

User Manual

Industrial 6 port POE switch, with 4 x Giga TX PSE (802.3af/at) + 1 x TX/SFP combo + 1 Giga SFP

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.

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Trademarks:

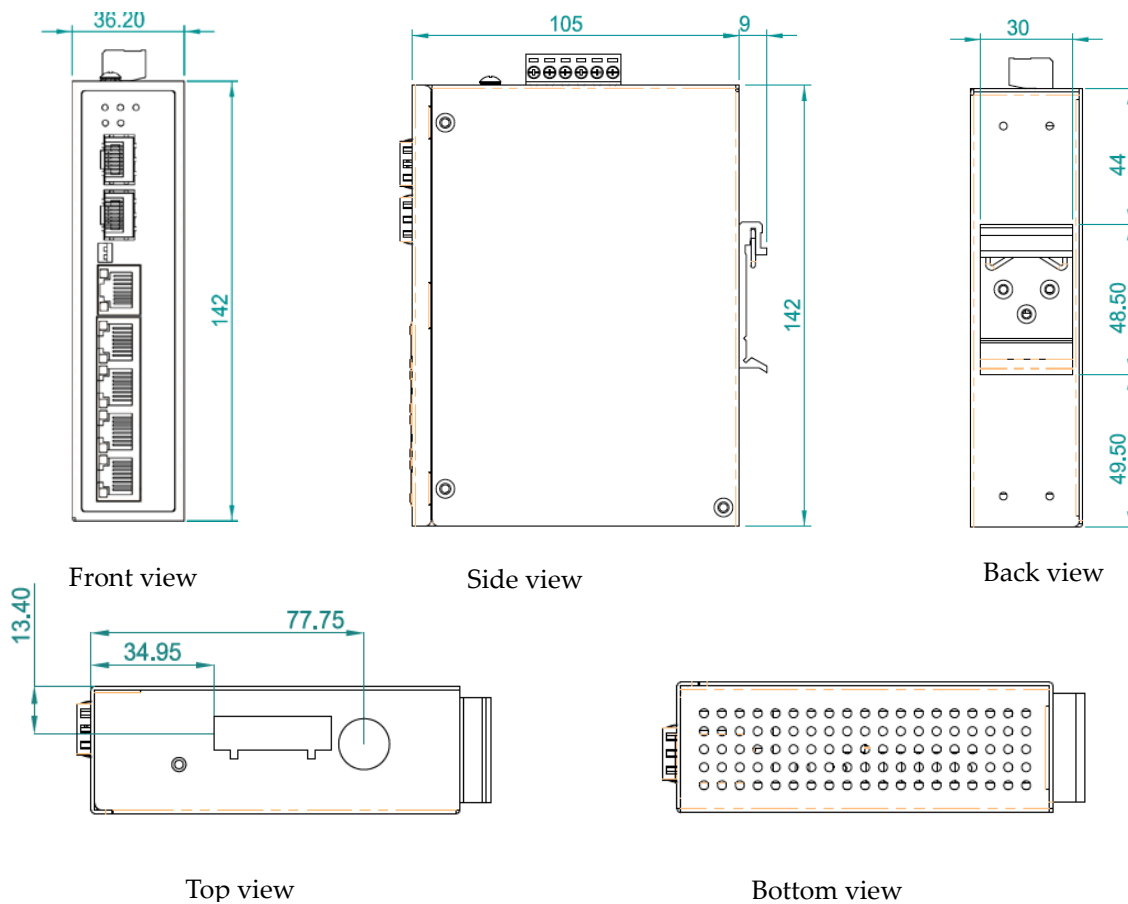
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Introduction

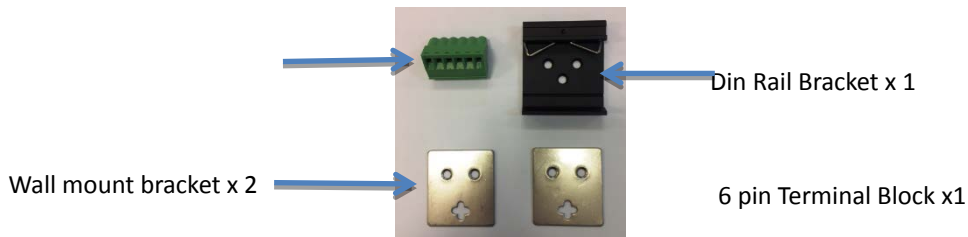
This rugged design Industrial 6 port POE switch, complied with IEEE802.3af and IEEE802.3at, and pass many rigorous environmental test. The uplink 2 SFP port can extend to a wild area connection. With its multi-purpose design, that can also be used for Din-Rail or wall-mounted. This is an idea unit for IP surveillance, traffic monitoring and security application in critical environment that can be tolerate -40°C to 75°C to perform a reliable situation.

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.



Power connection

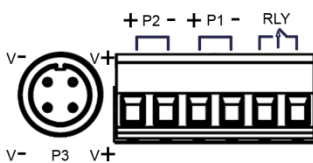
This product provides 6 pin terminal blocks. The POE port can be operated from 48-56VDC power source. The VDC power range can be 48VDC only or lower, or wide range from 48-56VDC. Please always to make sure your input voltage is the supported voltage range for each model.

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

To make power connection – 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 -- You may use 24V@1A relay connection to your external device for special purpose. When 2 powers are connected, the relay is in OPEN mode. While any power source fails, the relay will change to SHORT status.

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.



WARNING –

Always ground the power source to remain a clean power input. Too many inexpensive power supplies produce noise, and will cause the fluctuation. To avoid this, always ground the power source to gain 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 are set to 1000M for both port 5 and port 6 SFP ports. The detail setting as shown below:

OFF

 1	 2	DIP 1 to select port 5 SFP	ON	F5 OFF
			OFF	F5 ON (default)
ON		DIP 2 to select SFP speed	ON	100M
			OFF	1000M (default)

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.

LED indicator

PW1

ON -- when V1+, V1- is connected

PW2

ON -- when V2+, V2- is connected

F6

ON – port 6 SFP fiber is detected

OFF – port 6 SFP fiber is not detected.

Flashing – port 6 SFP fiber is active

LNK

ON—TX link is detected

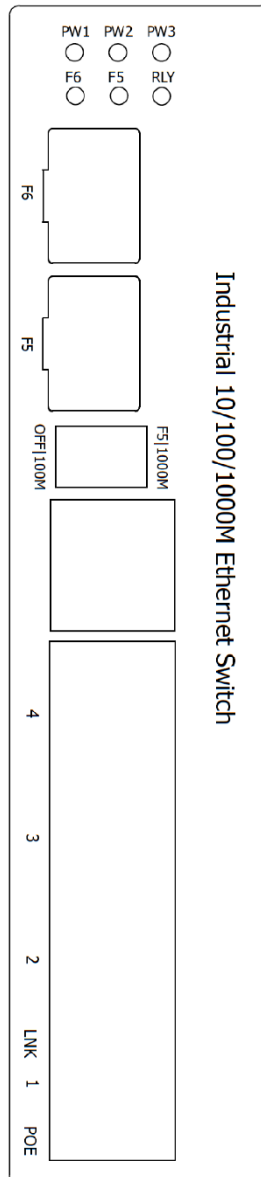
OFF – TX port is not detected

Flashing – TX port is active

POE (Amber)

ON – POE functioning.

OFF – POE off



PW3 (Amber)

ON – Power DIN is connected

OFF—Power DIN is disconnected

F5

ON – port 5 SFP fiber is detected

OFF –port 5 SFP fiber is not detected.

Flashing – port 5 SFP fiber is active

RLY (Amber)

ON – Alarm Relay is connected

OFF –Alarm Relay is disconnected

P1, P2, P3, P4

ON (Green)—PD is detected on designated port in 2 pair mode, 30 watts or less.

ON (Amber)—PD is detected on designated port in 4 pair mode, 30 watts range.

OFF – no PD is detected

Technical Specification:

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 IEEE802.3x Flow Control and Back Pressure, IEEE802.3af for POE IEEE802.3at 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	1Mbits
Network Connector:	5 RJ-45 10/100/1000BaseT(X) auto negotiation, 4 Giga POE+ 802.3at/af PSE port Auto MDI/MDI-X function, Full/Half duplex SFP 100/1000M BaseX
Network Cable	UTP/STP above Cat.5e or above 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(Power 1) Green, PW2(Power 2) Green, PW3(Power 3) Amber for Power DIN RLY(Alarm Relay) Amber,
	TX/RJ-45 port: LNK (Link/Active) Green, POE (Amber)
	SFP Fiber Per port: Link (Green) Active Flash
DIP Switch	DIP 1: OFF: Port 5 SFP (DEFAULT) ON: Port 5 TX

	DIP 2: OFF: SFP 1000M (DEFAULT) ON: SFP 100M
Reserve polarity protection	Present
Overload current protection	Present
Power Supply	Redundant Dual DC 48V-56V Power Input POE input 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, Relay in OPEN circuit mode when 2 powers are connected. in SHORT circuit mode when only one power supply is connected
POE power	POE power per port 30watts. Maximum 36Watts Maximum total power 126Watts, Supports IEEE802.3af/at
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~85°C
Housing	Rugged Metal ,IP30 Protection
Case Dimension (L x W x D)	142mmx43mmx105mm (LxWxD)
Installation mounting	DIN Rail mounting and Wall Mounting
Certifications:	
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