# 3ISYS-ETHI-8C4F

INDUSTRIAL 12-PORT RACK MOUNT MANAGED GIGABIT POE ETHERNET SWITCH WITH 4X1000BASE-X, SFP SOCKET

## **FEATURES**

- Supports Sys-Ring (recovery time < 30ms over 250 units of connection), MSTP/RSTP/STP (IEEE 802.1s/w/D) for
- Ethernet Redundancy
- Support Jumbo frame up to 9.6K Bytes
- Supports IPV6 new internet protocol version
- Provided HTTPS/SSH protocol to enhance network security
- Supports SMTP client
- Supports IP-based bandwidth management
- Supports application-based QoS management
- Supports Device Binding security function
- Supports DOS/DDOS auto prevention
- Supports IEEE 802.3at compliant PoE and total power budget is 120Watts with maximum 30Watts per port
- Supports PoE scheduled configuration and PoE auto-ping check function
- 300Watts Power supply included
- IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic
- Supports SNMP v1/v2c/v3 & RMON & 802.1Q VLAN Network Management
- Support ACL, 802.1x User Authentication for security
- Multiple notification for warning of unexpected event
- Windows utility (System-Vision 3.0) support centralized management and configurable by Web-based interface, Telnet and Console (CLI)
- Support LLDP Protocol
- 19 inches rack mountable design





















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### **PRODUCT OVERVIEW**

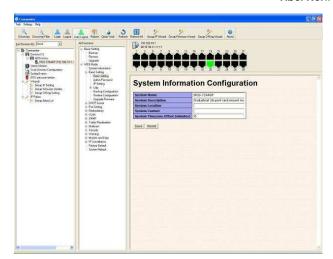
3ISYS-ETHI-8C4F is managed redundant ring PoE Ethernet switches with 4x1000Base-X SFP ports and 8x10/100/1000Base-T(X) P.S.E. ports. 3ISYS-ETHI-8C4F provided advanced IP-based bandwidth management which can limit each IP device maximum bandwidth. User can configure IP camera and NVR with more bandwidth and limit the bandwidth of other device. 3ISYS-ETHI-8C4F also supports application-based QoS which can set highest priority for data stream according TCP/UDP port number. 3ISYS-ETHI-8C4F also provided advanced DOS/DDOS auto prevention. If there is any IP flow become big in short time, 3ISYS-ETHI-8C4F will lock the source IP address for certain time to prevent the attack. It's hardware-based prevention so it can prevent plenty of DOS/DDOS attacks immediately and completely. 3ISYS-ETHI-8C4F also support Power over Ethernet, a system to transmit electrical power up to 30 watts, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. Each 3ISYS-ETHI-8C4F switch has 8x10/100/1000Base-T(X) P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE connection. All function of 3ISYS-ETHI-8C4F can be managed centralized and Web-based, Telnet, Console (CLI). Therefore, the switch is one of the most reliable choice for highly-managed and Gigabit Fiber Ethernet and PoE application.

#### **Sytem-Vision**

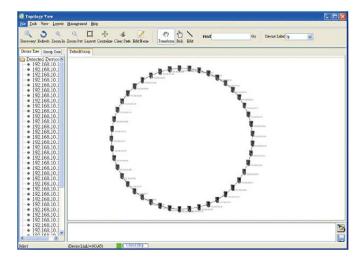




#### **Fiber Network connection**

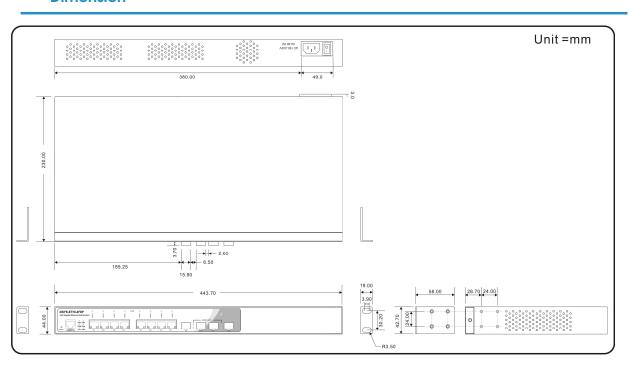






**Topology View** 

#### **Dimension**



## 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 -

#### 1 1000Base-T P.S.E. RJ-45 port

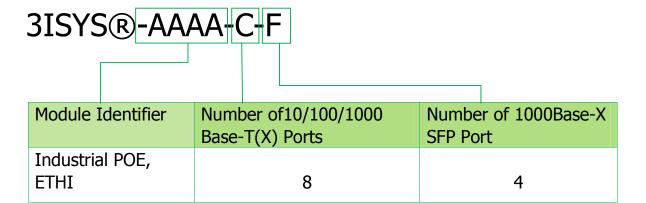
RJ-45 Pin Definition		
Pin No.	Description	
#1	BI_DA+ with PoE Power input +	
#2	BI_DA- with PoE Power input +	
#3	BI_DB+ with PoE Power input -	
#4	BI_DC+	
#5	BI_DC-	
#6	BI_DB- with PoE Power input -	
#7	BI_DD+	
#8	BI_DD-	

## **Specifications**

3ISYS Switch Model	3ISYS-ETHI-8C4F
Physical Ports	
1000Base-X SFP Port	4
10/100/1000 Base-T(X)	
Ports in RJ45	8, 120Watts with maximum
Auto MDI/MDIX with	30Watts per port
P.S.E	
Technology	
Ethernet Standards	• IEEE 802.3 for 10BaseT
	• IEEE 802.3u for 100Base-TX
	• IEEE 802.3z for 1000Base-X
	• IEEE 802.3ab for 1000Base-T
	• IEEE 802.3x for Flow control
	• IEEE 802.3ad for LACP (Link Aggregation Control Protocol )
	• IEEE 802.1D for STP (Spanning Tree Protocol)
	• IEEE 802.1p for COS (Class of Service)
	■ IEEE 802.1Q for VLAN Tagging

	• IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol)
	• IEEE 802.1x for Authentication
	• IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.)
MAC Table	8192 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
Frocessing	• Switching latency: 7 us
	Switching latericy. 7 us     Switching bandwidth: 24Gbps
Cwitch Proportios	Max. Number of Available VLANs: 256
Switch Properties	
	IGMP multicast groups: 128 for each VLAN  Part water limiting at Heavy Define.
	Port rate limiting: User Define
	Device Binding security feature
	Enable/disable ports, MAC based port security
	Port based network access control (802.1x)
Security Features	VLAN (802.1Q ) to segregate and secure network traffic
	Radius centralized password management
	SNMPv3 encrypted authentication and access security
	Https / SSH enhance network security
Jumbo frame	Up to 9.6K Bytes
	•STP/RSTP/MSTP (IEEE 802.1D/w/s)
	• Redundant Ring (Sys-Ring) with recovery time less than 30ms over 250 units
	•TOS/Diffserv supported
	Quality of Service (802.1p) for real-time traffic
	• VLAN (802.1Q) with VLAN tagging and GVRP supported
Software Features	■IGMP Snooping
Software realures	IP-based bandwidth management
	Application-based QoS management
	DOS/DDOS auto prevention
	Port configuration, status, statistics, monitoring, security
	DHCP Client/Server
	• SMTP Client
	Sys-Ring
	Fast Recovery Mode
Network Redundancy	STP / RSTP
	MSTP
RS-232 Serial Console	
Port	RS-232 in RJ45 connector with console cable. 115200bps, 8, N, 1
LED indicators	
Power indicator (PWR)	Green : Power indicator
System Ready Indicator	Green : rower indicator
(STA)	Green: Indicate system ready. Blinking for system is upgrading firmware.
Ring Master Indicator (R.M.)	Green : Indicate system operated in Sys-Ring Master mode
Sys-Ring Indicator (Ring)	Green: Indicate system operated in Sys-Ring mode. Blinking to indicate Ring is broken.
Sycom Dunnia Indicator	Green : System operated continuously
Sysem Runnig Indicator	Green System operated continuously

(RUN)	
Reset To Default Running	
Indicator (DEF)	Green: System reset to default configuration
PoE indicator	Blue: PoE LED x 8
10/100/1000Base-T(X)	
RJ45 port indicator	Green for port Link/Act. Amber for Duplex/Collision
1000Base-X SFP port	Green for port Link/Act.
indicator	Green for port Ling Act.
Power	
Power Input	AC 100~240V/AC, 50~60Hz
PoE Output Power	120Watts max for -40 to 60°C / Power de-rating 12W/ °C for 60 to 70°C
Power Consumption	22Watts (power device not included)
(Type.)	22 watts (power device not included)
Overload current	Duarant
protection	Present
Physical Characteristic	
Enclosure	19 inches rack mountable
Dimension (W x D x H)	443.7(W)x230(D)x44(H) mm
Weight (g)	3,554 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
	• EN61000-4-2 (ESD)
	● EN61000-4-3 (RS),
	• EN61000-4-4 (EFT),
EMS	• 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
Warranty	1 year



### **Packing List**

1 3ISYS-ETHI-8C4F x 1

3ISYS Tool CD x 1

Quick Installation

1 Rack-mount Kit x 1

1 Console Cable x 1

Guide x 1

#### **Optional Accessories**

System-Vision M5C : Powerful Network Management Windows Utility Suit, 500 IP devices 3ISYS-FTX : 1Gbps SFP optical transceiver



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All specifications are subject to change without further notice. All features with \* mark will be available by firmware upgrade.