order.