EDS-P510シリーズ

4つのIEEE 802.3af準拠PoEポートを備えた7+3GポートギガビットPoEマネージドイーサネットスイッチ

機能と特長

- IEE802.3af準拠PoEおよびEthernetコンボポート x 4
- PoEポートあたり最大15.4ワット（48 VDC）を提供
- インテリジェントな電力消費の検出、PD障害チェック、およびPoEスケジューリング機能
- 3つのコンボ（10/100/1000BaseT(X)または100/1000BaseSFPスロット）ギガビットポート（冗長リング用に2ポート、アップリンク用に1ポート）
- Turbo RingおよびTurbo Chain（リカバリ時間はスイッチ250台で20ミリ秒未満）をサポートし、RSTP/STP、およびMSTPでネットワーク冗長性を実現
- 簡単で視覚化された産業用ネットワーク管理を行うためのMXstudioに対応
- V-ON™により、ミリ秒レベルのマルチキャストデータとビデオネットワークの回復を確実に実現

認証

製品紹介

EDS-P510シリーズギガビットマネージド冗長イーサネットスイッチは、4つの10/100BaseT（X）、802.3af（PoE）準拠イーサネットポート、および3つのコンボギガビットイーサネットポートを備えています。EDS-P510スイッチは、PoEポートあたり最大15.4ワットの電力を供給し、AC電源がすぐに利用できない場合やローカルで提供するには費用が膨大にかかる場合に、接続されたデバイス（監視カメラ、ワイヤレスアクセスポイント、IP電話など）に電力を供給できます。EDS-P510スイッチは汎用性が高く、SFPファイバポートはEMI耐性の高い装置から制御センターへ最大80 kmのデータを送信できます。イーサネットスイッチは、高度な管理とセキュリティ機能をサポートしています。 EDS-P510シリーズは、スケーラブルなバックボーン構築やPoEからメリットを得られる、IP監視やエントリシステムのゲートなどのセキュリティオートメーションアプリケーション用に特別に設計されています。

その他の機能とメリット

- 先進的なPoE管理機能（PoEポート設定、PD障害チェック、PoEスケジューリング）
- 主なマネージド機能をすばやく設定するためのコマンドラインインターフェース（CLI）
- 各ポリシーに応じてIPアドレスを割り当てるDHCP Option 82
- デバイスの管理および監視用のEtherNet/IPおよびModbus TCPプロトコルをサポート
- Turbo RingおよびTurbo Chain（リカバリ時間はスイッチ250台で20ミリ秒未満）をサポートし、RSTP/STP、およびMSTPでネットワーク冗長性を実現
- マルチキャストトラフィックをフィルタリングするIGMPスヌーピングおよびGMRP
- ポートベースのVLAN、IEEE 802.1Q VLAN、GVRPでネットワークプランニングを簡素化
- QoS（IEEE 802.1p/1Q）およびTOS/DiffServ
- 最適な帯域幅利用のためのポートトランキング
- TACACS+、IEEE 802.1x、SNMPv3、HTTPS、およびSSHで、ネットワークセキュリティを強化
- MACアドレスに基づいている不正アクセスをブロックするためのロックポート機能
- 異なるレベルのネットワーク管理を実現するSNMPv1/v2c/v3
- 効率的なネットワーク監視とプロアクティブな機能を備えたRMON
- 想定外のネットワーク状況を防ぐ帯域幅管理
- オンラインデバッグ用のポートミラーリング
- 電子メール、リレー出力を通じた例外による自動警告

仕様

Ethernet Interface

Combo Ports (10/100/1000BaseT(X) or 100/1000BaseSFP+)	3 Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
10/100BaseT(X) Ports (RJ45 connector)	3 Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
PoE Ports (10/100BaseT(X), RJ45 connector)	4 Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
Standards	IEEE 802.1D-2004 for Spanning Tree Protocol IEEE 802.1p for Class of Service IEEE 802.1Q for VLAN Tagging IEEE 802.1s for Multiple Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1X for authentication IEEE 802.3 for 10BaseT IEEE 802.3ab for 1000BaseT(X) IEEE 802.3ad for Port Trunk with LACP IEEE 802.3u for 100BaseT(X) and 100BaseFX IEEE 802.3x for flow control IEEE 802.3z for 1000BaseSX/LX/LHX/ZX IEEE 802.3af for PoE

Ethernet Software Features

Filter	GMRP, GVRP, IGMP v1/v2, Port-based VLAN
Industrial Protocols	EtherNet/IP, Modbus TCP
Management	Back Pressure Flow Control, BOOTP, DDM, DHCP Option 66/67/82, DHCP Server/Client, Flow control, IPv4/IPv6, LLDP, Port Mirror, RARP, RMON, SMTP, SNMP Inform, SNMPv1/v2c/v3, Syslog, Telnet, TFTP
MIB	Bridge MIB, Ethernet-like MIB, MIB-II, P-BRIDGE MIB, Q-BRIDGE MIB, RMON MIB Groups 1, 2, 3, 9, RSTP MIB
Redundancy Protocols	LACP, Link Aggregation, MSTP, RSTP, STP, Turbo Chain, Turbo Ring v1/v2
Security	TACACS+, HTTPS/SSL, Port Lock, RADIUS, SSH
Time Management	NTP Server/Client, SNTP

Input/Output Interface

Alarm Contact Channels	2, Relay output with current carrying capacity of 1 A @ 24 VDC
Digital Input Channels	2
Digital Inputs	-30 to +3 V for state 0 +13 to +30 V for state 1 Max. input current: 8 mA

Switch Properties

IGMP Groups	1024
MAC Table Size	8 K
Max. No. of VLANs	64
Packet Buffer Size	1 Mbits

Priority Queues	4
VLAN ID Range	VID 1 to 4094

Serial Interface

Console Port	RS-232 (TxD, RxD, GND), 10-pin RJ45 (115200, n, 8, 1)

DIP Switch Configuration

Ethernet Interface	Turbo Ring, Master, Coupler, Reserve

Power Parameters

Connection	2 removable 6-contact terminal block(s)
Input Current	1.5 A @ 48 VDC
Input Voltage	48 VDC, Redundant dual inputs
Operating Voltage	44 to 57 VDC
Overload Current Protection	Supported
Power Budget	Max. 15.4 W for each PoE port Max. 61.6 W for total PD consumption
Power Consumption (Max.)	Max. 14.24 W full loading without PDs' consumption
Reverse Polarity Protection	Supported

Physical Characteristics

Dimensions	80.2 x 135 x 105 mm (3.16 x 5.31 x 4.13 in)
Housing	Metal
Installation	DIN-rail mounting, Wall mounting (with optional kit)
IP Rating	IP30
Weight	1,170 g (2.58 lb)

Environmental Limits

Ambient Relative Humidity	5 to 95% (non-condensing)
Operating Temperature	EDS-P510: 0 to 60°C (32 to 140°F) EDS-P510-T: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)

Standards and Certifications

Safety	UL 508
EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Maritime	ABS, DNV-GL, LR, NK
Freefall	IEC 60068-2-31

Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6

MTBF

Time	205,384 hrs
Standards	Telcordia (Bellcore), GB

Warranty

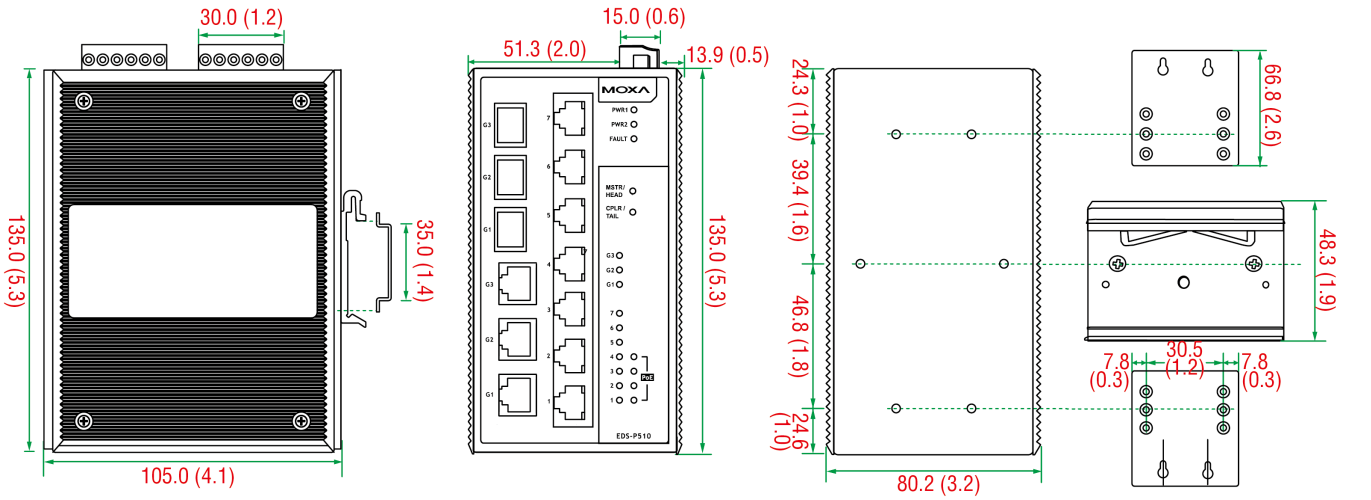
Warranty Period	5 years
Details	See www.moxa.com/jp/warranty

Package Contents

Device	1 x EDS-P510 Series switch
Cable	1 x DB9 female to RJ45 10-pin
Installation Kit	8 x cap, plastic, for RJ45 port 3 x cap, plastic, for SFP slot
Documentation	1 x product certificates of quality inspection, Simplified Chinese 1 x product notice, Simplified Chinese 1 x quick installation guide 1 x warranty card
Note	SFP modules need to be purchased separately for use with this product.

寸法

単位：mm（インチ）



側面図　前面図　背面図　DINレール/パネルマウントキット

注文情報

Model Name	Combo Ports 10/100/1000BaseT(X) or 100/1000BaseSFP	PoE Ports 10/100BaseT(X)	non-PoE Ports 10/100BaseT(X)	Operating Temp.
EDS-P510	3	4	3	0 to 60°C
EDS-P510-T	3	4	3	-40 to 75°C

アクセサリー（別売）

Storage Kits

ABC-02-USB	Configuration backup and restoration tool, firmware upgrade, and log file storage tool for managed Ethernet switches and routers, 0 to 60°C operating temperature
ABC-02-USB-T	Configuration backup and restoration tool, firmware upgrade, and log file storage tool for managed Ethernet switches and routers, -40 to 75°C operating temperature

SFP Modules

SFP-1FELLC-T	SFP module with 1 100Base single-mode with LC connector for 80 km transmission, -40 to 85°C operating temperature
SFP-1FEMLC-T	SFP module with 1 100Base multi-mode, LC connector for 2/4 km transmission, -40 to 85°C operating temperature
SFP-1FESLC-T	SFP module with 1 100Base single-mode with LC connector for 40 km transmission, -40 to 85°C operating temperature
SFP-1G10ALC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60°C operating temperature
SFP-1G10ALC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature
SFP-1G10BLC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60°C operating temperature
SFP-1G10BLC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 10 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature
SFP-1G20ALC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60°C operating temperature
SFP-1G20ALC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature
SFP-1G20BLC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60°C operating temperature
SFP-1G20BLC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 20 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature
SFP-1G40ALC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1310 nm, RX 1550 nm, 0 to 60°C operating temperature
SFP-1G40ALC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1310 nm, RX 1550 nm, -40 to 85°C operating temperature
SFP-1G40BLC	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1550 nm, RX 1310 nm, 0 to 60°C operating temperature
SFP-1G40BLC-T	WDM-type (BiDi) SFP module with 1 1000BaseSFP port with LC connector for 40 km transmission; TX 1550 nm, RX 1310 nm, -40 to 85°C operating temperature
SFP-1GEZXLC	SFP module with 1 1000BaseEZX port with LC connector for 110 km transmission, 0 to 60°C operating temperature
SFP-1GEZXLC-120	SFP module with 1 1000BaseEZX port with LC connector for 120 km transmission, 0 to 60°C operating temperature
SFP-1GLHLC	SFP module with 1 1000BaseLH port with LC connector for 30 km transmission, 0 to 60°C operating temperature
SFP-1GLHLC-T	SFP module with 1 1000BaseLH port with LC connector for 30 km transmission, -40 to 85°C operating temperature
SFP-1GLHXLC	SFP module with 1 1000BaseLHX port with LC connector for 40 km transmission, 0 to 60°C operating temperature
SFP-1GLHXLC-T	SFP module with 1 1000BaseLHX port with LC connector for 40 km transmission, -40 to 85°C operating temperature
SFP-1GLSXLC	SFP module with 1 1000BaseLSX port with LC connector for 1km/2km transmission, 0 to 60°C operating temperature
SFP-1GLSXLC-T	SFP module with 1 1000BaseLSX port with LC connector for 1km/2km transmission, -40 to 85°C operating temperature

SFP-1GLXLC	SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, 0 to 60°C operating temperature
SFP-1GLXLC-T	SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, -40 to 85°C operating temperature
SFP-1GSXLC	SFP module with 1 1000BaseSX port with LC connector for 300m/550m transmission, 0 to 60°C operating temperature
SFP-1GSXLC-T	SFP module with 1 1000BaseSX port with LC connector for 300m/550m transmission, -40 to 85°C operating temperature
SFP-1GZXLC	SFP module with 1 1000BaseZX port with LC connector for 80 km transmission, 0 to 60°C operating temperature
SFP-1GZXLC-T	SFP module with 1 1000BaseZX port with LC connector for 80 km transmission, -40 to 85°C operating temperature

Power Supplies

DR-120-48	120W/2.5A DIN-rail 48 VDC power supply with universal 88 to 132 VAC or 176 to 264 VAC input by switch, or 248 to 370 VDC input, -10 to 60°C operating temperature
DR-75-48	75W/1.6A DIN-rail 48 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 60°C operating temperature
DRP-240-48	DIN-rail 48 VDC power supply with 240W/5A, 85 to 264 VAC, or 120 to 370 VDC input, -10 to 70°C operating temperature
SDR-480P-48	DIN-rail 48 VDC power supply with 480W/10A, 90 to 264 VAC, or 127 to 370 VDC input, (current sharing up to 3840 W), -25 to 70°C operating temperature

Wall-Mounting Kits

WK-46-01	Wall-mounting kit, 2 plates, 8 screws, 46 x 66.8 x 2 mm

Rack-Mounting Kits

RK-4U	19-inch rack-mounting kit

Software

MXview-50	Industrial network management software with a license for 50 nodes (by IP address)
MXview-100	Industrial network management software with a license for 100 nodes (by IP address)
MXview-250	Industrial network management software with a license for 250 nodes (by IP address)
MXview-500	Industrial network management software with a license for 500 nodes (by IP address)
MXview-1000	Industrial network management software with a license for 1000 nodes (by IP address)
MXview-2000	Industrial network management software with a license for 2000 nodes (by IP address)
MXview Upgrade-50	License expansion of MXview industrial network management software by 50 nodes (by IP address)