EDS-P506E 系列

4+2G 埠 Gigabit PoE+ 網管型乙太網路交換器含 4 個 IEEE 802.3af/at PoE+ 連接埠

特色與優點

- 內建 4 個 PoE+ 連接埠，每個連接埠可支援最高 60 W 輸出
- 寬範圍 12/24/48 VDC 電源輸出，可提供彈性部署
- 智慧 PoE 功能可進行遠端電源裝置診斷以及故障復原
- 2 個 Gigabit 複合連接埠可進行高頻寬通訊
- 支援 Mxstudio 以進行輕鬆、虛擬化的工業網路管理

認證

EN 50121-4

簡介

EDS-P506E 系列包括 Gigabit 網管型 PoE+ 乙太網路交換器，標準版隨附 4 個 10/100BaseT(X)、802.3af (PoE) 和 802.3at (PoE+) 相容的乙太網路連接埠以及 2 個複合 Gigabit 乙太網路連接埠。EDS-P506E 系列在標準模式下每 PoE+ 連接埠可提供最高 30 瓦電力，同時在工業級高覆載 PoE 裝置可允許高達 4 對 60 瓦的高功率輸出，例如附帶雨刷/加熱器，可耐風雨的 IP 監視攝影機、高效能的無線存取點以及強固的 IP 電話。

EDS-P506E 系列用途極為廣泛，SFP 光纖連接埠可將資料從裝置傳輸至控制中心（最遠可達 120 公里），並且具有高度 EMI 抗擾性。乙太網路交換器支援各式管理功能，包括 STP/RSTP、Turbo Ring、Turbo Chain、PoE 電源管理、PoE 裝置自動檢查、PoE 電力排程、PoE 診斷、IGMP、VLAN、QoS、RMON、頻寬管理以及連接埠鏡像。EDS-P506E 系列是為在嚴峻的室外應用中提供 4 kV 突波保護，確保 PoE 系統不受中斷的可靠性所設計。

附加特色與優點

- 支援不同的 PoE 輸出設定（高功率 36 W 和 60 W、Force 與 Legacy 型號），提供最大的受電設備相容性
- 支援智慧 PoE 功能（PoE 診斷、PD 故障檢查、PoE 排程以及 PoE 事件警告）以加強 PoE 操作效率
- 命令列介面 (CLI) 快速設定主要網管功能
- 支援 EtherNet/IP、PROFINET 和 Modbus TCP 通訊協定以進行裝置管理與監控
- 支援 V-ON™ 以確保毫秒等級 Layer2/Layer3 網路復原
- 支援 Turbo Ring 和 Turbo Chain（對於 250 台交換器斷線復連時間小於 20 毫秒）[1]、RSTP/STP 和 MSTP 網路備援
- 發生狀況時，可自動透過 Email 和繼電器輸出告警
- 可用連線埠鏡像進行線上除錯
- IGMP 和 GMRP，用於篩選 Multicast 流量
- 以連接埠為基礎的 VLAN、IEEE 802.1Q VLAN 以及 GVRP，用來簡化網路規劃
- QoS（IEEE 802.1p/1Q 和 TOS/DiffServ）以提高確定性
- Port Trunking 可提供最佳頻寬使用率
- RADIUS、TACACS+、MAB Authentication、SNMPv3、IEEE 802.1x、MAC ACL、HTTPS、SSH 和 sticky MAC address 可提高網路安全
- SNMPv1/v2c/v3，適用不同層級的網路管理
- Fiber Check™ 可提供全面的光纖數位診斷監控 (DDM) 功能並且在 SFP 光纖連接埠發出事件警告
- 頻寬管理可預防無法預測的網路狀態
- ABC-02-USB（自動備份配置器）以進行系統配置備份/還原與韌體升級

1. Gigabit 乙太網路斷線復連時間小於 50 毫秒

規格

Ethernet Interface

Combo Ports (10/100/1000BaseT(X) or 100/1000BaseSFP+)	2 Full/Half duplex mode Auto MDI/MDI-X connection Auto negotiation speed
PoE Ports (10/100BaseT(X), RJ45 connector)	4 Full/Half duplex mode Auto MDI/MDI-X connection Auto negotiation speed
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

Ethernet Software Features

Filter	802.1Q VLAN, GMRP, GVRP, IGMP v1/v2/v3, Port-based VLAN
Industrial Protocols	EtherNet/IP, Modbus TCP, PROFINET
Management	Back Pressure Flow Control, BOOTP, DDM, DHCP Option 66/67/82, DHCP Server/Client, Fiber check, Flow control, IPv4/IPv6, 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	Link Aggregation, MSTP, RSTP, STP, Turbo Chain, Turbo Ring v1/v2
Security	Broadcast storm protection, HTTPS/SSL, MAC ACL, TACACS+, MAB authentication, Sticky MAC, NTP authentication, Port Lock, RADIUS, SSH
Time Management	IEEE 1588v2 PTP (software-based), NTP Server/Client, SNTP

Switch Properties

IGMP Groups	256
Jumbo Frame Size	9.6 KB
MAC Table Size	8 K
Packet Buffer Size	12 Mbits
Priority Queues	4
Max. No. of VLANs	64
VLAN ID Range	VID 1 to 4094

USB Interface

Storage Port	USB Type A

LED Interface

LED Indicators	PWR1, PWR2, STATE, FAULT, 10/100M (TP port), 10/100/1000M (Gigabit Combo port), MSTR/HEAD, CPLR/TAIL, PoE

Serial Interface

Console Port	USB-serial console (Type B connector)

Input/Output Interface

Digital Input Channels	1
Digital Inputs	Max. input current: 8 mA +13 to +30 V for state 1 -30 to +3 V for state 0
Alarm Contact Channels	1, Relay output with current carrying capacity of 0.5 A @ 48 VDC
Buttons	Reset button

DIP Switch Configuration

Ethernet Interface	Turbo Ring, Master, Coupler, Reserve

Power Parameters

Input Voltage	12/24/48 VDC, Redundant dual inputs
Operating Voltage	12 to 57 VDC (> 50 VDC for PoE+ output recommended)
Input Current	4.08 A @ 48 VDC
Max. PoE Power Output per Port	60 W
Connection	2 removable 4-contact terminal block(s)
Power Consumption (Max.)	Max. 18.96 W full loading without PDs' consumption
Total PoE Power Budget	Max. 180 W for total PD's consumption @ 48 VDC input Max. 150 W for total PD's consumption @ 24 VDC input Max. 62 W for total PD's consumption @ 12 VDC input
Overload Current Protection	Supported
Reverse Polarity Protection	Supported

Physical Characteristics

Housing	Metal
IP Rating	IP40
Dimensions	49.1 x 135 x 116 mm (1.93 x 5.31 x 4.57 in)
Weight	910 g (2.00 lb)
Installation	DIN-rail mounting, Wall mounting (with optional kit)

Environmental Limits

Operating Temperature	EDS-P506E-4PoE-2GTXSFP: -10 to 60°C (14 to 140°F) EDS-P506E-4PoE-2GTXSFP-T: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

Safety	UL 61010-2-201, EN 61010-2-201
EMC	EN 61000-6-2/-6-4
EMI	CISPR 32, FCC Part 15B Class A

EMS	IEC 61000-4-6 CS: 10 V IEC 61000-4-4 EFT: Power: 4 kV; Signal: 4 kV IEC 61000-4-5 Surge: Power: 4 kV; Signal: 4 kV IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 20 V/m IEC 61000-4-11 DIPs IEC 61000-4-8 PFMF
Power Substation	IEEE 1613, IEC 61850-3 Edition 2.0
Railway	EN 50121-4
Traffic Control	NEMA TS2
Vibration	IEC 60068-2-6
Bump	IEC 61850-3 Edition 2.0
Freefall	IEC 60068-2-31
Shock	IEC 60068-2-27

MTBF

Time	755,167 hrs
Standards	Telcordia (Bellcore), GB

Warranty

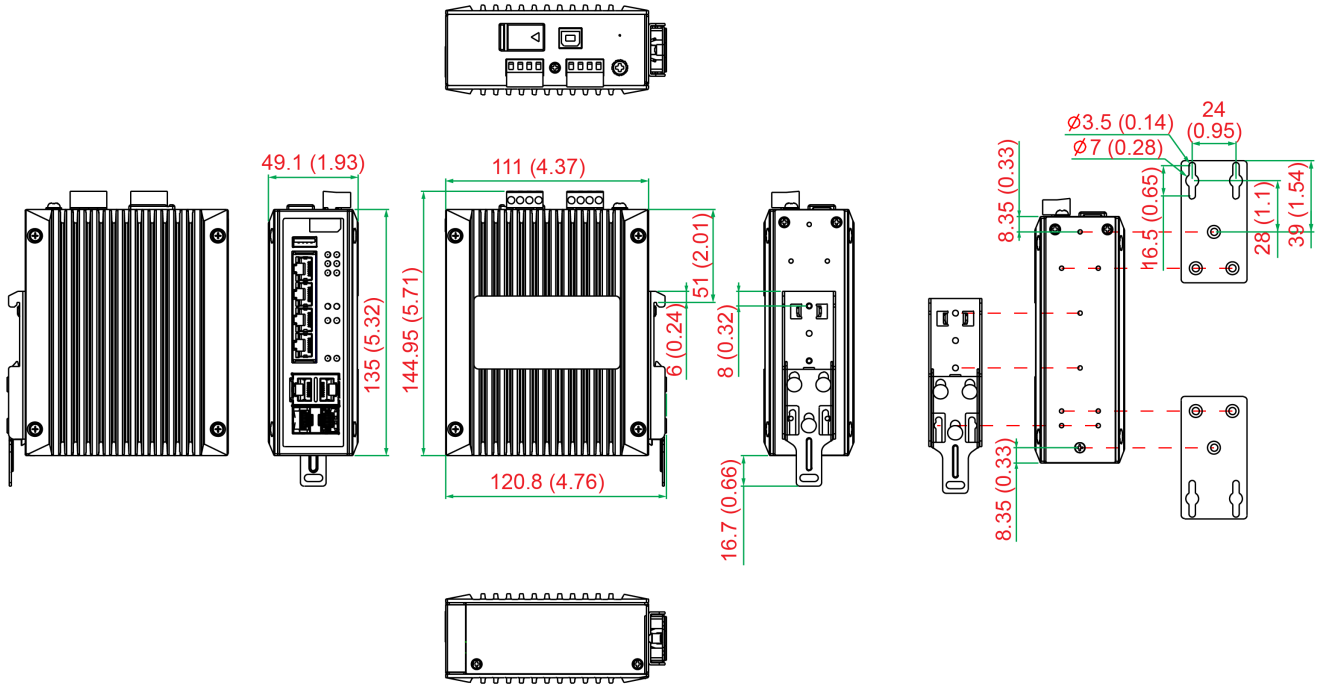
Warranty Period	5 years
Details	See www.moxa.com/tw/warranty

Package Contents

Device	1 x EDS-P506E Series switch
Cable	1 x USB type A male to USB type B male
Installation Kit	4 x cap, plastic, for RJ45 port 2 x cap, plastic, for SFP slot
Documentation	1 x quick installation guide 1 x product certificates of quality inspection, Simplified Chinese 1 x product notice, Simplified Chinese 1 x warranty card
Note	SFP modules need to be purchased separately for use with this product.

尺寸

單位：公釐（英吋）



訂購資訊

Model Name	Combo Ports 10/100/1000BaseT(X) or 100/1000BaseSFP+	PoE Ports 10/100BaseT(X), RJ45 Connector	Operating Temp.
EDS-P506E-4PoE-2GTXSFP	2	4	-10 to 60°C
EDS-P506E-4PoE-2GTXSFP-T	2	4	-40 to 75°C

配件（選購）

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 with LC connector for 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 500 m transmission, 0 to 60°C operating temperature
SFP-1GLSXLC-T	SFP module with 1 1000BaseLSX port with LC connector for 500 m 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 300/550 m transmission, 0 to 60°C operating temperature
SFP-1GSXLC-T	SFP module with 1 1000BaseSX port with LC connector for 300/550 m 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

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)