

EDS-510A 系列

7+3G 埠 Gigabit 網管型乙太網路交換器



特色與優點

- 2 個 Gigabit 乙太網路連接埠，適用於備援環，以及 1 個 Gigabit 乙太網路連接埠，適用於上行鏈路
- 支援 Turbo Ring 和 Turbo Chain (對於 250 台交換器，復原時間 < 20 ms)¹，RSTP/STP 和 MSTP，實現網路備援
- 支援 TACACS+、SNMPv3、IEEE 802.1X、HTTPS 和 SSH，強化網路安全
- 透過網頁瀏覽器、CLI、Telnet / 序列控制埠、Windows 工具程式和 ABC-01 輕鬆管理網路

認證



簡介

EDS-510A Gigabit 網管型備援乙太網路交換器配備最多 3 個 Gigabit 乙太網路連接埠，非常適合建置 Gigabit Turbo Ring，但留下備用的 Gigabit 連接埠供上行鏈路使用。乙太網路備援技術 Turbo Ring (復原時間 < 20 ms)、Turbo Chain、RSTP/STP 和 MSTP 可提升網路骨幹的系統可靠性和可用性。

EDS-510A 系列專為需要通訊需求的應用所設計，例如製程控制、造船、ITS 和 DCS 系統，可從可擴充的骨幹結構中受益。

附加特色與優點

- 命令列介面 (CLI) 快速設定主要網管功能
- DHCP Option 82 適用於以不同原則指派 IP 位址
- 支援 EtherNet/IP 和 Modbus TCP 通訊協定，以進行裝置管理和監控
- IGMP snooping 和 GMRP，用於篩選多點傳送流量
- 可基於連接埠實現 VLAN、IEEE 802.1Q VLAN 以及 GVRP，以簡化網路規劃
- QoS (IEEE 802.1p/1Q 和 TOS/DiffServ) 提高可靠性
- 網路埠端口聚合功能提供最佳頻寬使用率
- SNMPv1/v2c/v3，適用不同層級的網路管理
- RMON 提供主動且有效率的網路監控
- 頻寬管理可防止無法預測的網路狀態
- 鎖定連接埠功能可根據 MAC 位址封鎖未經授權的存取
- 發生例外狀況時透過電子郵件和繼電器輸出自動發出警告

規格

Input/Output Interface

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

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	7 Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
10/100/1000BaseT(X) Ports (RJ45 connector)	EDS-510A-1GT2SFP Series: 1 EDS-510A-3GT Series: 3

1. Gigabit 乙太網路復原時間 < 50 ms

	Supported functions: Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
1000BaseSFP Slots	EDS-510A-1GT2SFP Series: 2 EDS-510A-3SFP Series: 3
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) and 100BaseFX IEEE 802.3ab for 1000BaseT(X) IEEE 802.3z for 1000BaseSX/LX/LHX/ZX IEEE 802.1X for authentication IEEE 802.1D-2004 for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1s for Multiple Spanning Tree Protocol IEEE 802.1Q for VLAN Tagging IEEE 802.1p for Class of Service IEEE 802.3x for flow control IEEE 802.3ad for Port Trunk with LACP

Ethernet Software Features

Filter	802.1Q VLAN, Port-based VLAN, IGMP v1/v2, GVRP, GMRP
Industrial Protocols	EtherNet/IP, Modbus TCP
Management	IPv4/IPv6, SNMPv1/v2c/v3, LLDP, Port Mirror, Back Pressure Flow Control, BOOTP, DDM, DHCP Option 66/67/82, DHCP Server/Client, Fiber check, Flow control, RARP, RMON, SMTP, SNMP Inform, Syslog, Telnet, TFTP
MIB	MIB-II, Bridge MIB, Ethernet-like MIB, P-BRIDGE MIB, Q-BRIDGE MIB, RMON MIB Groups 1, 2, 3, 9, RSTP MIB
Redundancy Protocols	STP, MSTP, RSTP, LACP, Link Aggregation, Turbo Chain, Turbo Ring v1/v2
Security	HTTPS/SSL, RADIUS, TACACS+, Port Lock, SSH
Time Management	NTP Server/Client, SNTP

Switch Properties

IGMP Groups	256
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

LED Interface

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

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

Ethernet Interface	Turbo Ring, Master, Coupler, Reserve
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Power Parameters

Connection	2 removable 6-contact terminal block(s)
Input Current	EDS-510A-1GT2SFP Series: 0.38 A @ 24 VDC

	EDS-510A-3GT Series: 0.55 A @ 24 VDC EDS-510A-3SFP Series: 0.39 A @ 24 VDC
Input Voltage	24 VDC, Redundant dual inputs
Operating Voltage	12 to 45 VDC
Overload Current Protection	Supported
Reverse Polarity Protection	Supported

Physical Characteristics

Housing	Metal
IP Rating	IP30
Dimensions	80.2 x 135 x 105 mm (3.16 x 5.31 x 4.13 in)
Weight	1170 g (2.58 lb)
Installation	DIN-rail mounting, Wall mounting (with optional kit)

Environmental Limits

Operating Temperature	Standard Models: -10 to 60°C (14 to 140°F) Wide Temp. Models: -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	EN 60950-1, UL 60950-1, CSA C22.2 No. 60950-1, UL 508
Hazardous Locations	ATEX, Class I Division 2
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: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Traffic Control	NEMA TS2
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-31
Vibration	IEC 60068-2-6

MTBF

Time	204,901 hrs
Standards	Telcordia (Bellcore), GB

Warranty

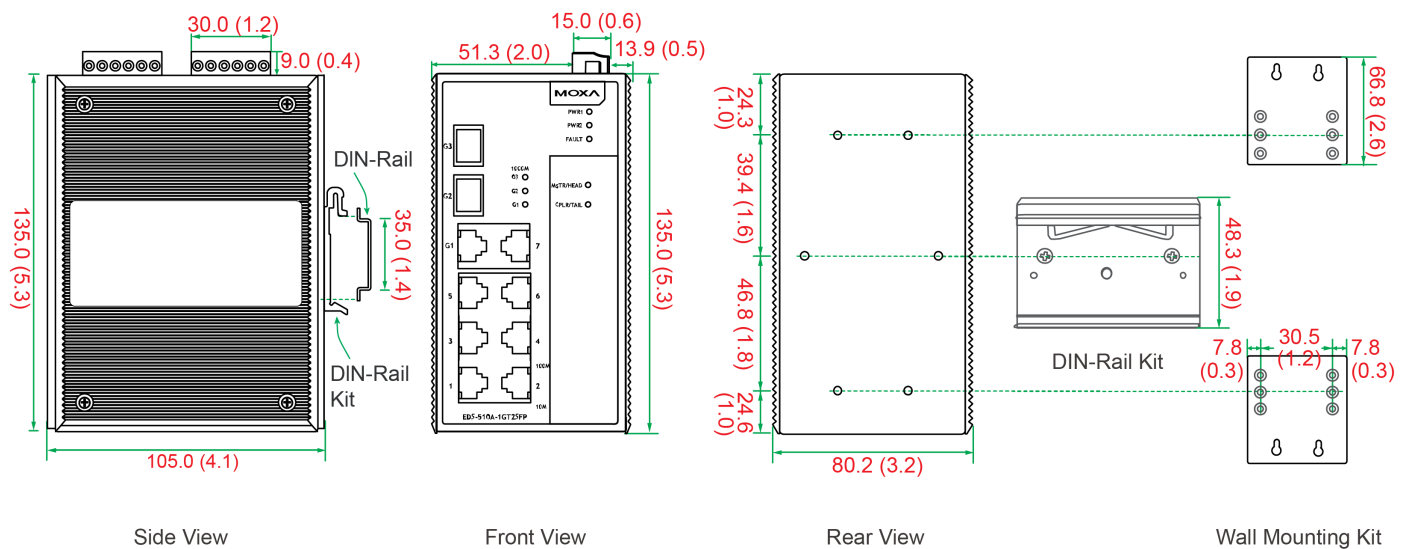
Warranty Period	5 years
Details	See www.moxa.com/tw/warranty

Package Contents

Device	1 x EDS-510A Series switch
Cable	1 x DB9 female to RJ45 10-pin
Installation Kit	4 x cap, plastic, for RJ45 port 2 x cap, plastic, for SC fiber port (-1GT2SFP models) 2 x cap, plastic, for ST fiber port (-3SFP models)
Documentation	1 x quick installation guide 1 x warranty card 1 x product certificates of quality inspection, Simplified Chinese 1 x product notice, Simplified Chinese
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	10/100BaseT(X) Ports RJ45 Connector	10/100/1000BaseT(X) Ports RJ45 Connector	1000Base SFP Slots	Operating Temp.
EDS-510A-3GT	7	3	–	-10 to 60°C
EDS-510A-3GT-T	7	3	–	-40 to 75°C
EDS-510A-3SFP	7	–	3	-10 to 60°C
EDS-510A-3SFP-T	7	–	3	-40 to 75°C
EDS-510A-1GT2SFP	7	1	2	-10 to 60°C
EDS-510A-1GT2SFP-T	7	1	2	-40 to 75°C

配件（選購）

Storage Kits

ABC-01	Configuration backup and restoration tool for managed Ethernet switches and AWK Series wireless APs/bridges/clients, 0 to 60°C operating temperature
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SFP Modules

DR-4524	45W/2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 50°C operating temperature
DR-75-24	75W/3.2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 60°C operating temperature
MDR-40-24	DIN-rail 24 VDC power supply with 40W/1.7A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
MDR-60-24	DIN-rail 24 VDC power supply with 60W/2.5A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature

Wall-Mounting Kits

WK-46	Wall-mounting kit, 2 plates, 8 screws, 46.5 x 66.8 x 1 mm
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Rack-Mounting Kits

RK-4U	19-inch rack-mounting kit
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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)

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