

SDS-3006 系列

6 埠 (可選配 4 個 PoE+ 埠或 2 個 Giga uplink 連接埠) 智慧型乙太網路交換器



特色與優點

- 4 個符合 IEEE 802.3af/at PoE+ 標準的連接埠
- 高功率模式下每個 PoE+ 連接埠可提供 36 瓦輸出功率
- 多語言 Web GUI：英文、繁體中文、簡體中文、日文、德文與法文
- 針對網路備援支援 RSTP/STP 與 MRP，可確保高網路可用性
- 支援簡易整合 EtherNet/IP、PROFINET 與 Modbus TCP 工業通訊協定，並在自動化 HMI/SCADA 系統中進行監控
- 旋轉式 DIP 開關可執行設定檔式設定，而無需使用 Web 瀏覽器
- 支援 MXstudio，輕鬆實現可視化的工業網路管理

認證



簡介

SDS-3006 智慧型乙太網路交換器是 IA 工程師與機械自動化設備製造商實現工業 4.0 網路架構的理想選擇。這款智慧型交換器賦予機械設備與控制機櫃智慧生命力，憑藉其簡易配置與便捷安裝的特性，大幅簡化日常工作。此外，本裝置具備完整產品生命週期可監控特性，且易於維護。

SDS-3006 交換器內建最常用的自動化通訊協定，包括 EtherNet/IP、PROFINET 和 Modbus TCP，透過自動化 HMI 實現裝置可監控與可視化，大幅提升操作效能與系統彈性。本裝置也支援多項實用管理功能，包括 IEEE 802.1Q VLAN、port mirroring、SNMP、繼電器警告，以及多語言 Web GUI。

附加特色與優點

- IP 連接埠繫結功能可確保關鍵裝置在快速更換時無需重新分配 IP 位址
- IEEE 802.1Q VLAN 可簡化網路規劃
- 支援 ABC-02-USB (自動備份配置器) 以進行快速系統配置備份/還原與韌體升級
- 發生例外狀況時透過繼電器輸出自動發出警告
- 未使用的連接埠鎖定、SNMPv3 與 HTTPS 可提升網路安全性
- Port mirroring 可用於線上除錯及監控
- 本機記錄與匯出存貨檔案的能力可輕鬆管理存貨
- 進階 PoE 管理功能 (PoE 連接埠設定、PD 故障檢查以及 PoE 排程)

規格

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	SDS-3006(-T) models: 6 SDS-3006-2GTXSFP(-T) models: 4 SDS-3006-4PoE-2GTXSFP(-T) models: 4 Auto negotiation speed Full/Half duplex mode Auto MDI/MDI-X connection
Combo Ports (10/100/1000BaseT(X) or 100/1000BaseSFP)	SDS-3006-2GTXSFP(-T) models: 2 SDS-3006-4PoE-2GTXSFP(-T) models: 2
PoE Ports (10/100/1000BaseT(X), RJ45 connector)	SDS-3006-4PoE-2GTXSFP(-T) models: 4
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3ab for 1000BaseT(X) IEEE 802.3x for flow control IEEE 802.1D-2004 for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1Q for VLAN Tagging IEEE 802.1p for Class of Service

Ethernet Software Features

Industrial Protocols	EtherNet/IP Modbus TCP PROFINET IO Device MECHATROLINK-4
Management	Back Pressure Flow Control DHCP Client Fiber check Flow control IPv4/IPv6 LLDP Port Mirroring RMON SNMP Inform SNMPv1/v2c/v3 Syslog
MIB	RFC1213 Ethernet-like MIB IF MIB LLDP MIB Bridge MIB Q-BRIDGE MIB
Redundancy Protocols	RSTP STP MRP
Security	Broadcast storm protection HTTPS/SSL SNMPv3 Port Lock Trust access control
Time Management	NTP Server/Client SNTP
Filter	802.1Q VLAN

Rotary Switch Configuration

Industrial Profile	Indicator	Mode
	0	No function enabled via DIP switch (Default)
	1	PROFINET profile enabled
	2	PROFINET profile and DHCP client enabled
	3	EtherNet/IP profile enabled
	4	EtherNet/IP profile and DHCP client enabled
	5	Modbus TCP profile enabled
	6	Modbus TCP profile and DHCP client enabled
	7	MECHATROLINK-4 profile enabled
	8-9	Reserved (currently performs the same behavior as indicator 0)

Switch Properties

MAC Table Size	8 K
Max. No. of VLANs	8
VLAN ID Range	VID 1 to 4094
Packet Buffer Size	3 Mbits

LED Interface

LED Indicators	PWR1, PWR2, STATE, FAULT, 10/100M (TP Port), 10/100/1000M (Gigabit Combo port), smart PoE LED (SDS-3006-4PoE-2GTXSFP(-T) models only)
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USB Interface

Storage Port	USB Type A (for ABC-02 only)
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Input/Output Interface

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

Power Parameters

Connection	2 removable 4-contact terminal block(s)
Input Voltage	12-48 VDC Redundant dual inputs
Operating Voltage	SDS-3006(-T) models: 9.6 to 60 VDC SDS-3006-2GTXSFP(-T) models: 9.6 to 60 VDC SDS-3006-4PoE-2GTXSFP(-T) models: 9.6 to 57 VDC
Input Current	SDS-3006(-T) models: 0.76 A max. 12-48 VDC SDS-3006-2GTXSFP(-T) models: 0.98 A max. 12-48 VDC SDS-3006-4PoE-2GTXSFP(-T) models: 0.85 A max. 12-48 VDC
Power Budget	Max. 120 W for total PD consumption @ 48 VDC input Max. 90 W for total PD consumption @ 24 VDC input Max. 45 W for total PD consumption @ 12 VDC input Max. 36 W for each PoE port
Power Consumption (Max.)	SDS-3006(-T) models: 4.75 W SDS-3006-2GTXSFP(-T) models: 6.69 W SDS-3006-4PoE-2GTXSFP(-T) models: 10.38 W full loading without PDs' consumption
Overload Current Protection	Supported
Reverse Polarity Protection	Supported

Physical Characteristics

Housing	Metal
IP Rating	IP40
Dimensions	SDS-3006(-T): 20 x 135 x 111 mm (0.79 x 5.32 x 4.37 in) SDS-3006-2GTXSFP(-T): 36 x 135 x 111 mm (1.42 x 5.32 x 4.37 in) SDS-3006-4PoE-2GTXSFP(-T): 36 x 135 x 111 mm (1.42 x 5.32 x 4.37 in)
Weight	SDS-3006(-T): 383g (0.84 lbs) SDS-3006-2GTXSFP(-T): 718g (1.58 lbs) SDS-3006-4PoE-2GTXSFP(-T): 779g (1.72 lbs)
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

EMC	EN 55032/35 EN 61000-6-2/-6-4
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 800 MHz: 10 V/m; 800 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 (1.2/50 µs), 1 kV (10/700 µs) IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Safety	EN IEC 62368-1 UL 61010-2-201
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

MTBF

Time	SDS-3006(-T): 3,483,278 hrs SDS-3006-2GTXSFP(-T): 3,196,539 hrs SDS-3006-4PoE-2GTXSFP(-T): 2,339,356 hrs
Standards	Telcordia (Bellcore), GB

Warranty

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

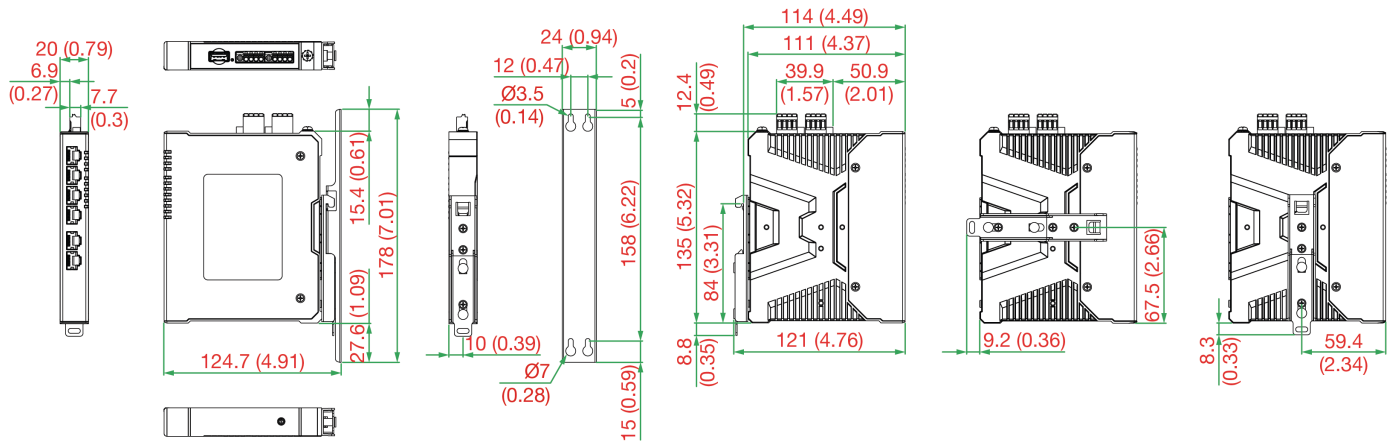
Package Contents

Device	1 x SDS-3006 Series switch
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

尺寸

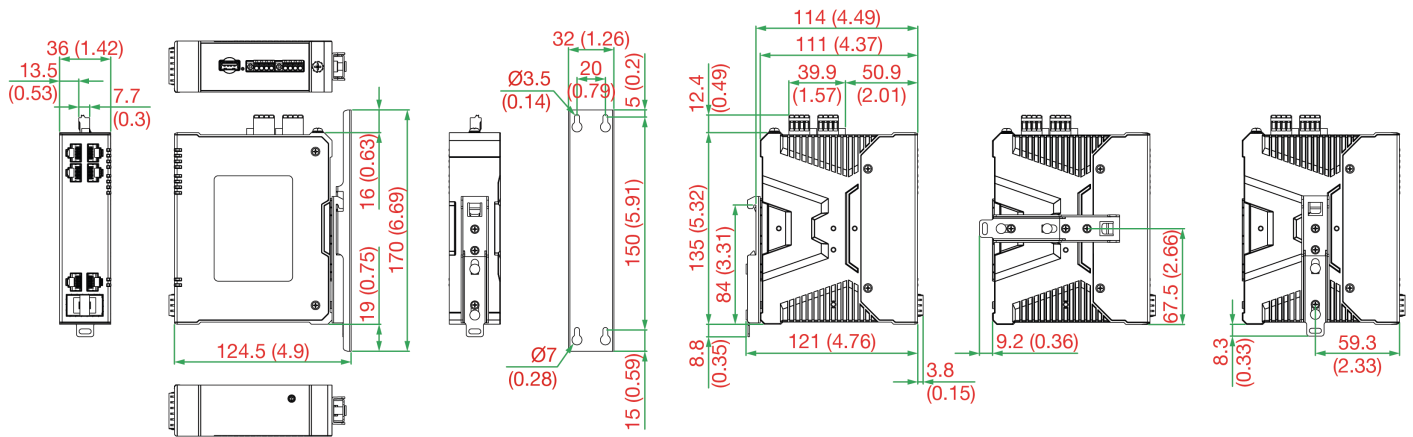
SDS-3006 型號

單位：公釐（英吋）



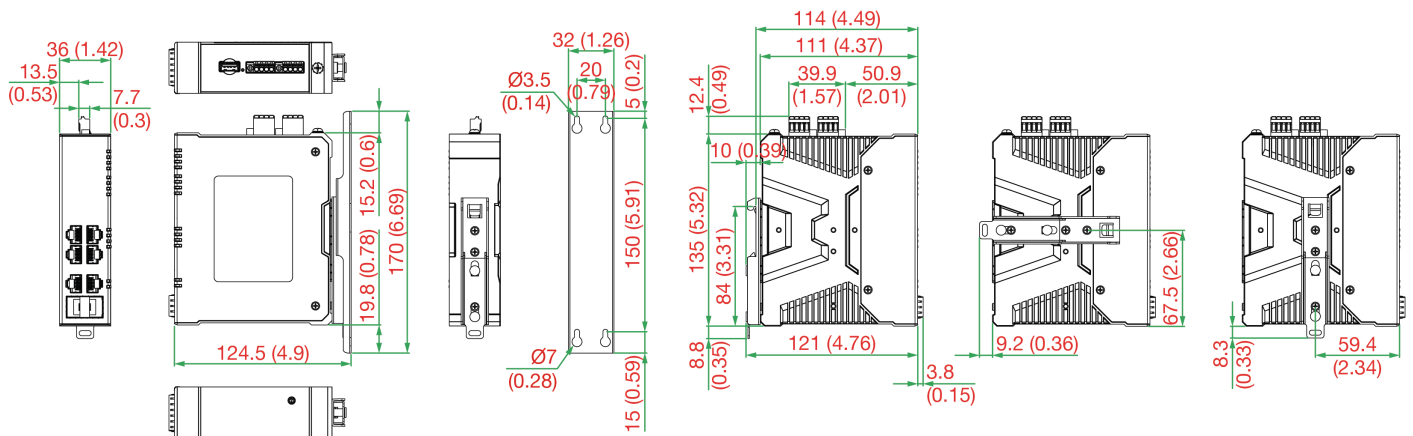
SDS-3006 2GTXSFP 型號

單位：公釐（英吋）



SDS-3006 4POE-2GTXSFP 型號

單位：公釐（英吋）



訂購資訊

Model Name	10/100BaseT(X) Ports, RJ45 Connector	Combo Ports, 10/100/1000BaseT(X) or 100/1000BaseSFP	PoE 10/100BaseT(X) Ports, RJ45 Connector	Operating Voltage	Operating Temp.
SDS-3006	6	-	-	9.6 to 60 VDC	-10 to 60°C
SDS-3006-T	6	-	-	9.6 to 60 VDC	-40 to 75°C
SDS-3006-2GTXSFP	4	2	-	9.6 to 60 VDC	-10 to 60°C
SDS-3006-2GTXSFP-T	4	2	-	9.6 to 60 VDC	-40 to 75°C
SDS-3006-4PoE-2GTXSFP	4	2	4	9.6 to 57 VDC	-10 to 60°C
SDS-3006-4PoE-2GTXSFP-T	4	2	4	9.6 to 57 VDC	-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-1GEZXLC	SFP module with 1 1000BaseEZ port with LC connector for 110 km transmission, 0 to 60°C operating temperature
SFP-1GEZXLC-120	SFP module with 1 1000BaseEZ 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	SFP module with 1 1000BaseLH port with LC connector for 30 km transmission, 0 to 60°C operating temperature
SFP-1GLHXL	SFP module with 1 1000BaseLHX port with LC connector for 40 km transmission, 0 to 60°C operating temperature
SFP-1GLSXL	SFP module with 1 1000BaseLSX port with LC connector for 1km/2km transmission, 0 to 60°C operating temperature
SFP-1GLXL	SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, 0 to 60°C operating temperature
SFP-1GSXL	SFP module with 1 1000BaseSX port with LC connector for 300m/550m transmission, 0 to 60°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-1GLHLC-T	SFP module with 1 1000BaseLH port with LC connector for 30 km transmission, -40 to 85°C operating temperature
SFP-1GLHXL-T	SFP module with 1 1000BaseLHX port with LC connector for 40 km transmission, -40 to 85°C operating temperature
SFP-1GLSXL-T	SFP module with 1 1000BaseLSX port with LC connector for 1km/2km transmission, -40 to 85°C operating temperature
SFP-1GLXL-T	SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, -40 to 85°C operating temperature
SFP-1GSXL-T	SFP module with 1 1000BaseSX port with LC connector for 300m/550m transmission, -40 to 85°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
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-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-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-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-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-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-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-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-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-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-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-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-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-1GTXRJ45-T	SFP module with 1 1000BaseT port with RJ45 connector for 100 m transmission, -40 to 75°C operating temperature

Power Supplies

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

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