

NPort IA5000A 系列

工業自動化的 1、2 和 4 埠串列設備伺服器



特色與優點

- 2 個具有相同 IP 或雙 IP 位址的乙太網路埠，達到網路備援的效果
- 通過 C1D2、ATEX 和 IECEx 認證，適用於嚴苛的工業環境
- 串聯乙太網路埠，方便佈線
- 串列、LAN 以及電源提供增強型突波保護
- 螺旋式接線端子模組，電源/串列連接更安全
- 備援直流電源輸入
- 透過繼電器輸出和電子郵件發出雙重告警
- 串列訊號提供 2 kV 隔離保護（隔離型號）
- -40 至 75°C 操作溫度範圍（-T 型號）

認證

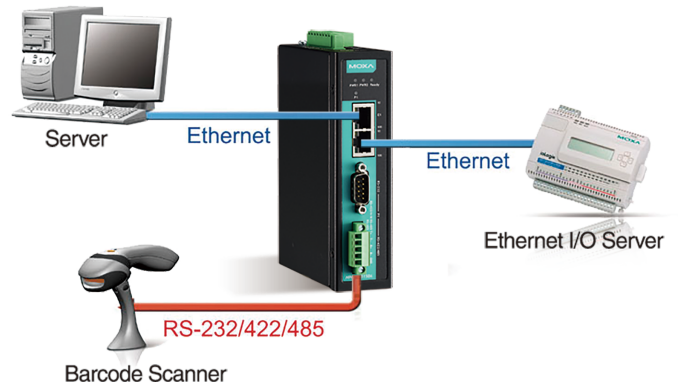


簡介

NPort IA5000A 設備伺服器專為連接工業自動化串列裝置所設計，例如 PLC、感測器、電表、馬達、驅動器、條碼掃描器和操作人員顯示器。設備伺服器採用堅固耐用的結構，採用金屬外殼和螺旋式接頭，並提供全面的突波保護。NPort IA5000A 設備伺服器操作簡易，提供簡單可靠的串列轉乙太網路解決方案。

串聯乙太網路埠可簡化佈線

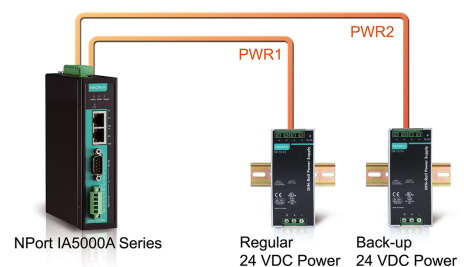
NPort IA5000A 設備伺服器配備兩個乙太網路埠，可做為乙太網路交換器連接埠。其中一個連接埠可直接連接至網路或伺服器，另一個可以連接至另一台 NPort IA 設備伺服器或另一個乙太網路裝置。雙乙太網路埠您毋須將每個裝置單獨連接到一台乙太網路交換機，因此可降低佈線成本。



備援電源輸入

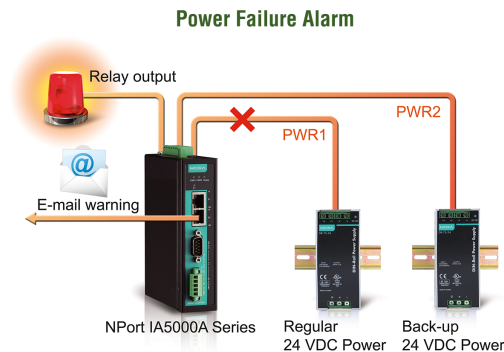
NPort IA5000A 系列設備伺服器支援兩個電源輸入，可同時連接兩台直流電源。如果一個電源發生故障，另一個電源會自動接替。備援電源輸入有助於確保設備伺服器運作不中斷。

Dual Power Inputs



繼電器輸出警告和電子郵件警示

當網路斷線、電源故障，或者當 DCD 或 DSR 串列訊號發生變化時，內建繼電器輸出可向管理員發出警示。若偵測到異常時，也可以發出電子郵件警告。這些實用的功能，讓維運工程師可以迅速回應緊急狀況。



串列、乙太網路和電源的突波保護

NPort® IA5000A 為串列、電源和乙太網路線路提供 Moxa 先進的突波抗擾解決方案，經測試證明符合 IEC 61000-4-5 規範。這種進階突波保護提供堅固的串列轉乙太網路解決方案，可以保護電子設備免於受到像是石油、天然氣和電力自動化應用的電壓突波和抗電干擾。

工業級認證

為了確保在工業環境中安全可靠運作，NPort® IA5000A 設備伺服器已獲得多項工業認證，包括 IP30 防護等級和工業控制設備的 UL 508 安全認證。此外，這些裝置伺服器符合 UL/cUL (Class 1、Division 2、Groups A、B、C、D)、ATEX Class 1 Zone 2 和 IECEx，可用於環境嚴苛場域。

規格

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	Supports 2 IP addresses Auto MDI/MDI-X connection
Magnetic Isolation Protection	1.5 kV (built-in)

Ethernet Software Features

Configuration Options	Serial Console, Telnet Console, Web Console (HTTP/HTTPS), Windows Utility
Management	ARP, BOOTP, DHCP Client, DNS, HTTP, HTTPS, ICMP, IPv4, LLDP, Rtelnet, SMTP, SNMPv1/v2c, TCP/IP, Telnet, UDP
Filter	IGMP v1/v2
Windows Real COM Drivers	Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), Windows 2008 R2/2012/2012 R2 (x64), Windows Embedded CE 5.0/6.0, Windows XP Embedded
Linux Real TTY Drivers	Kernel versions: 2.4.x, 2.6.x, 3.x, 4.x, and 5.x
Fixed TTY Drivers	SCO UNIX, SCO OpenServer, UnixWare 7, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i, Mac OS X
Android API	Android 3.1.x and later
Time Management	SNTP

Serial Interface

Connector	NPort IA5150A Series: DB9 male (RS-232), Terminal Block (RS-422/485) NPort IA5250A Series: DB9 male (RS-232/422/485) NPort IA5450A Series: DB9 male (RS-232/422/485)
No. of Ports	NPort IA5150A Series: 1 NPort IA5250A Series: 2 NPort IA5450A Series: 4
Serial Standards	RS-232, RS-422, RS-485
Operation Modes	Disabled, Ethernet Modem, Pair Connection, Real COM, Reverse Telnet, RFC2217, TCP Client, TCP Server, UDP

Baudrate	Supports standard baudrates (unit=bps): 50, 75, 110, 134, 150, 300, 600, 1200, 1800, 2400, 4800, 7200, 9600, 19200, 38400, 57600, 115200, 230.4k, 460.8k, 921.6k
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	None, RTS/CTS (RS-232 only), DTR/DSR (RS-232 only), XON/XOFF
Isolation	NPort IA5150AI/IA5250AI/IA5450AI Series: 2 kV (I models)
RS-485 Data Direction Control	ADDC® (automatic data direction control)
Pull High/Low Resistor for RS-485	1 kilo-ohm, 150 kilo-ohms
Terminator for RS-485	120 ohms

Serial Signals

RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND

Power Parameters

Input Current	NPort IA5150A Series: 220 mA @ 12 VDC NPort IA5150AI Series: 225 mA @ 12 VDC NPort IA5250A Series: 250 mA @ 12 VDC NPort IA5250AI Series: 290 mA @ 12 VDC NPort IA5450A Series: 374 mA @ 12 VDC NPort IA5450AI Series: 512 mA @ 12 VDC
Input Voltage	12 to 48 VDC
No. of Power Inputs	2
Power Connector	Terminal block

Physical Characteristics

Housing	Metal
Dimensions	NPort IA5150A/IA5250A Series: 36 x 105 x 140 mm (1.42 x 4.13 x 5.51 in) NPort IA5450A Series: 45.8 x 134 x 105 mm (1.8 x 5.28 x 4.13 in)
Weight	NPort IA5150A Series: 475 g (1.05 lb) NPort IA5250A Series: 485 g (1.07 lb) NPort IA5450A Series: 560 g (1.23 lb)
Installation	DIN-rail mounting, Wall mounting (with optional kit)

Environmental Limits

Operating Temperature	Standard Models: 0 to 60°C (32 to 140°F) Wide Temp. Models: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 75°C (-40 to 167°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

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: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 10 V/m; Signal: 10 V/m IEC 61000-4-8 PFMF IEC 61000-4-11 DIPs
Hazardous Locations	NPort IA5100A/IA5200A models: UL/cUL Class I Division 2 Groups A/B/C/D, ATEX Zone 2 NPort IA5100A-IEX/IA5200A-IEX models: UL/cUL Class I Division 2 Groups A/B/C/D, ATEX Zone 2, IECEx NPort IA5400A Series: UL/cUL Class I Division 2 Groups A/B/C/D, ATEX Zone 2, IECEx, UL/cUL Class I Division 2 Groups A/B/C/D, ATEX Zone 2
Safety	UL 508
Vibration	IEC 60068-2-6
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32

Declaration

Green Product	RoHS, CRoHS, WEEE
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MTBF

Time	262,805 hrs
Standards	Telcordia (Bellcore) Standard TR/SR

Warranty

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

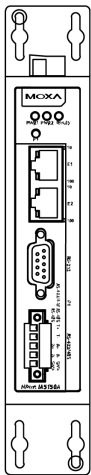
Package Contents

Device	1 x NPort IA5000A Series device server
Documentation	1 x document and software CD 1 x quick installation guide 1 x warranty card

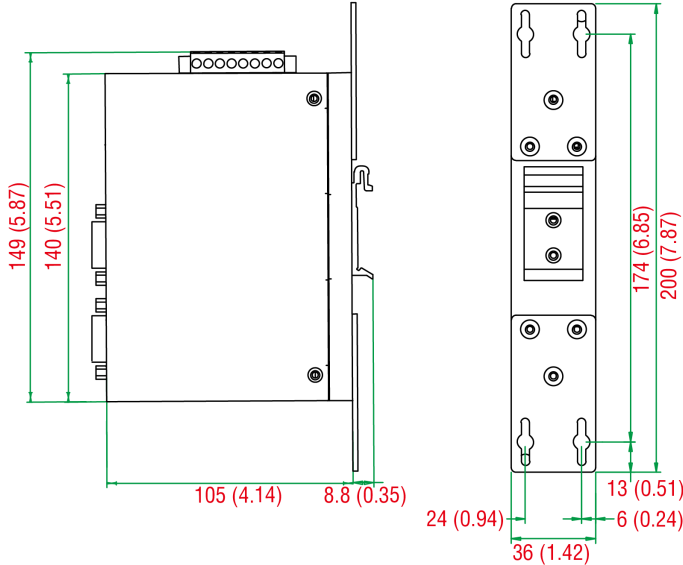
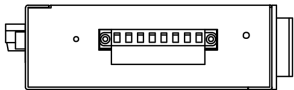
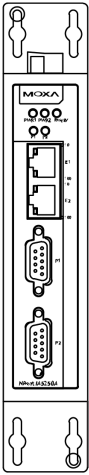
尺寸

單位：公釐（英吋）

NPort IA5150A
NPort IA5150AI

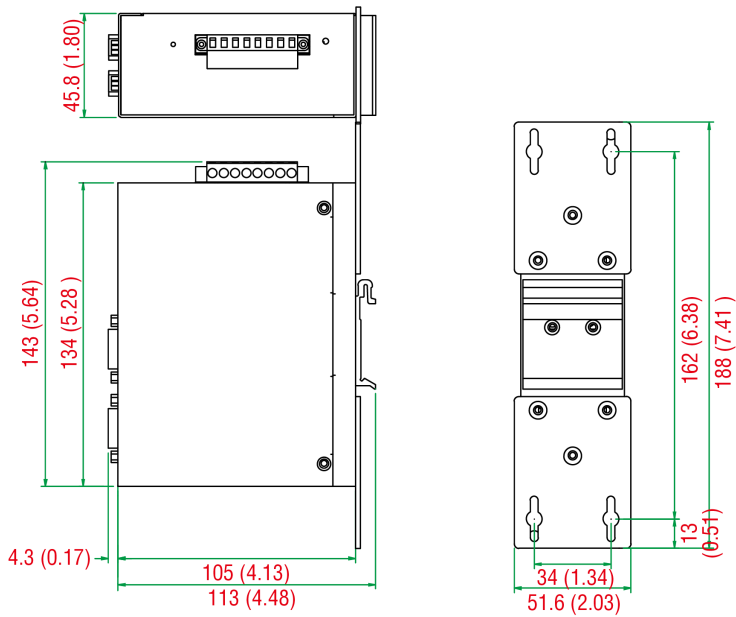
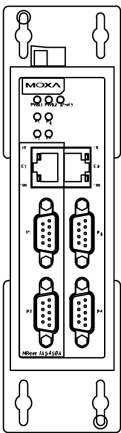


NPort IA5250A
NPort IA5250AI



單位：公釐（英吋）

NPort IA5450A
NPort IA5450AI



訂購資訊

Model Name	Operating Temp.	Serial Standards	Serial Isolation	No. of Serial Ports	Certification: Hazardous Locations
NPort IA5150A	0 to 60°C	RS-232/422/485	–	1	ATEX, C1D2
NPort IA5150A-T	-40 to 75°C	RS-232/422/485	–	1	ATEX, C1D2
NPort IA5150AI	0 to 60°C	RS-232/422/485	2 kV	1	ATEX, C1D2
NPort IA5150AI-T	-40 to 75°C	RS-232/422/485	2 kV	1	ATEX, C1D2
NPort IA5150A-IEEX	0 to 60°C	RS-232/422/485	–	1	ATEX, C1D2, IECEx
NPort IA5150A-T-IEEX	-40 to 75°C	RS-232/422/485	–	1	ATEX, C1D2, IECEx

Model Name	Operating Temp.	Serial Standards	Serial Isolation	No. of Serial Ports	Certification: Hazardous Locations
NPort IA5150AI-IEEX	0 to 60°C	RS-232/422/485	2 kV	1	ATEX, C1D2, IECEx
NPort IA5150AI-T-IEEX	-40 to 75°C	RS-232/422/485	2 kV	1	ATEX, C1D2, IECEx
NPort IA5250A	0 to 60°C	RS-232/422/485	–	2	ATEX, C1D2
NPort IA5250A-T	-40 to 75°C	RS-232/422/485	–	2	ATEX, C1D2
NPort IA5250AI	0 to 60°C	RS-232/422/485	2 kV	2	ATEX, C1D2
NPort IA5250AI-T	-40 to 75°C	RS-232/422/485	2 kV	2	ATEX, C1D2
NPort IA5250A-IEEX	0 to 60°C	RS-232/422/485	–	2	ATEX, C1D2, IECEx
NPort IA5250A-T-IEEX	-40 to 75°C	RS-232/422/485	–	2	ATEX, C1D2, IECEx
NPort IA5250AI-IEEX	0 to 60°C	RS-232/422/485	2 kV	2	ATEX, C1D2, IECEx
NPort IA5250AI-T-IEEX	-40 to 75°C	RS-232/422/485	2 kV	2	ATEX, C1D2, IECEx
NPort IA5450A	0 to 60°C	RS-232/422/485	–	4	ATEX, C1D2, IECEx
NPort IA5450A-T	-40 to 75°C	RS-232/422/485	–	4	ATEX, C1D2, IECEx
NPort IA5450AI	0 to 60°C	RS-232/422/485	2 kV	4	ATEX, C1D2, IECEx
NPort IA5450AI-T	-40 to 75°C	RS-232/422/485	2 kV	4	ATEX, C1D2, IECEx

配件 (選購)

Cables

CBL-F9M9-150	DB9 female to DB9 male serial cable, 1.5 m
CBL-F9M9-20	DB9 female to DB9 male serial cable, 20 cm
CBL-RJ458P-100	8-pin RJ45 CAT5 Ethernet cable, 1 m
CBL-RJ45SF9-150	8-pin RJ45 to DB25 male serial cable with shielding, 1.5m

Connectors

ADP-RJ458P-DB9F	DB9 female to RJ45 connector
Mini DB9F-to-TB	DB9 female to terminal block connector

Power Cords

CBL-PJTB-10	Non-locking barrel plug to bare-wire cable
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Power Supplies

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-120-24	120W/2.5A DIN-rail 24 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-75-24	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

Wall-Mounting Kits

WK-36-02	DIN-rail/wall-mounting kit, 2 plates, 6 screws Applicable Models: NPort IA5150A NPort IA5250A
WK-51-01	Wall mounting kit with 2 plates (51.6 x 67 x 2 mm) and 6 screws Applicable Models: NPort IA5450A

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