

# NPort 5200A 系列

2 埠 RS-232/422/485 序列裝置伺服器，內建串列突波保護



## 特色與優點

- 快速 3 步驟網頁式配置
- 串列、電源和乙太網路具有突波保護
- 支援 COM 埠群組和 UDP multicast 應用
- 用於安裝更安穩的螺絲式電源連接器
- 電源插座和接線端子模組的雙直流電源輸入
- 多種 TCP 和 UDP 操作模式

## 認證



## 簡介

NPort® 5200A 設備伺服器能夠讓串列裝置立即聯網，也讓您的 PC 軟體在任何地方可透過網路直接存取串列裝置。NPort® 5200A 設備伺服器超精巧、堅固耐用且方便使用，提供簡單且可靠的串列轉乙太網路解決方案。

### 更環保的串列轉乙太網路解決方案

MiiNe 是一款以 Arm 為基礎，並內嵌 RAM 和 Flash 的串列轉乙太網路 SoC，體積雖小但功能強大。相較於市場上現有的解決方案，內建 MiiNe 的 NPort® 5200A 系列可節省至少 50% 的功耗，協助工程師應對現今工業環境對於環保的要求規範。

### 串列、乙太網路和電源的突波保護

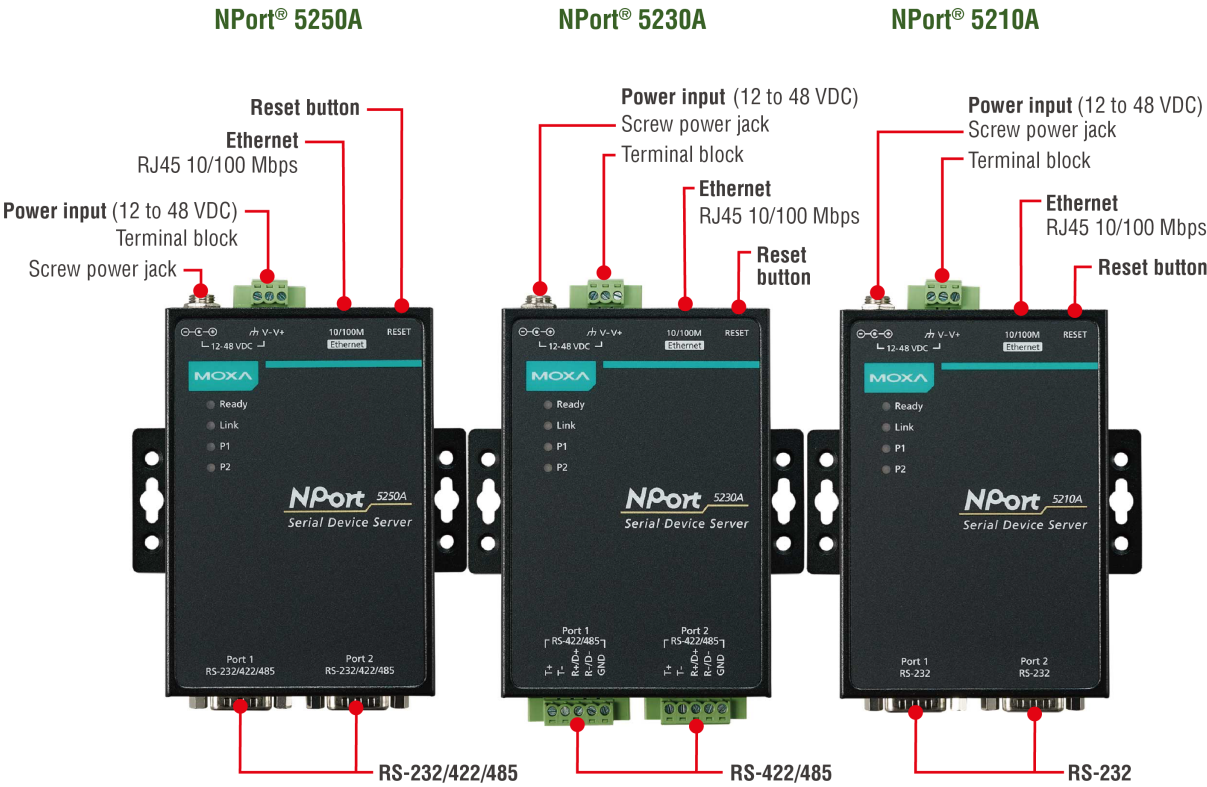
突波通常是來自雷擊或設備開關間所產生的短暫性高電壓，是所有電氣裝置的常見威脅。NPort® 5200A 採用了 Moxa 領先的突波保護技術，為串列、電源和乙太網路提供完整的保護，並通過 IEC 61000-4-5 認證標準。配備突波保護的串列連網解決方案，可以讓您的電氣設備遠離電壓變化或電氣雜訊等干擾。

### 3 步驟網頁式配置

NPort® 5200A 提供簡明易懂且易於使用的網頁式配置工具，只需三個步驟便可完成設置。NPort® 5200A 的網頁式主控台將會引導使用者透過三個簡單的配置步驟，便可啟動串列轉乙太網路的應用。透過這種快速 3 步驟網頁式配置，使用者平均只需 30 秒即可完成 NPort® 設定並啟用應用程式，從而節省大量時間和精力。

### COM 連接埠分組

NPort® 5200A 的 COM 分組功能可供您建立一個 COM 群組，並將數據重新導向到 NPort 設備伺服器上的多個實體 COM 連接埠。透過 COM 分組，您只需操作一個 COM 連接埠即可同時控制多個實體串列埠。



規格

Ethernet Interface

|                                       |                   |
|---------------------------------------|-------------------|
| 10/100BaseT(X) Ports (RJ45 connector) | 1                 |
| Magnetic Isolation Protection         | 1.5 kV (built-in) |

Ethernet Software Features

|                          |                                                                                                                                                                                                   |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Configuration Options    | Windows Utility<br>Serial Console (NPort 5210A NPort 5210A-T, NPort 5250A, and NPort 5250A-T)<br>Web Console (HTTP/HTTPS)<br>Device Search Utility (DSU)<br>MCC Tool<br>Telnet Console            |
| Management               | ARP<br>BOOTP<br>DHCP Client<br>DNS<br>HTTP<br>HTTPS<br>ICMP<br>IPv4<br>LLDP<br>SMTP<br>SNMPv1/v2c<br>Telnet<br>TCP/IP<br>UDP                                                                      |
| Filter                   | IGMP v1/v2                                                                                                                                                                                        |
| Windows Real COM Drivers | Windows 11, 10, 8.1, 8, 7, Vista, XP, ME, 98, and 95<br>Windows Server 2022, 2019, 2016, 2012 R2, 2012, 2008 R2, 2008, 2003, 2000, and NT<br>Windows Embedded CE 6.0 and 5.0, Windows XP Embedded |
| Linux Real TTY Drivers   | Kernel versions: 6.x, 5.x, 4.x, 3.x, 2.6.x, and 2.4.x                                                                                                                                             |

|                             |                                                                                                                                                             |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fixed TTY Drivers           | macOS versions: 14, 13, 12, 11, and 10.1x<br>SCO UNIX, SCO OpenServer, UnixWare 7, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i, Mac OS X       |
| Arm®-based Platform Support | Windows 11<br>Linux Kernel 6.x, 5.x, and 4.x<br>macOS 14, 13, 12, and 11                                                                                    |
| Virtual Machine             | VMWare ESXi (Windows 11/10)<br>VMware Fusion (Windows on macOS 14, 13, 12, 11, and 10.1x)<br>Parallels Desktop (Windows on macOS 14, 13, 12, 11, and 10.1x) |
| Android API                 | Android 3.1.x and later                                                                                                                                     |
| MIB                         | RFC1213, RFC1317                                                                                                                                            |

## Security Functions

|                    |                                                  |
|--------------------|--------------------------------------------------|
| Authentication     | Local database                                   |
| Encryption         | AES-128<br>RSA-1024<br>SHA-256<br>HTTPS<br>SHA-1 |
| Security Protocols | HTTPS (TLS 1.2)                                  |

## Serial Interface

|                                   |                                                                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connector                         | NPort 5210A/5250A models: DB9 male<br>NPort 5230A models: 5-pin terminal block                                                                                   |
| No. of Ports                      | 2                                                                                                                                                                |
| Serial Standards                  | NPort 5210A models: RS-232<br>NPort 5230A models: RS-422, RS-485<br>NPort 5250A models: RS-232, RS-422, RS-485                                                   |
| Operation Modes                   | Disabled<br>Ethernet Modem<br>Pair Connection<br>Real COM<br>Reverse Telnet<br>RFC2217<br>TCP Client<br>TCP Server<br>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                      | RTS/CTS (RS-232 only)<br>DTR/DSR (RS-232 only)<br>XON/XOFF                                                                                                       |
| Pull High/Low Resistor for RS-485 | 1 kilo-ohm, 150 kilo-ohms                                                                                                                                        |
| RS-485 Data Direction Control     | NPort 5250A/5250A-T/5230A/5230A-T: ADDC (automatic data direction control)                                                                                       |
| 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       | 119 mA @ 12 VDC                                             |
| Input Voltage       | 12 to 48 VDC                                                |
| No. of Power Inputs | 2                                                           |
| Power Connector     | 1 removable 3-contact terminal block(s)<br>Power input jack |

## Reliability

|                          |              |
|--------------------------|--------------|
| Automatic Reboot Trigger | Built-in WDT |
|--------------------------|--------------|

## Physical Characteristics

|                           |                                                                   |
|---------------------------|-------------------------------------------------------------------|
| Housing                   | Metal                                                             |
| Dimensions (with ears)    | 100 x 111 x 26 mm (3.94 x 4.37 x 1.02 in)                         |
| Dimensions (without ears) | 77 x 111 x 26 mm (3.03 x 4.37 x 1.02 in)                          |
| Weight                    | 340 g (0.75 lb)                                                   |
| Installation              | Desktop<br>DIN-rail mounting (with optional kit)<br>Wall mounting |

## Environmental Limits

|                                        |                                                                                           |
|----------------------------------------|-------------------------------------------------------------------------------------------|
| Operating Temperature                  | Standard models: 0 to 60°C (32 to 140°F)<br>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 55032/35                                                                                                                                                                                                                                                                                        |
| EMS    | IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV<br>IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m<br>IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV<br>IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV<br>IEC 61000-4-6 CS: 150 kHz to 80 MHz: 10 V/m; Signal: 10 V/m<br>IEC 61000-4-8 PFMF<br>IEC 61000-4-11 |
| EMI    | CISPR 32, FCC Part 15B Class A                                                                                                                                                                                                                                                                     |
| Safety | EN 62368-1<br>IEC 62368-1<br>UL 60950-1                                                                                                                                                                                                                                                            |

## Declaration

|               |                   |
|---------------|-------------------|
| Green Product | RoHS, CRoHS, WEEE |
|---------------|-------------------|

## MTBF

|           |                                     |
|-----------|-------------------------------------|
| Time      | 847,750 hrs                         |
| Standards | Telcordia (Bellcore) Standard TR/SR |

## Warranty

|                 |                                                                            |
|-----------------|----------------------------------------------------------------------------|
| Warranty Period | 5 years                                                                    |
| Details         | See <a href="http://www.moxa.com/tw/warranty">www.moxa.com/tw/warranty</a> |

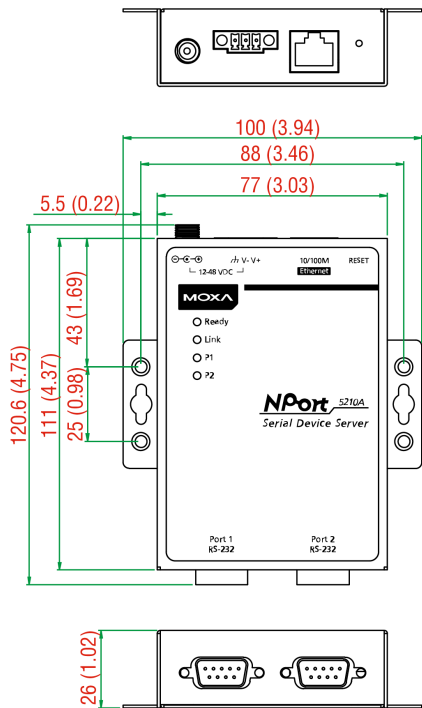
## Package Contents

|               |                                                                          |
|---------------|--------------------------------------------------------------------------|
| Device        | 1 x NPort 5200A Series device server                                     |
| Power Supply  | 1 x power adapter, suitable for your region (standard temp. models only) |
| Documentation | 1 x quick installation guide<br>1 x warranty card                        |

尺寸

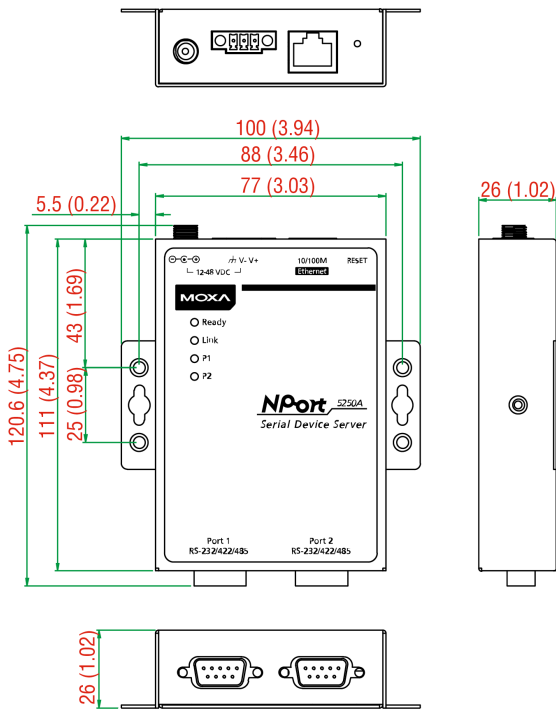
NPort 5210A

單位：公釐（英吋）



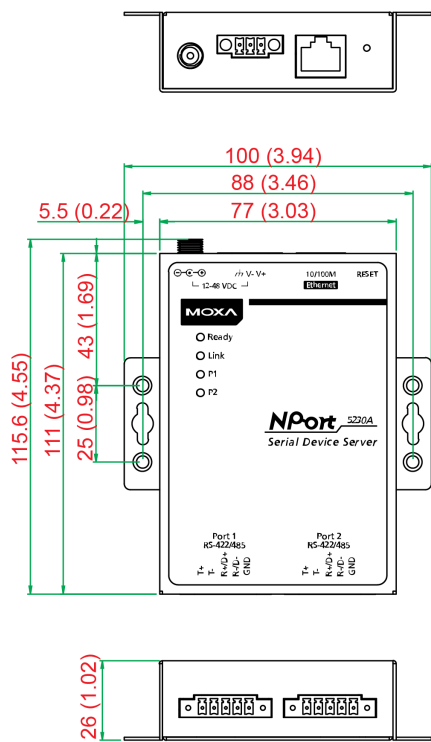
NPort 5250A

單位：公釐（英吋）



NPort 5230A

單位：公釐（英吋）



訂購資訊

| Model Name    | Operating Temp. | Baudrate             | Serial Standards | No. of Serial Ports | Input Current   | Input Voltage |
|---------------|-----------------|----------------------|------------------|---------------------|-----------------|---------------|
| NPort 5210A   | 0 to 55°C       | 50 bps to 921.6 kbps | RS-232           | 2                   | 119 mA @ 12 VDC | 12-48 VDC     |
| NPort 5210A-T | -40 to 75°C     | 50 bps to 921.6 kbps | RS-232           | 2                   | 119 mA @ 12 VDC | 12-48 VDC     |
| NPort 5230A   | 0 to 55°C       | 50 bps to 921.6 kbps | RS-422/485       | 2                   | 119 mA @ 12 VDC | 12-48 VDC     |

| Model Name    | Operating Temp. | Baudrate             | Serial Standards | No. of Serial Ports | Input Current   | Input Voltage |
|---------------|-----------------|----------------------|------------------|---------------------|-----------------|---------------|
| NPort 5230A-T | -40 to 75°C     | 50 bps to 921.6 kbps | RS-422/485       | 2                   | 119 mA @ 12 VDC | 12-48 VDC     |
| NPort 5250A   | 0 to 55°C       | 50 bps to 921.6 kbps | RS-232/422/485   | 2                   | 119 mA @ 12 VDC | 12-48 VDC     |
| NPort 5250A-T | -40 to 75°C     | 50 bps to 921.6 kbps | RS-232/422/485   | 2                   | 119 mA @ 12 VDC | 12-48 VDC     |

## 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 |

### Connectors

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

### DIN-Rail Mounting Kits

|       |                              |
|-------|------------------------------|
| DK35A | DIN-rail mounting kit, 35 mm |
|-------|------------------------------|

### Power Adapters

|                     |                                                                                                                                                                               |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PWR-12150-USJP-SA-T | Locking barrel plug, 12 VDC 1.5 A, 100 to 240 VAC, US/JP plug, -40 to 75°C operating temperature<br><br>Applicable Models:<br>NPort 5210A-T<br>NPort 5230A-T<br>NPort 5250A-T |
| PWR-12150-EU-SA-T   | Locking barrel plug, 12 VDC, 1.5 A, 100 to 240 VAC, EU plug, -40 to 75°C operating temperature<br><br>Applicable Models:<br>NPort 5210A-T<br>NPort 5230A-T<br>NPort 5250A-T   |
| PWR-12150-CN-SA-T   | Locking barrel plug, 12 VDC, 1.5 A, 100 to 240 VAC, CN plug, -40 to 75°C operating temperature<br><br>Applicable Models:<br>NPort 5210A-T<br>NPort 5230A-T<br>NPort 5250A-T   |
| PWR-12150-UK-SA-T   | Locking barrel plug, 12 VDC, 1.5 A, 100 to 240 VAC, UK plug, -40 to 75°C operating temperature<br><br>Applicable Models:<br>NPort 5210A-T<br>NPort 5230A-T<br>NPort 5250A-T   |
| PWR-12150-AU-SA-T   | Locking barrel plug, 12 VDC, 1.5 A, 100 to 240 VAC, AU plug, -40 to 75°C operating temperature<br><br>Applicable Models:<br>NPort 5210A-T<br>NPort 5230A-T<br>NPort 5250A-T   |
| PWR-12050-USJP-S1   | Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, US/JP plug, 0 to 40°C operating temperature                                                                               |
| PWR-12050-EU-S1     | Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, EU plug, 0 to 40°C operating temperature                                                                                  |
| PWR-12050-CN-S1     | Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, CN plug, 0 to 40°C operating temperature                                                                                  |
| PWR-12050-UK-S1     | Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, UK plug, 0 to 40°C operating temperature                                                                                  |
| PWR-12050-AU-S1     | Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, AU plug, 0 to 40°C operating temperature                                                                                  |
| PWR-12050-KR-S1     | Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, KR plug, 0 to 40°C operating temperature                                                                                  |

## Power Cords

CBL-PJ21NOPEN-BK-30

Locking barrel plug to bare-wire cable

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