



ENSIR-8

Managed Network Switch



Description

- Advanced PoE management function (PoE port setting, PD failure check, and PoE scheduling)
- Command Line Interface (CLI) for quickly configuring major managed functions
- IPv6 Ready logo awarded (IPv6 Logo Committee certified)
- IEEE 1588 PTP V2 (Precision Time Protocol) for precise time synchronization of networks
- DHCP Option 82 for IP address assignment with different policies
- Support EtherNet/IP and Modbus/TCP protocols for device management and monitoring
- Turbo Ring and Turbo Chain (recovery time < 20 ms @ 250 switches), RSTP/STP, and MSTP for network redundancy
- IGMP snooping and GMRP for filtering multicast traffic
- Port-based VLAN, IEEE 802.1Q VLAN, and GVRP to ease network planning
- QoS (IEEE 802.1p/1Q) and TOS/DiffServ to increase determinism
- Port Trunking for optimum bandwidth utilization
- TACACS+, IEEE 802.1X, SNMPv3, HTTPS, and SSH to enhance network security

page 1/7

- Lock port function for blocking unauthorized access based on MAC Address
- SNMPv1/v2c/v3 for different levels of network management
- RMON for efficient network monitoring and proactive capability
- Bandwidth management to prevent unpredictable network status
- Port mirroring for online debugging
- Automatic warning by exception through e-mail and/or relay output

The ENSIR-8 Gigabit managed redundant Ethernet switch comes standard with 4 10/100BaseT(X) 802.3af (PoE) compliant Ethernet ports and 3 combo Gigabit Ethernet ports. The ENSIR-8 switch provides up to 15.4 watts of power per PoE port, and allows power to be supplied to connected devices (such as PA/GA access panels and IP phones). The ENSIR-8 switch is highly versatile, and the SFP fiber port can transmit data up to 80 km between devices, with high EMI immunity. The Ethernet switch supports advanced management and security features. The ENSIR-8 switch is designed especially for security automation applications such as IP surveillance.

Specifications

ORDER NUMBER	DESCRIPTION	SHIP WEIGHT
1023604008	ENSIR-8 Managed Network Switch, 8 Ports, PoE, DIN Mounting	
TECHNOLOGY	IEEE 802 3af for Power-	

12011102001	
Standards:	IEEE 802.3af for Power- over-Ethernet, IEEE 802.3 for 10BaseT, IEEE 802.3u for 100BaseT(X) and 100 BaseFX, IEEE 802.3ab for 1000BaseT(X), IEEE 802.3z for 1000BaseX, IEEE 802.3x for Flow Control, IEEE 802.1D- 2004 for Spanning Tree Protocol, IEEE 802.1w for Rapid STP, IEEE 802.1s for Multiple Spanning Tree Protocol, IEEE 802.1Q for VLAN Tagging, IEEE 802.1p for Class of Service I, EEE 802.1X for Authentication, IEEE 802.3ad for Port Trunk with LACP
Protocols:	IGMPv1/v2, GMRP, GVRP, SNMPv1/v2c/v3, DHCP Server/ Client, DHCP Option 66/67/82, BootP, TFTP, SNTP, SMTP, RARP, RMON, HTTP, HTTPS, Telnet, SSH, Syslog, EtherNet/IP, PROFINET*, Modbus/TCP, SNMP Inform, LLDP, IEEE

page 3/7

1588 PTP V2, IPv6, NTP Server/Client MIB-II, Ethernet-Like MIB, P-BRIDGE MIB, MIB: Q-BRIDGE MIB, Bridge MIB, RSTP MIB, RMON MIB Group 1, 2, 3, 9 IEEE 802.3x flow

Flow Control: control, back pressure flow control

SWITCH PROPERTIES

Priority queues: 4 Max. no of available 64 VLANs: VLAN ID Range: VID 1 to 4094 IGMP Groups: 256 MAC Table Size: 8 k Packet Buffer Size: 1 Mbit

INTERFACE

Fiber Ports:	100/1000 BaseSFP slot
RJ45 Ports:	10/100 BaseT(X) or 10/100/1000 BaseT(X) auto negotiation speed
PoE Pinout:	V+, V+, V-, V- for pin 1, 2, 3, 6 (Endspan, MDI Alternative A)
Console Port:	RS-232 (RJ45 connector)
DIP Switches:	Turbo Ring, Master, Coupler, Reserve
LED Indicators:	PWR1, PWR2, FAULT, 10/100/1000, 10/100, MSTR/ HEAD, CPLR/ TAIL, POE
Alarm Contact:	2 relay outputs with current carrying capacity of 0.5 A @ 48 VDC
Digital Inputs:	2 inputs with the same ground, but electrically isolated from the electronics. • +13 to +30V for state "1" • -30 to +3V for state "0" • Max. input current: 8 mA

page 5/7

POWER REQUIREMENTS

Input Voltage:	48 (46 to 50 V) VDC, redundant dual inputs
Input Current:	Max. 1.62 A @ 48 VDC (supports up to 4 ports at 15.4 W per PoE port)
Overload Current Protection:	Present
Connection:	2 removable 6-contact terminal blocks
Reverse Polarity Protection:	Present

PHYSICAL CHARACTERISTICS

Housing:	Metal, IP30 protection	
Dimensions:	80.2 x 135 x 105 mm (3.16 x 5.31 x 4.13 in)	
Weight:	1170 g	
Installation:	DIN-Rail mounting, wall mounting (with optional kit)	

ENVIRONMENTAL LIMITS

	Standard Models: 0 to	
	60°C (32 to 140°F),	
	Storage Temperature: -	
Operating Temperature:	40 to 85°C (-40 to	
	185°F), Ambient	
	Relative Humidity: 5 to	
	95% (non-condensing)	

STANDARDS AND CERTIFICATIONS

Safety:	UL 508
EMI:	FCC Part 15 Subpart B Class A, EN 55022 Class A
EMS:	EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3, EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3, EN 61000-4-6 (CS) Level 3, EN 61000-4-8
Marine:	DNV, GL, LR, ABS, NK
Shock:	IEC 60068-2-27
Freefall:	IEC 60068-2-32
Vibration:	IEC 60068-2-6 Note: Please check Moxa's website for the most up- to-date certification status