

EDS-P510A-8PoE Series

8+2G-port Gigabit PoE+ managed Ethernet switches



- > Built-in 8 PoE+ ports compliant with IEEE 802.3af/at standards
- > Up to 36 W output per PoE+ port
- > 3 KV LAN surge protection for extreme outdoor environments
- > PoE diagnostic for powered device mode analysis
- > 2 Gigabit combo ports for high-bandwidth and long-distance communication
- > Operate with 240 watts full PoE+ loading at -40 to 75°C



EN 50121



Introduction

The Moxa EDS-P510A-8PoE Series are Gigabit managed PoE+ Ethernet switches that come standard with 8 10/100BaseT(X), 802.3af (PoE), and 802.3at (PoE+)-compliant Ethernet ports, and 2 combo Gigabit Ethernet ports. The EDS-P510A-8PoE Ethernet switches provide up to 30 watts of power per PoE+ port in standard mode and allow high power output of up to 36 watts for industrial heavy-duty PoE devices, such as weather-proof IP surveillance cameras with wipers/heaters, high-performance wireless access points, and rugged IP phones. The EDS-P510A-8PoE Ethernet switches are highly versatile, and the

SFP fiber ports can transmit data up to 120 km from the device to the control center with high EMI immunity. The Ethernet switches support a variety of management functions, including STP/RSTP, TurboRing, Turbo Chain, PoE power management, PoE device auto-checking, PoE power scheduling, PoE diagnostic, IGMP, VLAN, QoS, RMON, bandwidth management, and port mirroring. The EDS-P510A-8PoE series is designed especially for harsh outdoor applications with 3KV surge protection to ensure uninterrupted reliability of PoE systems.

Features and Benefits

- Advanced PoE management function (PoE output setting, PD failure check, PoE scheduling, and PoE diagnostic)
- 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
- Compatible with EtherNet/IP and PROFINET protocols for transparent data transmission
- 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
- 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, relay output

Specifications

Technology

Standards:

IEEE 802.3af/at for Power-over-Ethernet
 IEEE 802.3 for 10BaseT
 IEEE 802.3u for 100BaseT(X) and 100BaseFX
 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
 IEEE 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, SNMP, SMTP, RARP, RMON, HTTP, HTTPS, Telnet, SSH, Syslog, EtherNet/IP, Modbus/TCP, SNMP Inform, LLDP, IEEE 1588 PTP V2, IPv6, NTP Server/Client
MIB: MIB-II, Ethernet-Like MIB, P-BRIDGE MIB, Q-BRIDGE MIB, Bridge MIB, RSTP MIB, RMON MIB Group 1, 2, 3, 9

Flow Control: IEEE 802.3x flow control, back pressure flow control

Switch Properties

Priority Queues: 4

Max. Number of Available VLANs: 64

VLAN ID Range: VID 1 to 4094

IGMP Groups: 256

MAC Table Size: 8 K

Packet Buffer Size: 1 Mbit

Interface

Fiber Ports: 100/100BaseSFP slot

RJ45 Ports: 10/100BaseT(X) or 10/100/1000BaseT(X) auto negotiation speed

PoE Pinout: V+, V-, V-, V- for pin 1, 2, 3, 6 (Endspan, MDI, Mode 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: 1 relay output with current carrying capacity of 0.5 A @ 48 VDC

Digital Inputs: 1 input with the same ground, but electrically isolated from the electronics.

- +13 to +30 V for state "1"
- -30 to +3 V for state "0"
- Max. input current: 8 mA

Power Requirements

Input Voltage: 48 (46 to 57 V) VDC redundant dual inputs (> 50 VDC for PoE+ output recommended)

Input Current: 0.27 A @ 48 VDC (w/o PDs connected), 0.42 A @ 48 VDC (w/ 8 PDs connected, excluding PDs' consumption)*

Overload Current Protection: Present

Connection: 2 removable 2-contact terminal blocks

Reverse Polarity Protection: Present

* When selecting power supply, check the PD power consumption

Physical Characteristics

Housing: Metal, IP30 protection

Dimensions: 79.2 x 135 x 105 mm (3.12 x 5.31 x 4.13 in)

Weight: 1030 g

Installation: DIN-rail mounting, wall mounting (with optional kit)

Environmental Limits

Operating Temperature:

Standard Models: -10 to 60°C (14 to 140°F)

Wide Operating Temp. Models: -40 to 75°C (-40 to 167°F)

Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

Safety: UL 508 (Pending)

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

Traffic Control: NEMA-TS2

Rail Traffic: EN 50121-4

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.

MTBF (mean time between failures)

Time: TBD

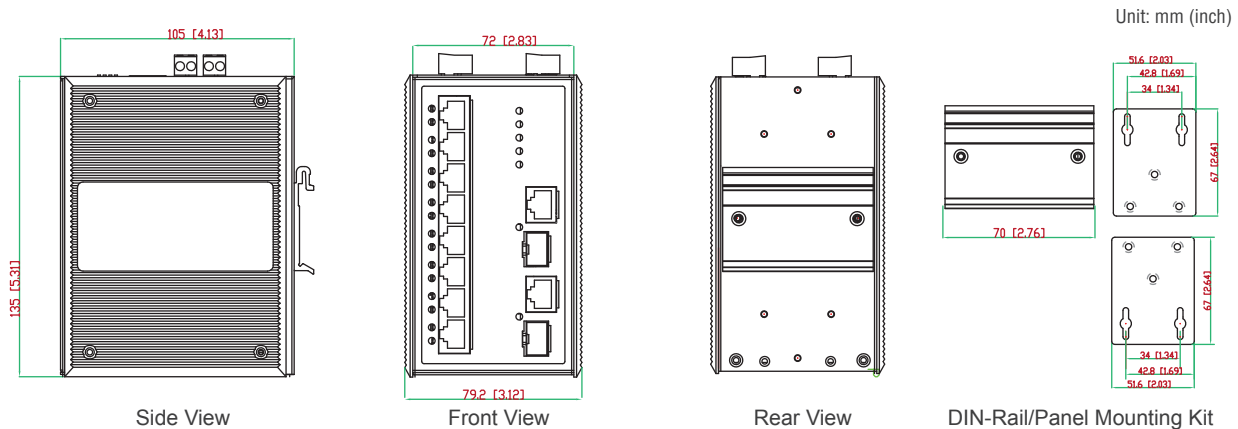
Database: Telcordia (Bellcore), GB

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions



Ordering Information

Available Models		Port Interface	
Standard Temperature (-10 to 60°C)	Wide Temperature (-40 to 75°C)	Gigabit Ethernet Combo Port, 10/100/1000BaseT(X) or 100/1000BaseSFP*	Fast Ethernet PoE+, 10/100BaseT(X)
EDS-P510A-8PoE-2GTXSFP	EDS-P510A-8PoE-2GTXSFP-T	2	8

*The EDS-P510A-8PoE series supports 2 100/1000BaseSFP slots. See SFP module page for SFP-1G/1FE series Gigabit/Fast Ethernet SFP module product information.

Optional Accessories (can be purchased separately)

DR-75-48/120-48: 75/120 W DIN-Rail 48 VDC power supplies

DRP-240-48: 240 W DIN-Rail 48 VDC power supplies

MXview: Moxa industrial network management software with 50, 100, 250, 500, 1000, or 2000 nodes

EDS-SNMP OPC Server Pro: OPC server software that works with all SNMP devices

ABC-01: Configuration backup and restoration tool for managed Ethernet switches, 0 to 60°C operating temperature

WK-46: Wall mounting kit

RK-4U: 4U-high 19" rack mounting kit

Package Checklist

- EDS-P510A-8PoE switch
- RJ45 to DB9 console port cable
- Protective caps for unused ports
- Documentation and software CD
- Hardware installation guide (printed)
- Warranty card

Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.



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 Uhlířská 1064/3, 710 00 Ostrava, Česká republika

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od realizovaného obrátu.



SERVIS ON-SITE A IN-TIME

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