# **3ISYS-ETHI-4C2F-24V**

INDUSTRIAL 6-PORT UNMANAGED GIGABIT POE ETHERNET SWITCH WITH 2X100/1000BASE-X, SFP SOCKET AND 4X10/100/1000BASE-T(X) P.S.E., 24VDC POWER INPUT

## FEATURES

- 3ISYS-ETHI-4C2F-24V provide 4x10/100/1000Base-T(X) PoE (P.S.E.) ports
- Supports P.S.E. based on IEEE 802.3at standard up to 30 Watts per port
- Advanced PoE power boost technology to support dual 24VDC power inputs
- Supports Jumbo frame up to 9KBytes
- 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
- DIN-Rail and wall mounting enabled







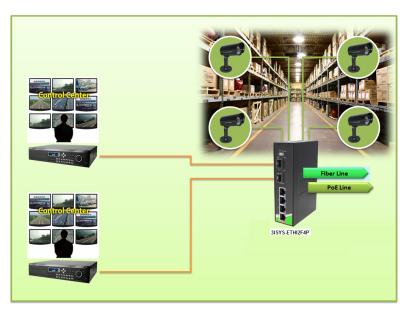
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### **PRODUCT** OVERVIEW

3ISYS-ETHI-4C2F-24V is an unmanaged PoE Ethernet switch with P.S.E. function. 3ISYS-ETHI-4C2F -24V 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-4C2F -24V has 4x10/100/1000Base-T(X) P.S.E. (Power Sourcing Equipment) ports and 2x100/1000Base-X SFP port. The SFP port optical network speed can be set by changing the settings of the DIP-Switch below. 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 70oC can satisfy most of operating environment. Therefore, the switch is one of the most reliable choices for PoE Ethernet application.

#### **Practical Operation**

3ISYS-ETHI-4C2F -24V 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** 

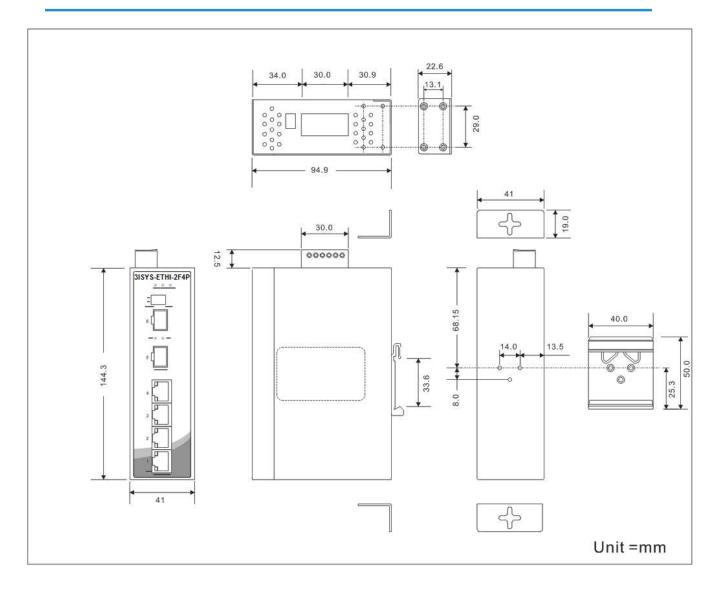
#### **PoE Pin Definition**

§ 10/10	5 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 S

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-			

#### Dimension



## Specifications

3ISYS Switch Model	3ISYS-ETHI-4C2F-24V	
Physical Ports		
100/1000Base-X SFP port	2	
10/100/1000Base-T(X) Ports in RJ45 with P.S.E. Auto MDI/MDIX	4	
Technology		
Ethernet Standards	<ul> <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	
LED indicators		
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.	
100/1000Base-X SFP port indicator	Green for port Link/Act.	
SFP Speed		
DIP-Switch		
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	
Relay Output		
DIP-Switch		
DIP-Switch 1	Power-1 failed warning : (ON) enable, (OFF) disable	
DIP-Switch 2	Power-2 failed warning : (ON) enable, (OFF) disable	
Fault contact		

Relay	Relay output to carry capacity of 1A at 24VDC	
Power		
Redundant Input power	Dual DC inputs. 24~36VDC on 6-pin terminal block.	
Power consumption (Typ.)	6.5 Watts (power device not included)	
Overload current protection	Present	
Reverse polarity protection	NOT Present	
Physical		
Characteristic		
Enclosure	IP-30	
Dimension (W x D x H)	41 (W) x 94.9 (D) x 144.3(H) mm (1.61 x 3.74 x 5.68 inches)	
Weight (g)	540 g	
Environmental		
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Operating Temperature	-40 to 70°C (-40 to 158°F)	
Operating Humidity	5% to 95% Non-condensing	
Regulatory		
approvals		
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	
Warranty	1 year	

#### **Ordering Information**

3IS	BISYS®-AAAA-C-F					
	Module	Number of P.S.E.	Number of 100/1000Base-X			
	Identifier	with10/100/1000Base-T(X)	SFP port			
		Ports				
	Industrial					
	Gigabit	4	2			
	Ethernet,					
	ETHI					

#### Items Included

- 1
   3ISYS-ETHI-4C2F-24V x 1
   1
   Din-Rail Kit x 1
   1
   Wall-Mount Kit x 1
- 1 Quick Installation Guide x 1

#### **Optional Accessories**

- 1 3ISYS-FTX : 100Mbps SFP optical transceiver
- **3ISYS-FC : 1Gbps SFP optical transceiver**



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