



User Manual

PS3105F / PS3105T



PS3105F Industrial 10 port POE switch, with 8 x 10/100M TX PSE (802.3af/at) + 2 Giga SFP

PS3105T Industrial 10 port POE switch, with 8 x 10/100M TX PSE (802.3af/at) + 2 Giga TX

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 the 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.
- (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.

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.

Trademarks:

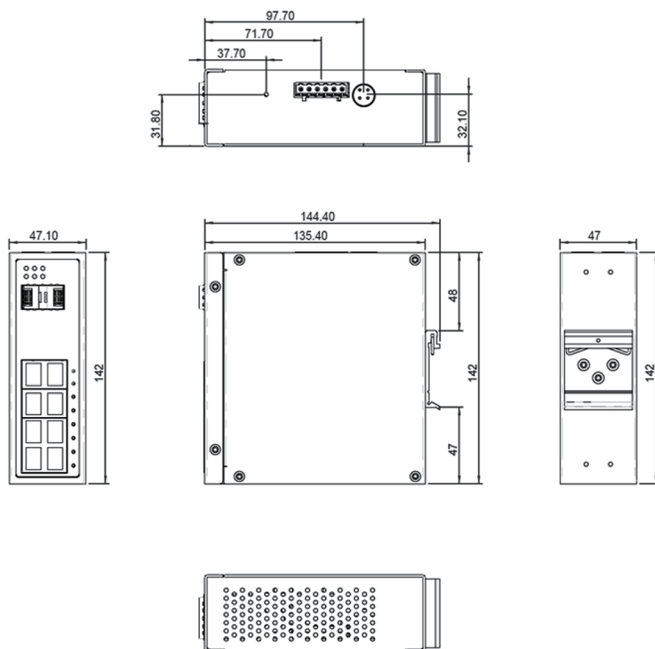
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Introduction

This rugged design Industrial 10 port POE switch, complied with IEEE802.3af and IEEE 802.3at, and pass many rigorous environmental test. It delivers 30 watts (Max 36 watts) power per POE port, also generate up to 200 watts power to PD devices. The uplink 2 SFP port can extend to a wilder area connection. With its multi-purpose design, that can also be used for Din - Rail or wall-mounted. This is an ideal unit for IP surveillance, traffic monitoring and security application in critical environment which -40°C to 75°C range is required.

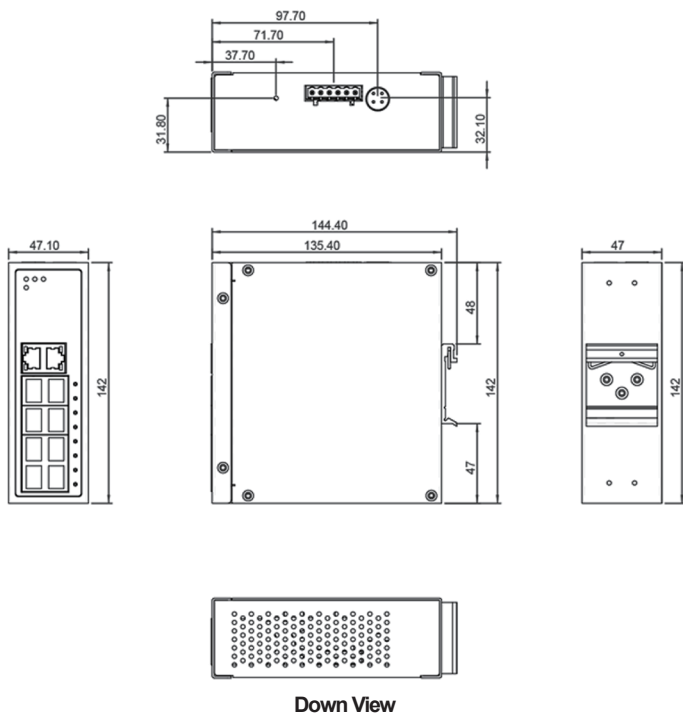
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

Housing Dimension (mm)



Down View

Housing Dimension (mm)



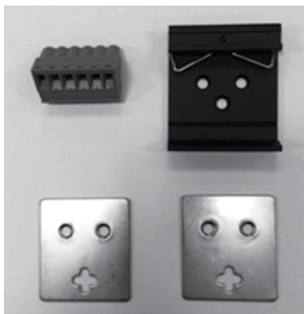
Installation package (the mounting kit)

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

6 pin Terminal Block x1

Din Rail Bracket x 1

Wall mount bracket x 2

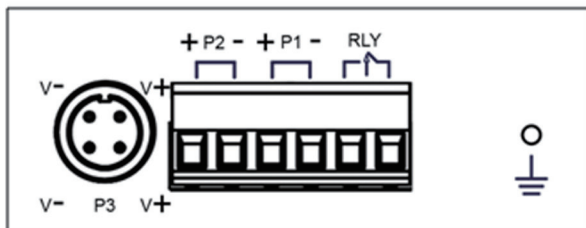
**Power connection**

This product provides 6 pin terminal block. The POE port can be operated from 44-56 VDC power source. The VDC power range can be 44VDC only or lower, or wide range from 44-56 VDC. Please always to make sure your input voltage is the supported voltage range for each model.

WARNING – Any exceeded input voltage will not make this product function properly and may damage it.

To make power connection – This unit can receive 3 power inputs. PW1, PW2, and PW3, Follow the printed polarity for V1+, V1-, V2+, V2-, and ground. Connect positive wire to V+, connect negative wire to V-, and also connect neutral wire to the ground screw as shown.

Relay-This relay function monitor Power failure. You may use 24V@1A relay connection to your external alarm device to monitor power status. Relay function will only work with PW1 and PW2. When PW1 and PW2 are connected, the relay is in "OPEN" mode. The LED RLY indicator will go OFF. When only PW1 or PW2 is connected, the relay is in "SHORT" mode. The LED RLY indicator will go "ON".

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.

For PW3 connection – Use an external industrial graded power adapter to make proper connection. Follow the priority sign V+, V-.

WARNING –

Always ground the power source to remain a clean power input. Too many LOW - END power supplies produce too much noise which can produce POE detection failure. To avoid this, always ground the power source to gain a clean power input.

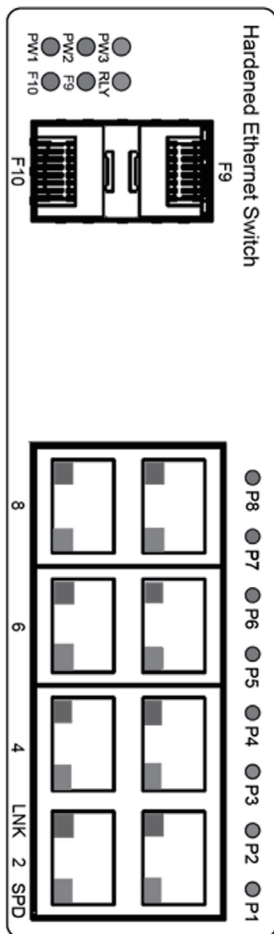
LED indicator

PW1 (Green)
 ON--when V1+,V1-is connected
 PW2 (Green)
 ON--when V2+,V2-is connected
 PW3 (Amber)
 ON--when V3+,V3-is connected

F9 (Green)
 ON-port 9 SFP fiber is detected.
 OFF - port 9 SFP fiber is not detected.
 Flashing-port 9 SFP fiber is active
 F10 (Green)
 ON-port 10 SFP fiber is detected.
 OFF - port 10 SFP fiber is not detected.
 Flashing-port 10 SFP fiber is active.

Port 1 to 8
 LNK (Green)
 ON-TX link is detected
 OFF-TX port is not detected
 Flashing-TX port is active

Port 1 to 8
 SPD (Amber)
 ON-100M speed is detected.
 OFF-10M speed is detected



RLY (Amber)
 ON-PW1 or PW2 is connected
 OFF-PW1 & PW2 are connected

P1, P2, P3, P4, P5, P6, P7, P8
 (Green)
 ON-PD is detected on designated port.
 OFF-no PD is detected

LED indicator

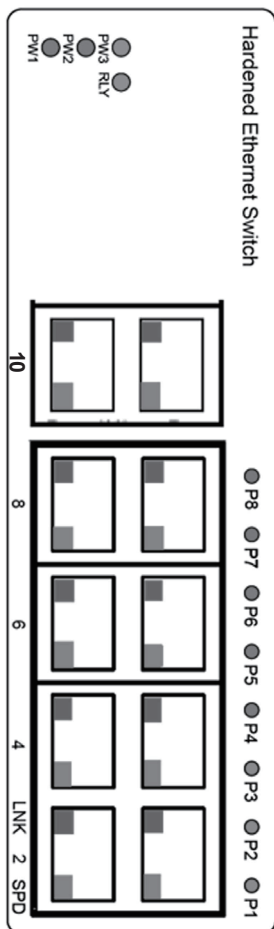
PW1 (Green)
ON—when V1+,V1-is connected
PW2 (Green)
ON—when V2+,V2-is connected
PW3 (Amber)
ON—when V3+,V3-is connected

Port 9, 10
LNK (Green)
ON—TX link is detected
OFF—TX port is not detected
Flashing—TX port is active

Port 9, 10
SPD (Amber)
ON—1000M speed is detected.
OFF—100M or 10M speed is detected

Port 1 to 8
LNK (Green)
ON—TX link is detected
OFF—TX port is not detected
Flashing—TX port is active

Port 1 to 8
SPD (Amber)
ON—100M speed is detected
OFF—10M speed is detected



RLY (Amber)
ON—PW1 or PW2 is connected
OFF—PW1 & PW2 are connected

P1, P2, P3, P4, P5, P6, P7, P8
(Green)
ON—PD is detected on designated port.
OFF—no PD is detected

Technical Specification :

IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3z 1000Base-X fiber IEEE802.3x Flow Control and Back Pressure, IEEE802.3af for POE IEEE802.3at for POE+
Switch Architecture	Back-plane (Switching Fabric): 5.6Gbps
Data Processing	Store and Forward
MAC address Table Size	8K
Packet Buffer Size	1M
Network Connector :	8xRJ-45 10/100BaseT(X) auto negotiation, 8 10/100M POE+ 802.3at/af PSE port, 2 x 1000M SFP 2xRJ-45 10/100/1000BaseT(X) auto negotiation Auto MDI/MDI-X function, Full/Half duplex
Network Cable	UTP/STP Cat.5e or above Cable EIA/TIA-568 10-ohm (100m)
Protocol	CSMA/CD
LEDs	PW1(Power 1) Green, PW2(Power 2) Green, PW3(Power 3) Amber for External Power adapter RLY (Relay) Amber F9 (SFP) Green/Link, Flash/active F10 (SFP) Green/Link, Flash/active TX/RJ-45 port: Green --- LNK (Link/Active) Amber --- 100M Fiber port F9 (SFP) Green/Link, Flash/active F10 (SFP) Green/Link, Flash/active POE Green POE detected Console Green -- console connection detected

Technical Specification :

Reserve polarity protection	Present
Overload current protection	Present
Power Supply	PW1 and PW2 for Redundant Dual DC 48V-56V PW3 for Power DIN to connect external power adapter DC 48-56V For Switch only --- Power input range DC 12-56VDC For POE --- Power input range 48-56VDC
Power Consumption	5.76W@48 VDC full load, Without POE
Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC, for PW1 and PW2 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 200Watts with 56VDC input
Removable Terminal Block	Provide 2 Redundant powers , Alarm relay contact ,6 Pin for PW1 and PW2 (PW3 is an independent Power din connection for external power adapter) 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~85°C
MTBF (mean time between failure)	490,304 hrs (MIL-HDBK-217F) at 25°C
Housing	Rugged Metal ,IP30 Protection
Case Dimension (L x W x D)	142mmx47.3mmx135.3mm (LxWxD)
Installation mounting	DIN Rail mounting and Wall Mounting

Certificates :

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

LILIN