

# IGP-0401

4-Port Gigabit PoE Industrial Switch

User Manual

### Introduction

This IGP-0401 Industrial 4 port Gigabit Ethernet Switch is equipped with two PoE ports. The PSE ports are critical for your PD environment. They will not only perform your network job, but also provide PSE power to your PD WiFi or IP CAM applications. This product has been rigorously tested in harsh environment. These PSE ports can be powered by 48-56 VDC input voltage. The additional Gigabit TX port and Gigabit SFP port can be easily cascaded to extend your existing networks. With its multi- purpose design, it can also be Din-Rail or wall-mounted. It is an ideal unit for Mobile Base Station (BTS), IP surveillance, traffic monitoring and security application in critical environment. It can tolerate -40°C to 75°C in harsh environment to perform a reliable network.

## 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 6 pin terminal block. The PoE port can be operated from 48-56VDC power source input. 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. This unit comes with 3 power input sources. P1, P2, and P3

To make power connection – Follow the printed polarity for P1+, P1-, P2+, P2-, and ground. Connect positive



wire to P1+ or P2+, connect negative wire to P1- or P2-, 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. If only one of the power source is connected, the relay change to SHORT mode. This Relay will only work with P1 and P2. It is independent to P3

Power connecting procedure:

STEP 1 – Pull out 6 pin terminal block.

STEP 2 – Connect wire to P1+, P1-, or P2+, P2-, and Ground the neutral wire to the ground screw.

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

Or, Connect the P3 power DIN from external power adopter. **WARNING –** 

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Always ground the power source to maintain a clean power input. Due to too many cheap made power supplies, it creates too much noise, and it will cause the power input fluctuates when connect to this unit. To avoid this, always ground the power source to gain a clean power input.

## LED indicator

#### Lnk

ON – port F4 SFP fiber is detected OFF – port F4 SFP fiber is not detected. Flashing – port F4 SFP fiber is active

## DIP SWITCH

DIP1: OFF: Port F4 SFP 1000M ON: Port F4 SFP 100M DIP2: Reserved.

Lnk (Green) ON—Link port is detected OFF – Link port is not detected Flashing – Link port is active

PoE (Amber) Port 1 & Port 2 ON – PD is detected on designated port. OFF – no PD is detected



#### PW1

ON -- when P1+, P1- is connected PW2 ON -- when P2+, P2- is connected PW3 ON -- when P3 Power DIN is connected

#### RLY

ON – Either PW1 or PW2 is connected

OFFboth PW1 and PW2 are connected

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): 8-Gbps
Data Processing	Store and Forward
Flow Control:	IEEE 802.3x Flow Control and Back Pressure
Jumbo Frame	10KB
MAC address Table Size	8K
Packet Buffer Size	1Mbits
Network Connector:	
	3 x RJ-45 10/100/1000BaseT(X) auto negotiation,
	2 x Gigabit 30Watts PoE+ 802.3at/af PSE port
	1 x 10/100/1000M TX
	1 x 100/1000M SFP
	Auto MDI/MDI-X function, Full/Half duplex
Network Cable	UTP/STP Cat.5e Cable or above
	EIA/TIA-568 10-ohm (100m)
Protocol	CSMA/CD
LED	PW1(Power 1) Green,
	PW2(Power 2) Green,
	PW3(Power 3) Amber, for external power adapter
	RLY (Relay) Amber
	TX/RJ-45 port:
	Lnk (Link/Active) Green/Flashing
	PoE Amber
	SFP port:
	F4 (Link/Active) Green
DIP Switch	DIP1: OFF: Port 4 SFP 1000M
	ON: Port 4 SFP 100M
	DIP2: Reserve
Reserve polarity protection	Present
Overload current protection	Present
Power Supply	Redundant Dual DC 48V-56V Power Input
	PoE input 48-56VDC
Power Consumption	4.0 W@48 VDC full load, Without POE
	Max total power 65 Watts
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
Removable Terminal Block	Provide 2 Redundant power, Alarm relay contact ,6 Pin
	Wire range: 0.34mm <sup>2</sup> to 2.5mm <sup>2</sup>
	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
Power DIN	For 110VAC/240VAC external power adapter, 4 pin high
	current with lock type
Operating Temperature	$-40^{\circ}$ C ~75°C fully tested.
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C ~85°C
MTBF (mean time between failure)	>500,000 hrs. (MIL-HDBK-217F) at 25°C
Housing	Rugged Metal, IP30 Protection
Case Dimension (W X D X H)	142 x 36.2 x 105 mm (L x W x D)
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

## Housing Dimensions

