

# 3ISYS-ETHI-1F4P1C

INDUSTRIAL 6-PORT UNMANAGED GIGABIT POE ETHERNET SWITCH WITH  
4X10/100/1000BASE-T(X) P.S.E., 1X10/100/1000BASE-T(X) AND  
1X100/1000BASE-X, SFP SOCKET

## FEATURES

- 3ISYS-ETHI-1F4P1C is 6 port Switch which provide 4x10/100/1000Base-T(X) PoE (P.S.E.) 1 X 10/100/1000 Copper and 1 x 10/1000 SFP ports
- Supports P.S.E. based on IEEE 802.3at standard up to 30 Watts per port
- Supports jumbo frame up to 9KBytes
- Support dual wide range 50~57 VDC power inputs for power redundancy
- SFP port supports 100Base-FX and 1000Base-X speed
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports store and forward transmission
- Supports flow control
- Rigid IP-30 housing design



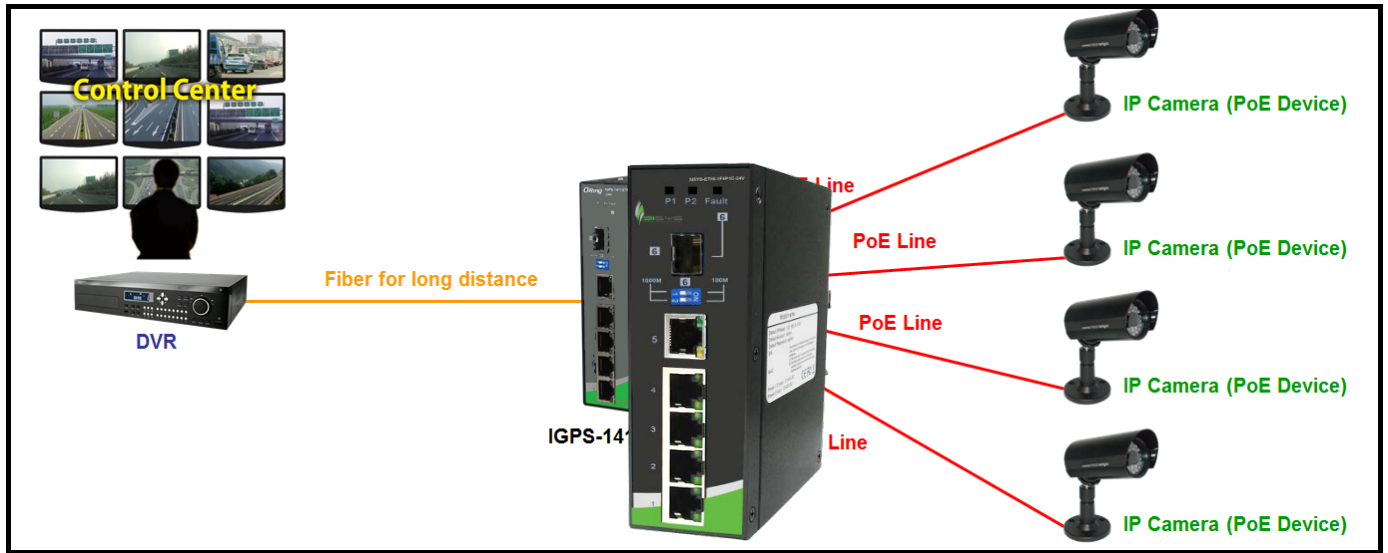
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## PRODUCT OVERVIEW

3ISYS-ETHI-1F4P1C is an unmanaged PoE Ethernet switch with P.S.E. function. 3ISYS-ETHI-1F4P1C supports Power over Ethernet, a system to transmit electrical power, along with data to remote devices over standard twisted-pair cable in an Ethernet network. 3ISYS-ETHI-1F4P1C has 4x10/100/1000Base-T(X) P.S.E. (Power Sourcing Equipment) ports, 1 additional Gigabit port, and 1x100/1000Base-X SFP port. The SFP port optical network speed can be set by changing the settings of the DIP-Switch. 3ISYS-ETHI-1F4P1C supports input range 50~57VDC power and generates 50VDC P.S.E. power output per port. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE setup. The wide operating temperature range from -40oC to 60oC can satisfy most of operating environment. Therefore, the switch is one of the most reliable choices for PoE Ethernet application. Ideal for Last Mile POE Injection to IP cameras / Wireless Access Points and Fiber / Copper Uplinks to Aggregation sites.

## Implementation

3ISYS-ETHI-1F4P1C can be used in connecting several PoE P.D. Ethernet devices like IP-Camera or other Ethernet devices. In addition, there are two different power inputs at terminal block to avoid interruption caused by power down. When the primary DC power input fails, the backup power input will take over immediately to guarantee a non-stop operation.



Connections of Ethernet devices

## PoE Pin Definition

- 10/100Base-T(X) P.S.E. RJ-45 port

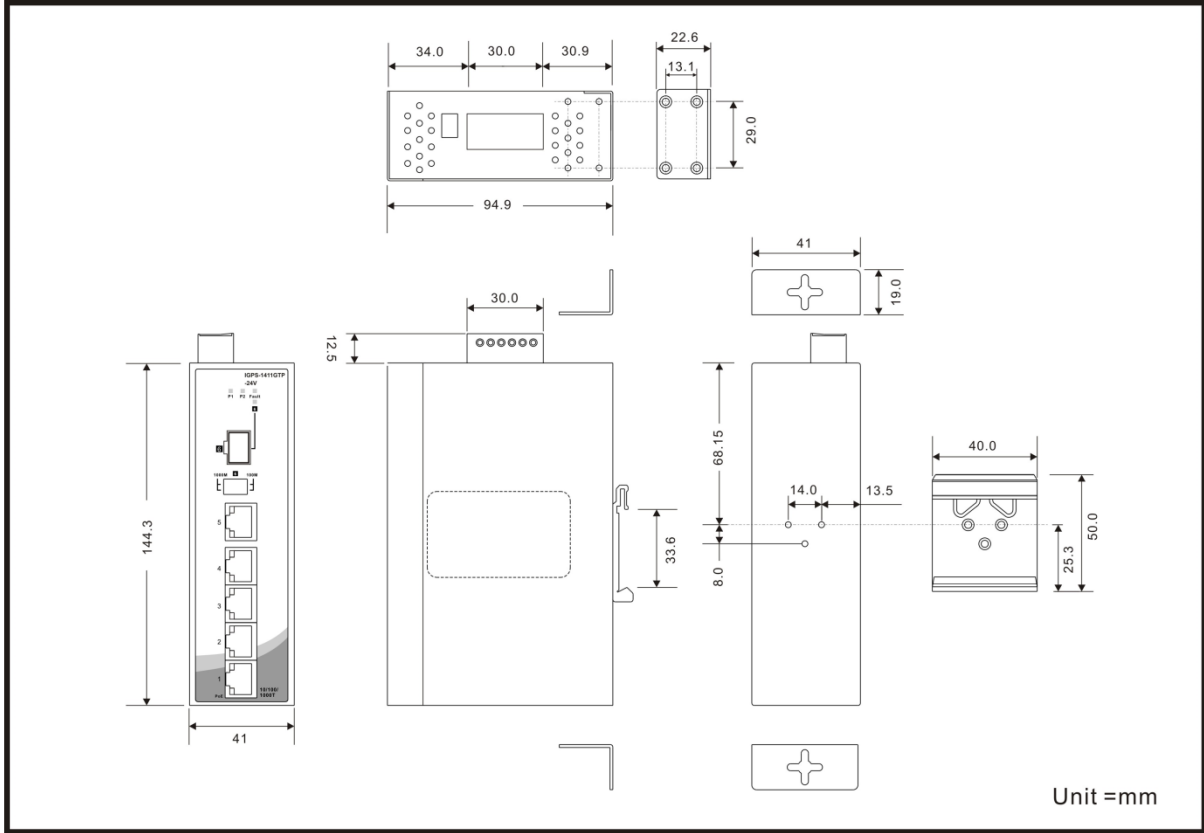
RJ-45 Pin Definition	
Pin No.	Description
#1	TD+ with PoE Power input +
#2	TD- with PoE Power input +
#3	RD+ with PoE Power input -
#6	RD- with PoE Power input -

- 1000Base-T P.S.E. RJ-45 port

RJ-45 Pin Definition	
Pin No.	Description
#1	BI_DA+ with PoE Power input +
#2	BI_DA- with PoE Power input +
#3	BI_DB+ with PoE Power input -
#4	BI_DC+
#5	BI_DC-
#6	BI_DB- with PoE Power input -
#7	BI_DD+

#8	BI_DD-
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Dimension



## Dimension

<b>3ISYS Switch Model</b>	<b>3ISYS-ETHI-1F4P1C</b>
<b>Physical Ports</b>	
100/1000Base-X SFP port	<b>1</b>
10/100/1000Base-T(X) Ports in RJ45 with P.S.E. Auto MDI/MDIX	<b>4</b>
10/100/1000Base-T(X) Port in RJ45  Auto MDI/MDIX	<b>1</b>
<b>Technology</b>	
Ethernet Standards	<ul style="list-style-type: none"> <li>• IEEE 802.3 for 10Base-T</li> <li>• IEEE 802.3u for 100Base-TX</li> <li>• IEEE 802.3ab for 1000Base-T</li> <li>• IEEE 802.3z for 1000Base-X</li> <li>• IEEE 802.3x for Flow control</li> <li>• IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.)</li> </ul>
MAC Table	1K MAC addresses
Processing	Store-and-Forward
Jumbo Frame	Up to 9KBytes
<b>LED indicators</b>	
Power indicator	Green : Power LED x 2
Fault indicator	Amber : Indicate PWR1 or PWR2 failure
10/100/1000Base-T(X) RJ45 port indicator and PoE indicator (P1 ~ P4)	Green for port Link/Act.  Green for power injected.
10/100/1000Base-T(X) RJ45 port indicator (P5)	Green for port Link/Act.  Amber for 100Mbps indicator

100/1000Base-X SFP port indicator	Green for port Link/Act.
<b>SFP Speed DIP-Switch</b>	
DIP-Switch 1/2	DIP-Switch 1 (ON) and DIP-Switch 2 (ON) : SFP speed setting to 100Mbps DIP-Switch 1 (OFF) and DIP-Switch 2 (OFF) : SFP speed setting to 1000Mbps
<b>Relay Output DIP-Switch</b>	
DIP-Switch 1	Power-1 failed warning : (ON) enable, (OFF) disable
DIP-Switch 2	Power-2 failed warning : (ON) enable, (OFF) disable
<b>Fault contact</b>	
Relay	Relay output to carry capacity of 1A at 24VDC
<b>Power</b>	
Redundant Input power	Dual DC inputs. 50-57 VDC on 6-pin terminal block.
Power consumption (Typ.)	6.5 Watts (power device not included)
Overload current protection	Present
Reverse polarity protection	NOT Present
<b>Physical Characteristic</b>	
Enclosure	IP-30
Dimension (W x D x H)	41 (W) x 94.9 (D) x 144.3(H) mm
Weight (g)	550 g
<b>Environmental</b>	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-40 to 60°C (-40 to 140°F)

Operating Humidity	5% to 95% Non-condensing
<b>Regulatory approvals</b>	
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950-1
<b>Warranty</b>	1 Year

## Ordering Information

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3ISYS® - AAAA - F - P - C - X - Q

Module Identifier	Number of 100/1000Base-X SFP port	Number of P.S.E. with 10/100/1000Base-T(X) Ports	Number of 10/100/1000Base-T(X) Ports
Gigabit Ethernet, ETHI	1	4	1

Available Model	Model Name	Description
	<b>3ISYS-ETHI-1F4P1C</b>	Industrial 6-port unmanaged Gigabit PoE Ethernet switch with 1x100/1000Base-X, SFP socket ,4x10/100/1000Base-T(X) P.S.E, 1x10/100/1000Base-T(X)



## Ordering Information

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- **3ISYS-ETHI-1F4P1C x 1**
- **Din-Rail Kit x 1**
- **Wall-Mount Kit x 1**
- **Quick Installation Guide x 1**

## Accessories

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- **3ISYS-100SFP : 100Mbps SFP optical transceiver**
- **3ISYS-SFP : 1Gbps SFP optical transceiver**
- **3ISYS-PWR-240-48, 240 Watts DIN-Rail power supply**
- **3ISYS-PWR-75-48, 75 Watts DIN-Rail power supply**
- **3ISYS-PWR-120-48, 120 Watts DIN-Rail power supply**



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