



User Manual: PC-PIGE502-GBTE-B Industrial 6 port Gigabit POE Switch

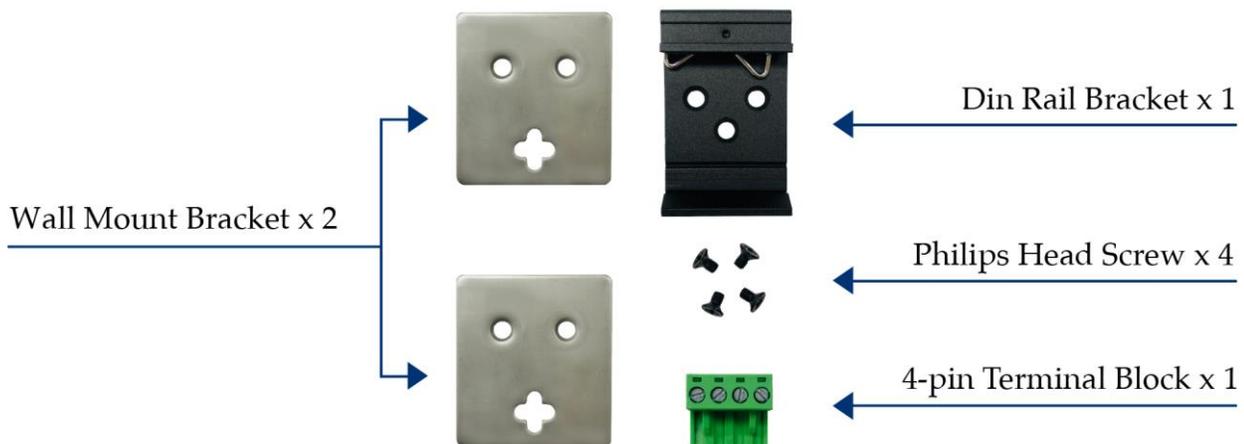
Version 9.2020

Introduction

The Super Voltage Booster --- This EN50155 Certified high power Industrial PoE+ Switch is equipped with our high efficiency Cold Design technology which allows low input voltages from 12VDC be boosted up to 56VDC to meet IEEE802.3at requirements. The Cold Design technology will not only boost up input voltage, but also reduce the excessive heat problem to a minimum. It accepts input voltages as low as 12VDC and boosts it up to 56VDC. It has been rigorously tested for your security, transportation, and telco applications.

Installation package

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



Power connection

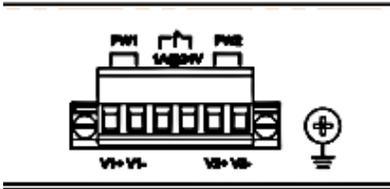
This industrial switch comes with a 6 pin terminal block. It can be operated from 12-56VDC power source. Always make sure your input voltage is within this supported voltage range for each model.

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

To connect power: Follow the printed polarity for PW1+, PW1-, PW2+, PW2-, and ground. Connect positive wires to PW1+ and/or PW2+, connect negative wires to PW1- and/or PW2-, and connect the neutral wire to the ground screw as shown.

Relay: This unit includes an additional 24V@1A relay circuit for special purpose. When 2 powers are connected, the relay is in SHORT mode. If only one of the power sources is connected, the relay changes to OPEN mode. This relay will only work with PW1 and PW2. It is independent from PW3.

Power connecting procedure:



STEP 1 – Pull out 6 pin terminal block.

STEP 2 – Connect wire to V1+, V1-, or V2+, V2- and the neutral wire to the ground screw.

STEP 3 – Plug back 6 pin terminal block to its place.

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.

Dip Switch Function

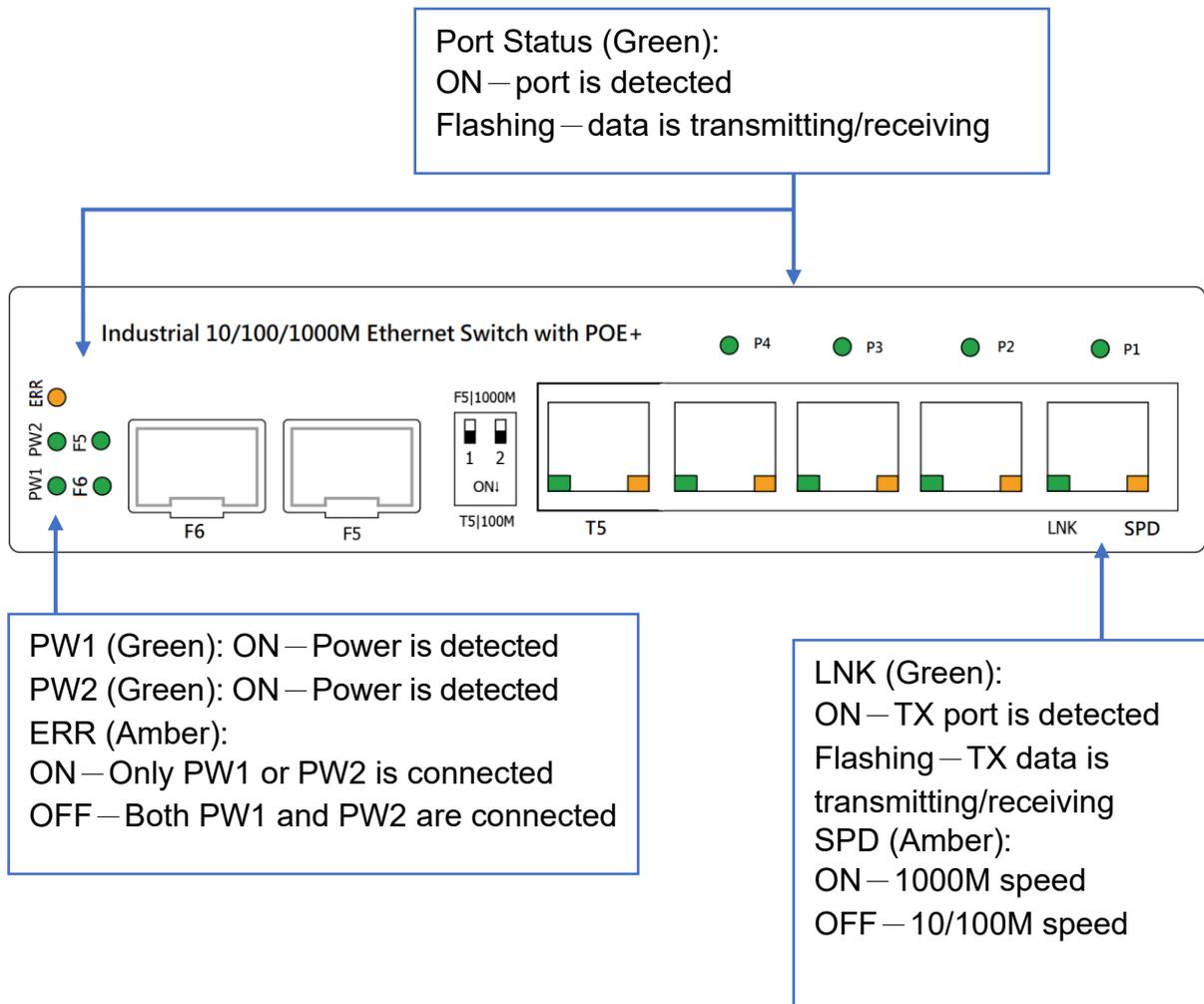
This unit is equipped with dip switches, located on the front panel. Adjusting the dip switches will change the default function of this unit. This unit has set to manufacturer default as: Port 5 SFP and the speed is set to 1000M for both port 5 and port 6 SFP ports. you may adjust dip switch setting to select port 5 as TX (disable port 5 SFP) or set SFP speed to 100M. The detail setting as shown below:

WARNING:

Dip switch function will not work if it is changed when power is connected. Always turn off or disconnect power supply to change dip switch settings.

F5 1000M		Dip 1 to select port 5 TX or SFP	F5	F5 ON (default)
			T5	T5 ON
T5 100M		Dip 2 to select SFP speed	1000M	1000M (default)
			100M	100M

LED indicator



Specifications

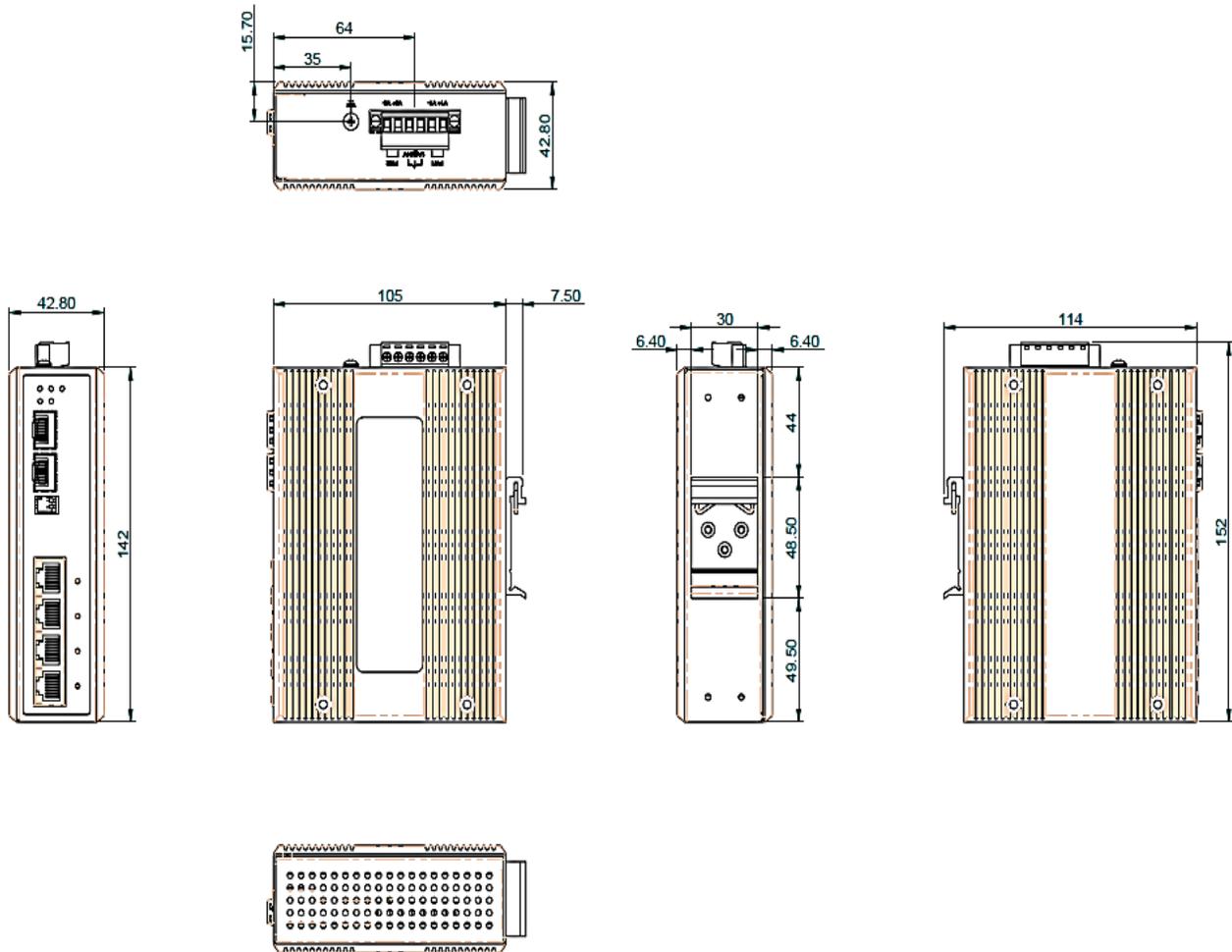
IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3z 1000Base-X Gigabit Ethernet IEEE 802.3x Flow Control and Back Pressure IEEE 802.3af for POE IEEE 802.3at for POE+
Switch Architecture	Back-plane (Switching Fabric): 12Gbps
Data Processing	Store and Forward
Flow Control	IEEE 802.3x Flow Control and Back Pressure
Jumbo Frame	9KB
MAC address Table Size	1K
Packet Buffer Size	1M
Network Connector	5 x RJ-45 10/100/1000BaseT(X) auto negotiation, 4 x Gigabit 30W PSE port 2 x SFP 100/1000M BaseX Auto MDI/MDI-X function, Full/Half duplex
Network Cable	UTP/STP above Cat.5e Cable EIA/TIA-568 10-ohm (100m) Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um
Protocol	CSMA/CD
LED	PW1 (Green): ON – Power is detected PW2 (Green): ON – Power is detected ERR (Amber): ON – Only PW1 or PW2 is connected OFF – Both PW1 and PW2 are connected TX/RJ-45 port: LNK (Green): ON – TX port is detected Flashing – TX data is transmitting/receiving SPD (Amber): ON – 1000M speed OFF – 10/100M speed Port Status (Green): ON – port is detected Flashing – data is transmitting/receiving
DIP Switch	DIP 1: F5 – Port 5 SFP (Default) T5/OFF – Port 5 TX/OFF DIP 2: 1000M – SFP Speed 1000M (Default) 100M – SFP Speed 100M
Reverse polarity protection	Present
Overload current protection	Present

Power Supply	Redundant Dual DC 12V-56V Power Input
Power Consumption	5.76W@12/24/48 VDC full load, Without POE
Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC. 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 per port at 12/24/48/56VDC input Maximum total power 126Watts at 24/48/56VDC power input. Maximum total power 65W at 12VDC 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):12-24/14-22 Stranded wire(AWG): 12-24/14-22 Torque:5lb-In/0.5Nm/0.56Nm Wire Strip length: 7-8mm
Operating Temperature	-40°C~75°C fully tested.
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 43 x 105 mm (L x W x D)
Installation mounting	DIN Rail mounting and Wall Mounting

Certifications

Safety	IEC EN60950-1
EMC/EMS	CE, FCC, VCCI
EMI	FCC Part 15 Subpart B Class A
Vibration	EN 60068-2-6
Shock	EN 60068-2-27
Free Fall	EN 60068-2-32
Railroad	EN50155 / EN50121-3-2
Railroad	EN50155 / EN50121-4

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.