NPort 5600 系列

8 埠和 16 埠 RS-232/422/485 機架式串列設備伺服器

特色與優點

- 標準 19 吋機架式
- 使用 LCD 面板輕鬆設定 IP 位址（寬溫型號除外）
- 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
- 用於網路管理的 SNMP MIB-II
- 通用高電壓範圍：100 至 240 VAC 或 88 至 300 VDC
- 常用的低壓範圍：±48 VDC（20 至 72 VDC、-20 至 -72 VDC）

認證

簡介

使用 NPort® 5600 機架式系列，您不僅可以保護您目前的硬體資產，也可以透過集中管理串列設備以及在網路上分配管理主機來實現未來的網路擴充。

最多可讓 16 個串列裝置連上網路

NPort® 5600 只需透過基本配置即可將多達 16 個串列設備連接到乙太網路。

19 吋機架式設備伺服器

NPort® 5600 設備伺服器的前面板有串列埠的 Tx/Rx LED，後面板有 8 個或 16 個 RJ45 串列埠連接器。因此 NPort® 5600 設備伺服器適合標準的 19 吋機架式安裝，從而讓您簡化操作、維護和管理任務。

Real COM/TTY 連接埠

提供 Real COM/TTY 驅動程式，使 NPort® 5600 上的串列埠可透過 Windows 識別為 Real COM 連接埠，或由 Linux 識別為 Real TTY 連接埠。除了支援基本的數據傳輸和接收，NPort® 驅動程式也支援 RTS、CTS、DTR、DSR 和 DCD 控制訊號。

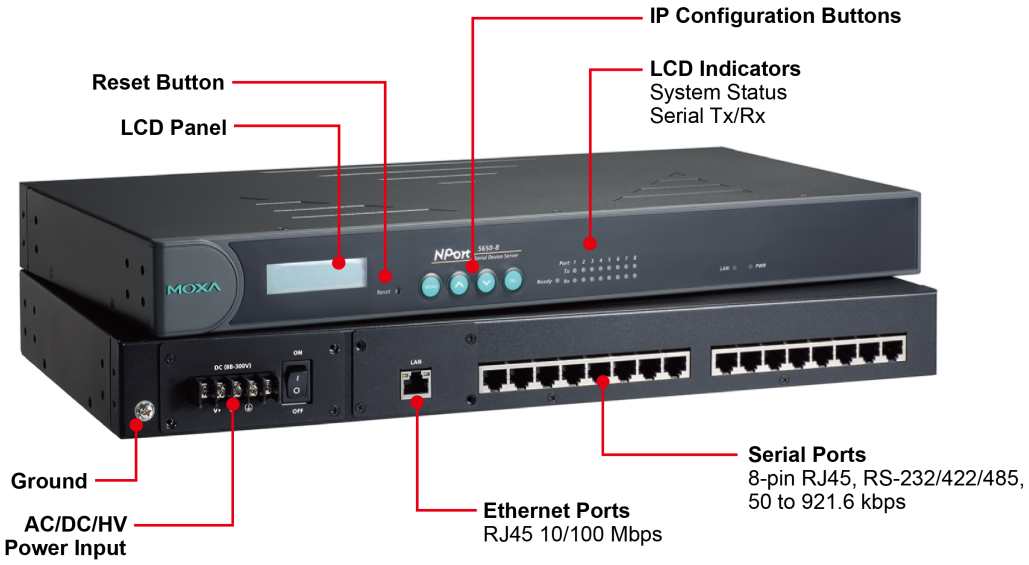
LED 指示燈可簡化維護任務

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。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裝置狀態。

可調整的終端器和上拉/下拉電阻

使用終端電阻來防止串列訊號反射時，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® 5650-8/16 的底部面板有 DIP 開關，可用於設定終端器和上拉/下拉電阻值。

外觀



Note: LCD panel and configuration buttons not available with wide-temp. models

規格

Ethernet Interface

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

Optical Fiber

		100BaseFX		
		Multi-Mode		Single-Mode
Fiber Cable Type		OM1	50/125 µm 800 MHz x km	G.652
Typical Distance		4 km	5 km	40 km
Wavelength	Typical (nm)	1300		1310
	TX Range (nm)	1260 to 1360		1280 to 1340
	RX Range (nm)	1100 to 1600		1100 to 1600
Optical Power	TX Range (dBm)	-10 to -20		0 to -5
	RX Range (dBm)	-3 to -32		-3 to -34
	Link Budget (dB)	12		29
	Dispersion Penalty (dB)	3		1

Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power.
Note: Compute the “typical distance” of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).

Ethernet Software Features

Configuration Options	Telnet Console, Web Console (HTTP/HTTPS), Windows Utility
Management	ARP, BOOTP, DHCP Client, DNS, HTTP, HTTPS, ICMP, IPv4, LLDP, RFC2217, Rtelnet, PPP, SLIP, SMTP, SNMPv1/v2c, TCP/IP, Telnet, UDP
Filter	IGMP v1/v2c

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 R2/2016/2019 (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, macOS 10.12, macOS 10.13, macOS 10.14, macOS 10.15
Android API	Android 3.1.x and later
Time Management	SNTP

Serial Interface

Connector	8-pin RJ45
No. of Ports	8 or 16 ports
Serial Standards	NPort 5610 Series: RS-232 NPort 5630 Series: RS-422, RS-485 NPort 5650 Series: 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
Pull High/Low Resistor for RS-485	1 kilo-ohm, 150 kilo-ohms
Terminator for RS-485	120 ohms
RS-485 Data Direction Control	ADDC® (automatic data direction control)

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 5610-8-48V/16-48V: 135 mA @ 48 VDC NPort 5650-8-HV-T/16-HV-T: 152 mA @ 88 VDC NPort 5610-8/16: 141 mA @ 100 VAC NPort 5630-8/16: 152 mA @ 100 VAC NPort 5650-8/8-T/16/16-T: 158 mA @ 100 VAC NPort 5650-8-M-SC/16-M-SC: 174 mA @ 100 VAC NPort 5650-8-S-SC/16-S-SC: 164 mA @ 100 VAC
Input Voltage	HV Models: 88 to 300 VDC AC Models: 100 to 240 VAC, 47 to 63 Hz DC Models: ±48 VDC, 20 to 72 VDC, -20 to -72 VDC

Reliability

Automatic Reboot Trigger	Built-in WDT

Physical Characteristics

Housing	Metal
Installation	19-inch rack mounting
Dimensions (with ears)	480 x 45 x 198 mm (18.90 x 1.77 x 7.80 in)
Dimensions (without ears)	440 x 45 x 198 mm (17.32 x 1.77 x 7.80 in)
Weight	NPort 5610-8: 2,290 g (5.05 lb) NPort 5610-8-48V: 3,160 g (6.97 lb) NPort 5610-16: 2,490 g (5.49 lb) NPort 5610-16-48V: 3,260 g (7.19 lb) NPort 5630-8: 2,510 g (5.53 lb) NPort 5630-16: 2,560 g (5.64 lb) NPort 5650-8/5650-8-T: 2,310 g (5.09 lb) NPort 5650-8-M-SC: 2,380 g (5.25 lb) NPort 5650-8-S-SC/5650-16-M-SC: 2,440 g (5.38 lb) NPort 5650-8-HV-T: 3,720 g (8.20 lb) NPort 5650-16/5650-16-T: 2,510 g (5.53 lb) NPort 5650-16-S-SC: 2,500 g (5.51 lb) NPort 5650-16-HV-T: 3,820 g (8.42 lb)
Interactive Interface	LCD panel display (standard temp. models only) Push buttons for configuration (standard temp. models only)

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) High-voltage Wide Temp. Models: -40 to 85°C (-40 to 185°F)
Storage Temperature (package included)	Standard Models: -20 to 70°C (-4 to 158°F) Wide Temp. Models: -40 to 75°C (-40 to 167°F) High-voltage Wide Temp. Models: -40 to 85°C (-40 to 185°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	NPort 5650-8/16 Models: IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 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: 2.5 kV; Signal: 1 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 IEC 61000-4-11 NPort 5650-8/16-HV Models: IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8
Safety	UL 60950-1
Medical	EN 55011: 2007+A2: 2007 Class A (Group 1) compliant EN 60601-1-2: 2007 compliant

MTBF

Time	NPort 5610-8: 877,888 hrs NPort 5610-8-48V: 870,961 hrs NPort 5610-16: 666,105 hrs NPort 5610-16-48V: 662,111 hrs NPort 5630-8: 765,449 hrs NPort 5630-16: 473,748 hrs NPort 5650-8: 692,010 hrs NPort 5650-8-T: 692,010 hrs NPort 5650-8-HV-T: 627,078 hrs NPort 5650-8-M-SC: 678,053 hrs NPort 5650-8-S-SC: 678,053 hrs NPort 5650-16: 473,748 hrs NPort 5650-16-T: 473,748 hrs NPort 5650-16-HV-T: 442,626 hrs NPort 5650-16-M-SC: 467,180 hrs NPort 5650-16-S-SC: 467,180 hrs
Standards	AC models: MIL-HDBK-217F HV models: Telcordia (Bellcore) Standard TR/SR

Warranty

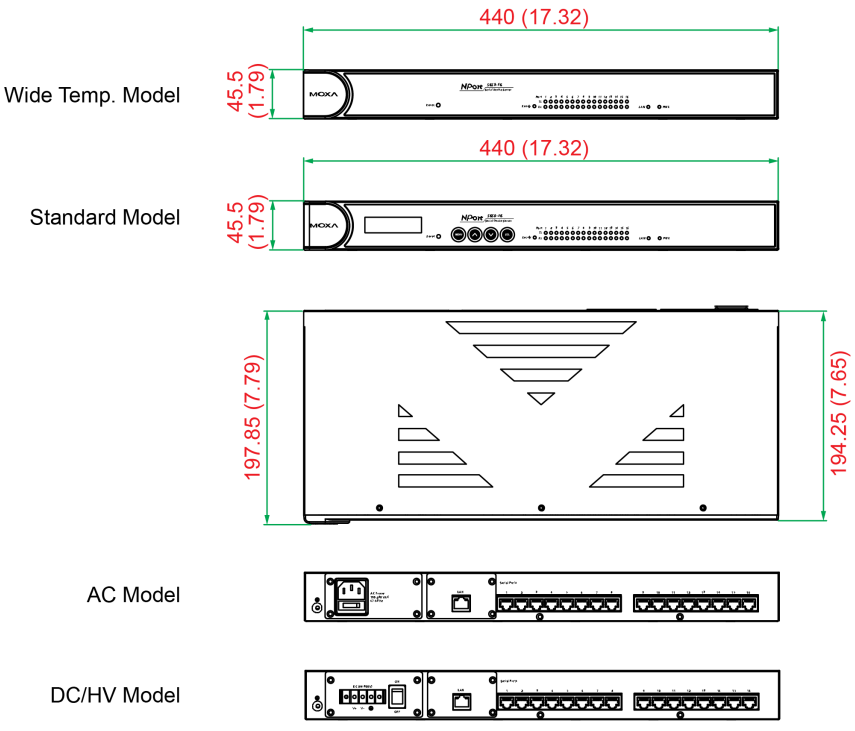
Warranty Period	5 years
Details	See www.moxa.com/tw/warranty

Package Contents

Device	1 x NPort 5600 Series device server
Installation Kit	1 x rack-mounting kit
Cable	1 x power cord, suitable for your region (AC models)
Documentation	1 x quick installation guide 1 x warranty card

尺寸

單位：公釐（英吋）



訂購資訊

Model Name	Ethernet Interface Connector	Serial Interface	No. of Serial Ports	Operating Temp.	Input Voltage
NPort 5610-8	8-pin RJ45	RS-232	8	0 to 60°C	100-240 VAC
NPort 5610-8-48V	8-pin RJ45	RS-232	8	0 to 60°C	±48 VDC
NPort 5630-8	8-pin RJ45	RS-422/485	8	0 to 60°C	100-240 VAC
NPort 5610-16	8-pin RJ45	RS-232	16	0 to 60°C	100-240 VAC
NPort 5610-16-48V	8-pin RJ45	RS-232	16	0 to 60°C	±48 VDC
NPort 5630-16	8-pin RJ45	RS-422/485	16	0 to 60°C	100-240 VAC
NPort 5650-8	8-pin RJ45	RS-232/422/485	8	0 to 60°C	100-240 VAC
NPort 5650-8-M-SC	Multi-mode fiber SC	RS-232/422/485	8	0 to 60°C	100-240 VAC
NPort 5650-8-S-SC	Single-mode fiber SC	RS-232/422/485	8	0 to 60°C	100-240 VAC
NPort 5650-8-T	8-pin RJ45	RS-232/422/485	8	-40 to 75°C	100-240 VAC
NPort 5650-8-HV-T	8-pin RJ45	RS-232/422/485	8	-40 to 85°C	88-300 VDC
NPort 5650-16	8-pin RJ45	RS-232/422/485	16	0 to 60°C	100-240 VAC
NPort 5650-16-M-SC	Multi-mode fiber SC	RS-232/422/485	16	0 to 60°C	100-240 VAC
NPort 5650-16-S-SC	Single-mode fiber SC	RS-232/422/485	16	0 to 60°C	100-240 VAC
NPort 5650-16-T	8-pin RJ45	RS-232/422/485	16	-40 to 75°C	100-240 VAC
NPort 5650-16-HV-T	8-pin RJ45	RS-232/422/485	16	-40 to 85°C	88-300 VDC

配件（選購）

Cables

CBL-RJ45F25-150	8-pin RJ45 to DB25 female serial cable, 1.5 m
CBL-RJ45F9-150	8-pin RJ45 to DB9 female serial cable, 1.5m
CBL-RJ45M9-150	8-pin RJ45 to DB9 male serial cable, 1.5m
CBL-RJ45SF9-150	8-pin RJ45 to DB9 female serial cable with shielding, 1.5m
CBL-RJ45SF25-150	8-pin RJ45 to DB25 female serial cable with shielding, 1.5m
CBL-RJ45SM25-150	8-pin RJ45 to DB25 male serial cable with shielding, 1.5m
CBL-RJ45SM9-150	8-pin RJ45 to DB9 male serial cable with shielding, 1.5m
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

Connectors

ADP-RJ458P-DB9F	DB9 female to RJ45 connector
ADP-RJ458P-DB9M	RJ45 to DB9 male connector

Power Cords

PWC-C13AU-3B-183	Power cord with Australian (AU) plug, 1.83 m
PWC-C13CN-3B-183	Power cord with three-prong China (CN) plug, 1.83 m
PWC-C13EU-3B-183	Power cord with Continental Europe (EU) plug, 1.83 m
PWC-C13JP-3B-183	Power cord with Japan (JP) plug, 7A/125V, 1.83 m
PWC-C13UK-3B-183	Power cord with United Kingdom (UK) plug, 1.83 m

PWC-C13US-3B-183	Power cord with United States (US) plug, 1.83 m

Rack-Mounting Kits

WK-45-01	Rack-mounting kit, 2 L-shaped plates, 8 screws, 45 x 57 x 2.5 mm