

# NPort 5600-DT 系列

## 8 埠 RS-232/422/485 串列設備伺服器



### 特色與優點

- 支援 RS-232/422/485 的 8 個串列埠
- 小巧的桌上型設計
- 10/100M 自動感測乙太網路
- 使用 LCD 面板輕鬆設定 IP 位址
- 透過 Telnet、網頁瀏覽器或 Windows 工具程式進行設定
- 通訊端模式：TCP server、TCP client、UDP、Real COM
- 用於網路管理的 SNMP MIB-II

### 認證



### 簡介

NPort 5600-8-DT 設備伺服器可以藉由方便且透通的方式將 8 台串列設備連接到乙太網路，僅需透過基本配置將現有的串列設備連上乙太網路。您可以集中管理串列設備連上乙太網路，也可以透過網路分發管理主機。由於 NPort 5600-8-DT 設備伺服器的外型比 Moxa 19 吋機型小，對於需要額外的串列埠，但卻沒有安裝軌道可用的應用環境而言，是最佳的選擇。

### RS-485 應用的簡便設計

NPort 5650-8-DT 設備伺服器提供 1 k $\Omega$  和 150 k $\Omega$  上拉/下拉電阻和 120  $\Omega$  終端器可選。在某些嚴苛環境中，可能需要終端電阻來防止串列訊號的反射。使用終端電阻時，必須正確設定上拉/下拉電阻，以防止電器訊號被破壞。因為沒有電阻值可以相容於所有的環境，因此 Nport 5600-8-DT 設備伺服器使用 DIP 開關來允許使用者手動調整每個串列埠的終端器和上拉/下拉電阻值。

### 方便的電源輸入

NPort 5650-8-DT 設備伺服器支援電源接線端子模組和電源插孔，不僅方便使用，而且使用上有更大的彈性。使用者可以將接線端子模組直接連接到直流電源，也可以使用電源插孔透過轉接器連接到交流電路。

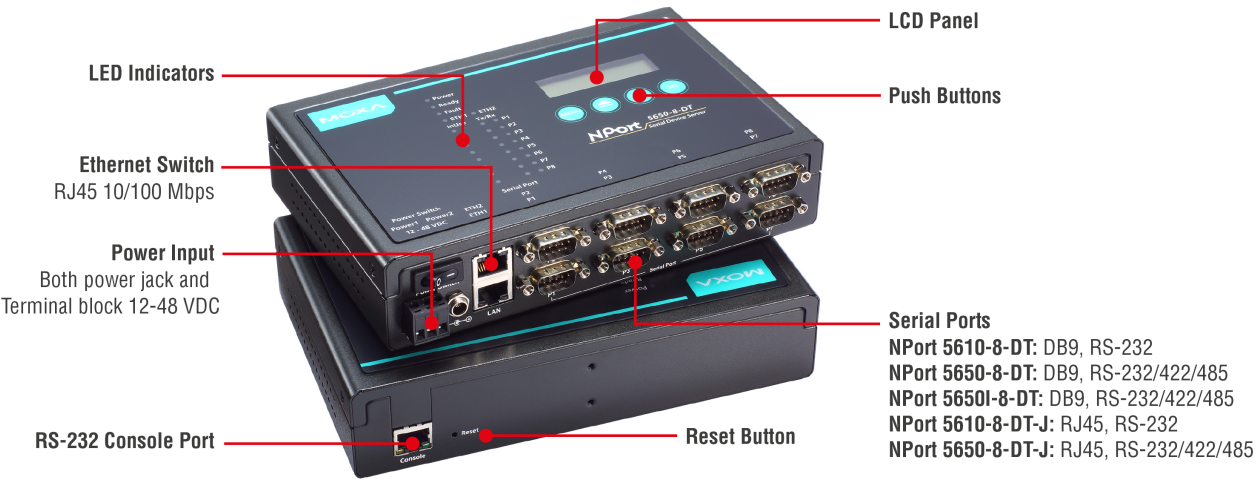
### LED 指示燈可簡化維護任務

系統 LED、串列 Tx/Rx LED 和乙太網路 LED（位於 RJ45 連接器上）是相當適合設備進行基本維護的工具，並協助工程師直接在現場分析問題。NPort 5600 的 LED 不僅可顯示目前系統和網路狀態，而且也協助現場工程師監控已連接的串列設備狀態。

### 便於串聯接線的兩個乙太網路連接埠

NPort 5600-8-DT 設備伺服器具有兩個乙太網路連接埠，可做為乙太網路交換器連接埠。將一個連接埠連接到網路或伺服器，將另一個連接埠連接到另一台乙太網路設備。雙乙太網路連接埠無需將每個裝置個別連接到單獨的乙太網路交換器，藉以降低接線成本。

外觀



規格

Ethernet Interface

|                                       |                   |
|---------------------------------------|-------------------|
| 10/100BaseT(X) Ports (RJ45 connector) | 2                 |
| Magnetic Isolation Protection         | 1.5 kV (built-in) |

Ethernet Software Features

|                             |                                                                                                                                                                           |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Configuration Options       | Serial Console<br>Telnet Console<br>Web Console (HTTP/HTTPS)<br>Windows Utility                                                                                           |
| Management                  | ARP<br>BOOTP<br>DHCP Client<br>DNS<br>HTTP<br>HTTPS<br>ICMP<br>IPv4<br>LLDP<br>Rtelnet<br>SMTP<br>SNMPv1/v2c<br>TCP/IP<br>Telnet<br>UDP                                   |
| Filter                      | IGMP v1/v2                                                                                                                                                                |
| Windows Real COM Drivers    | Windows 11/10/8.1/8/7/Vista/XP/ME/98/95<br>Windows Server 2022/2019/2016/2012 R2/2012/2008 R2/2008/2003<br>Windows Embedded CE 6.0/5.0, 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: 11.x, 10.12 to 10.15<br>SCO UNIX, SCO OpenServer, SCO UnixWare 7, Sun Solaris 10, QNX 4.25, QNX 6.x,<br>Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i, Mac OS X |
| Arm®-based Platform Support | Linux Kernel 5.x/4.x                                                                                                                                                      |
| Virtual Machine             | VMWare ESXi (Windows 11/10)<br>VMware Fusion (Windows on macOS 10.12 to 11.x)<br>Parallels Desktop (Windows on macOS 10.12 to 11.x)                                       |
| Android API                 | Android 3.1.x and later                                                                                                                                                   |

|                                   |                                                                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time Management                   | SNTP                                                                                                                                                             |
| MIB                               | RFC1213, RFC1317                                                                                                                                                 |
| <b>Security Functions</b>         |                                                                                                                                                                  |
| Authentication                    | Local database                                                                                                                                                   |
| Encryption                        | HTTPS<br>AES-128<br>RSA-1024<br>SHA-1<br>SHA-256                                                                                                                 |
| Security Protocols                | HTTPS (TLS 1.2)<br>SNMPv3                                                                                                                                        |
| <b>Serial Interface</b>           |                                                                                                                                                                  |
| Connector                         | 8-pin RJ45:<br>NPort 5610-8-DT-J/5650-8-DT-J<br>DB9 male:<br>NPort 5610-8-DT models/NPort 5650-8-DT models/NPort 5650I-8-DT models                               |
| No. of Ports                      | 8                                                                                                                                                                |
| Serial Standards                  | NPort 5610-8-DT Models: RS-232<br>NPort 5650-8-DT Models: RS-232/422/485                                                                                         |
| 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<br>DTR/DSR<br>XON/XOFF                                                                                                                                   |
| Pull High/Low Resistor for RS-485 | 1 kilo-ohm, 150 kilo-ohms                                                                                                                                        |
| Terminator for RS-485             | 120 ohms                                                                                                                                                         |
| RS-485 Data Direction Control     | Automatic Data Direction Control (ADDC)                                                                                                                          |
| Isolation                         | -I models: 2 kV                                                                                                                                                  |
| Surge                             | 0.5 kV                                                                                                                                                           |
| Console Port                      | RS-232 (TxD, RxD, GND), 3-pin (19200, n, 8, 1)                                                                                                                   |
| <b>Serial Signals</b>             |                                                                                                                                                                  |
| 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 5610-8-DT/NPort 5610-8-DT-J/<br>NPort 5610-8-DT-T:<br>611 mA @ 12 VDC<br><br>NPort 5650-8-DT/NPort 5650-8-DT-J/<br>NPort 5650-8-DT-T:<br>615 mA @ 12 VDC<br><br>NPort 5650I-8-DT/NPort 5650I-8-DT-T:<br>1066 mA @ 12 VDC |
| No. of Power Inputs         | 2                                                                                                                                                                                                                              |
| Input Voltage               | 12 to 48 VDC                                                                                                                                                                                                                   |
| Reverse Polarity Protection | Supported                                                                                                                                                                                                                      |
| Source of Input Power       | TB, Power input jack                                                                                                                                                                                                           |

## Reliability

|                          |                                           |
|--------------------------|-------------------------------------------|
| Automatic Reboot Trigger | Built-in WDT                              |
| Alert Tools              | Built-in buzzer and RTC (real-time clock) |

## Physical Characteristics

|                                                |                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Housing                                        | Metal                                                                                                                                                                                                                                                                                                                    |
| Installation                                   | Desktop<br>DIN-rail mounting (with optional kit)<br>Wall mounting (with optional kit)                                                                                                                                                                                                                                    |
| Dimensions (with ears)                         | 229 x 46 x 125 mm (9.01 x 1.81 x 4.92 in)                                                                                                                                                                                                                                                                                |
| Dimensions (without ears)                      | 197 x 44 x 125 mm (7.76 x 1.73 x 4.92 in)                                                                                                                                                                                                                                                                                |
| Dimensions (with DIN-rail kit on bottom panel) | 197 x 53 x 125 mm (7.76 x 2.09 x 4.92 in)                                                                                                                                                                                                                                                                                |
| Weight                                         | NPort 5610-8-DT: 1,570 g (3.46 lb)<br>NPort 5610-8-DT-J: 1,520 g (3.35 lb)<br>NPort 5610-8-DT-T: 1,320 g (2.91 lb)<br>NPort 5650-8-DT: 1,590 g (3.51 lb)<br>NPort 5650-8-DT-J: 1,540 g (3.40 lb)<br>NPort 5650-8-DT-T: 1,340 g (2.95 lb)<br>NPort 5650I-8-DT: 1,660 g (3.66 lb)<br>NPort 5650I-8-DT-T: 1,410 g (3.11 lb) |
| Interactive Interface                          | LCD panel display (standard temp. models only)<br>Push buttons for configuration (standard temp. models only)                                                                                                                                                                                                            |

## Environmental Limits

|                                        |                                                                                           |
|----------------------------------------|-------------------------------------------------------------------------------------------|
| Operating Temperature                  | Standard Models: 0 to 55°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                    |
| EMI | CISPR 32, FCC Part 15B Class A |

|        |                                                                                                                                                                                                                                                                                                    |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EMS    | IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV<br>IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m<br>IEC 61000-4-4 EFT: Power: 2 kV; Signal: 0.5 kV<br>IEC 61000-4-5 Surge: Power: 2 kV; Signal: 0.5 kV<br>IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m<br>IEC 61000-4-8 PFMF<br>IEC 61000-4-11 |
| Safety | UL 60950-1<br>IEC 62368-1                                                                                                                                                                                                                                                                          |

## Declaration

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

## MTBF

|           |                               |
|-----------|-------------------------------|
| Time      | 836,374 hrs                   |
| Standards | Telcordia (Bellcore) Standard |

## Warranty

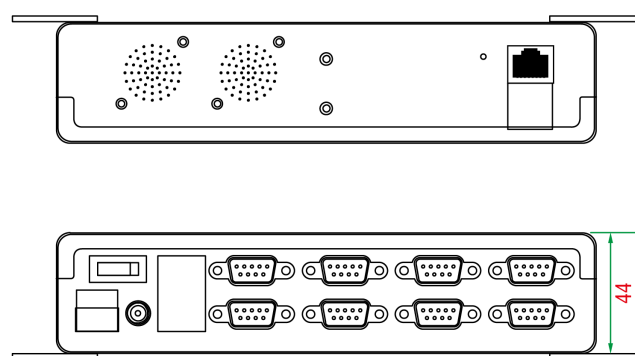
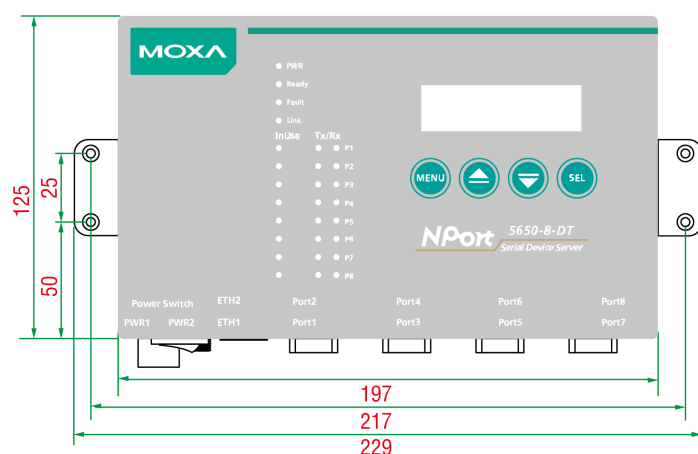
|                 |                                                                            |
|-----------------|----------------------------------------------------------------------------|
| Warranty Period | 5 years                                                                    |
| Details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

## Package Contents

|                  |                                                         |
|------------------|---------------------------------------------------------|
| Device           | 1 x NPort 5600-DT Series device server                  |
| Installation Kit | 1 x wall-mounting kit                                   |
| Cable            | 1 x Ethernet, RJ45                                      |
| Power Supply     | 1 x power adapter for your region (excluding -T models) |
| Documentation    | 1 x quick installation guide<br>1 x warranty card       |

## 尺寸

單位：公釐



訂購資訊

| Model Name         | Serial Interface | Serial Interface Connector | Serial Interface Isolation | Operating Temp. | Power Adapter Included in Package | Input Voltage |
|--------------------|------------------|----------------------------|----------------------------|-----------------|-----------------------------------|---------------|
| NPort 5610-8-DT    | RS-232           | DB9                        | –                          | 0 to 55°C       | Yes                               | 12 to 48 VDC  |
| NPort 5610-8-DT-T  | RS-232           | DB9                        | –                          | -40 to 75°C     | No                                | 12 to 48 VDC  |
| NPort 5610-8-DT-J  | RS-232           | 8-pin RJ45                 | –                          | 0 to 55°C       | Yes                               | 12 to 48 VDC  |
| NPort 5650-8-DT    | RS-232/422/485   | DB9                        | –                          | 0 to 55°C       | Yes                               | 12 to 48 VDC  |
| NPort 5650-8-DT-T  | RS-232/422/485   | DB9                        | –                          | -40 to 75°C     | No                                | 12 to 48 VDC  |
| NPort 5650-8-DT-J  | RS-232/422/485   | 8-pin RJ45                 | –                          | 0 to 55°C       | Yes                               | 12 to 48 VDC  |
| NPort 5650I-8-DT   | RS-232/422/485   | DB9                        | 2 kV                       | 0 to 55°C       | Yes                               | 12 to 48 VDC  |
| NPort 5650I-8-DT-T | RS-232/422/485   | DB9                        | 2 kV                       | -40 to 75°C     | No                                | 12 to 48 VDC  |

配件（選購）

DIN-Rail Mounting Kits

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

Wall-Mounting Kits

|          |                                                                               |
|----------|-------------------------------------------------------------------------------|
| WK-35-04 | Wall-mount kit with 2 plates (35 x 44 x 2.5 mm), 6 screws (FTS x 6 M3 x 4 mm) |
|----------|-------------------------------------------------------------------------------|

Power Adapters

|                     |                                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------|
| PWR-12300-WPUSJP-S2 | Locking barrel plug with 12 VDC, 3 A, 100 to 240 VAC, US/JP plug, 0 to 40°C operating temperature |
| PWR-12300-WPEU-S2   | Locking barrel plug with 12 VDC, 3 A, 100 to 240 VAC, EU plug, 0 to 40°C operating temperature    |
| PWR-12300-WPCN-S2   | Locking barrel plug with 12 VDC, 3 A, 100 to 240 VAC, CN plug, 0 to 40°C operating temperature    |
| PWR-12300-WPUK-S2   | Locking barrel plug with 12 VDC, 3 A, 100 to 240 VAC, UK plug, 0 to 40°C operating temperature    |
| PWR-12300-WPAU-S2   | Locking barrel plug with 12 VDC, 3 A, 100 to 240 VAC, AU plug, 0 to 40°C operating temperature    |

© Moxa Inc. 版權所有.2024 年 1 月 02 日更新。

未經 Moxa Inc. 明確書面許可，不得以任何方式複製或使用本文件及其任何部分。產品規格如有變更，恕不另行通知。請至本公司官網了解最新的產品資訊。