User Manual: PC-IA800 Industrial Switch

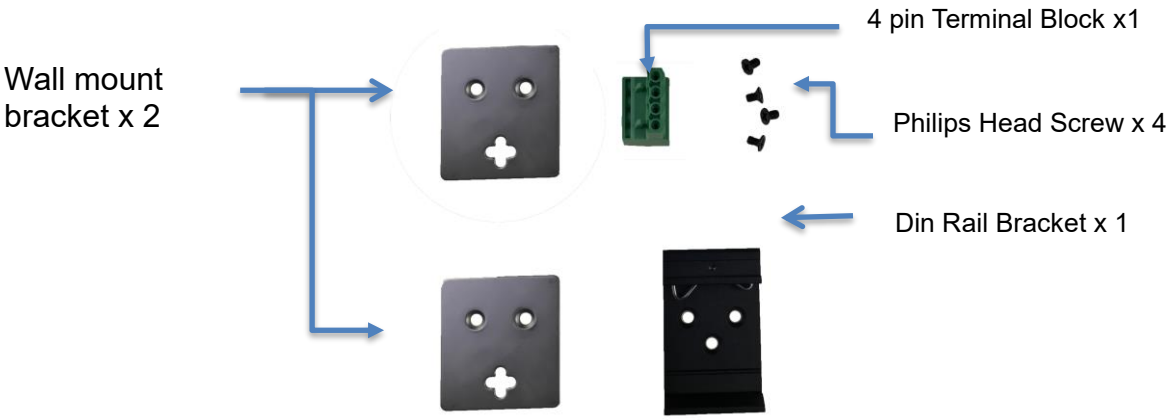
Version 5.2019

Introduction

This 10/100M industrial 8 port Ethernet switch is equipped with 8 port 10/100M Ethernet ports. It is designed especially for IP surveillance, traffic monitoring and for a broad range of applications. This unit can be used as a stand-alone device for buses, trucks, and other vehicles for surveillance purposes. 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

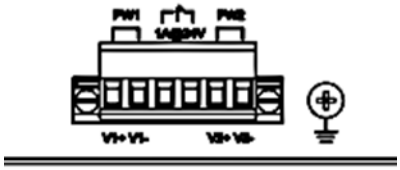
This unit provides a 6 pin terminal block. It can be operated using 12-56VDC power source. Always make sure your input voltage is within this supported voltage range.

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 OPEN mode. If only one of the power sources is connected, the relay changes to SHORT mode. This relay will only work with PW1 and PW2. It is independent from PW3.

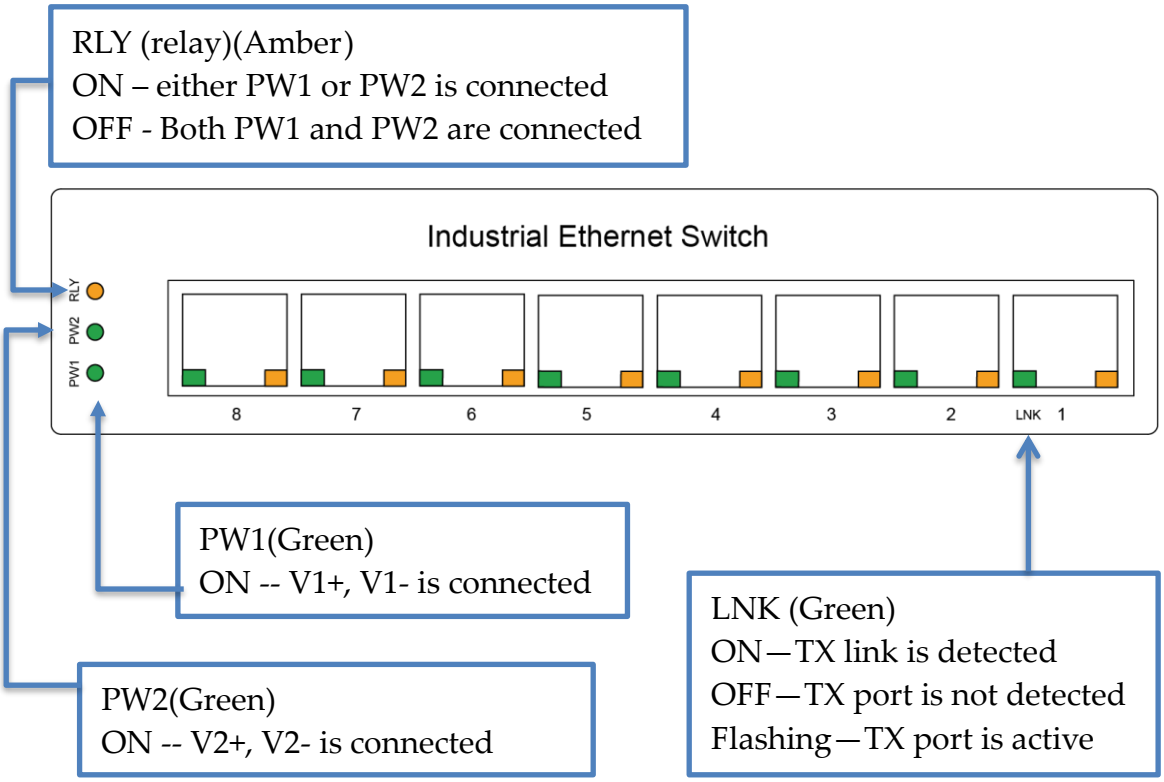
Power connecting procedure:



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.

LED indicator



Specifications

IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE802.3x Flow Control and Back Pressure
Switch Architecture	Back-plane (Switching Fabric): 1.6Gbps
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	8xRJ-45 10/100BaseT(X) auto negotiation, 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, RLY(relay) Amber,
	TX/RJ-45 port: LNK (Link/Active) Green,
Housing	Heavy Metal Housing
Reserve polarity protection	Present
Overload current protection	Present
Power Supply	Redundant Dual DC 12V-56V Power Input
Power Consumption	3W@48 VDC full load,
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	n/a
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℃ to 75℃
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40℃ to 85℃
MTBF (mean time between failure)	510,304 hrs (MIL-HDBK-217F) at 25°C
Housing	Rugged Metal, IP30 Protection
Case Dimension (L x W x D)	142mmx36.2mmx105mm (LxWxD)
Installation mounting	DIN-Rail and wall mount brackets included
Certificates	
Safety	IEC EN60950-1
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)