NPort 5600-8-DT Desktop Series

Compact 8-port Serial Device Servers

NPort 5600-8-DT

NPort 5600-8-DT-J

Features

- 8 ports supporting RS-232, RS-422, or RS-485 operation
- Compact desktop size
- Auto-detecting 10/ 100 Mbps Ethernet
- 15 KV ESD surge protection for all serial signals
- Easy IP address configuration with LCM (Liquid Crystal Module)
- Configuration by web console, Telnet console, and more
- TCP Server, TCP Client, UDP, and Real COM operation modes
- Supports SNMP MIB-II for network management
- Configurable voice alarm for exceptions

Overview

NPort 5600-8-DT device servers can conveniently and transparently connect 8 serial devices to an Ethernet, allowing you to network your existing serial devices with only basic configuration. You can both centralize management of your serial devices and distribute management hosts over the network.

The NPort 5600-8-DT series is the best choice for applications that need additional serial ports, but for which mounting rails are not available. The NPort 5600-8-DT device servers have a smaller form factor compared to our 19" models.

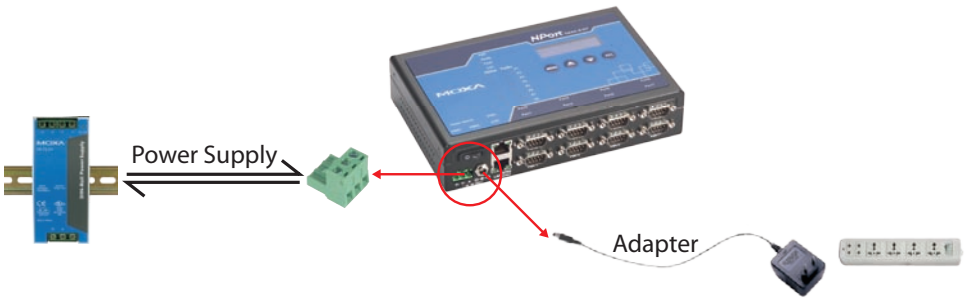
Convenient design for RS-485 applications

The NPort 5650-8-DT device servers support selectable 1 K and 150 K pull high/low resistors and a 120 terminator. In some critical environments, termination resistors may be needed to prevent the reflection of serial signals. When using termination resistors, it is also important to set the pull high/low resistors correctly so that the electrical signal is not corrupted. Since no set of resistor values is universally compatible with all environments, NPort 5600-8-DT device servers use DIP switches to allow users to adjust termination and pull high/low resistor values manually for each serial port.

DIP Switches for NPort 5600-8-DT

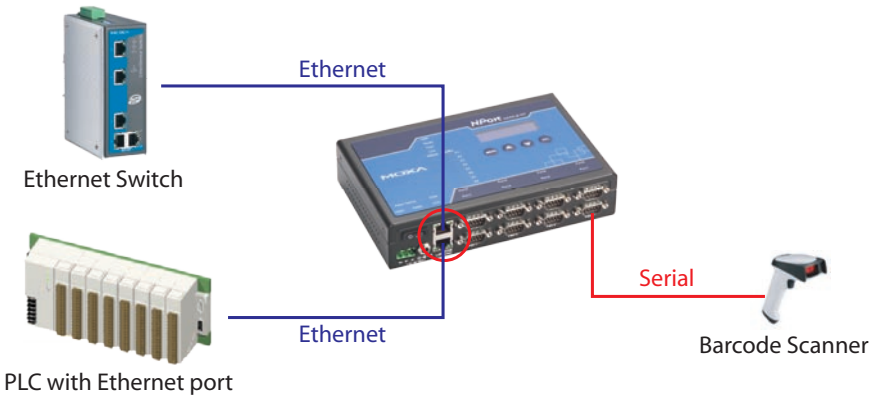
Convenient power inputs

The NPort 5650-8-DT device servers support both a power terminal block and power jack for ease of use and greater flexibility. Users can connect the terminal block directly to a DC power source, or use the power jack to connect to an AC circuit through an adaptor.



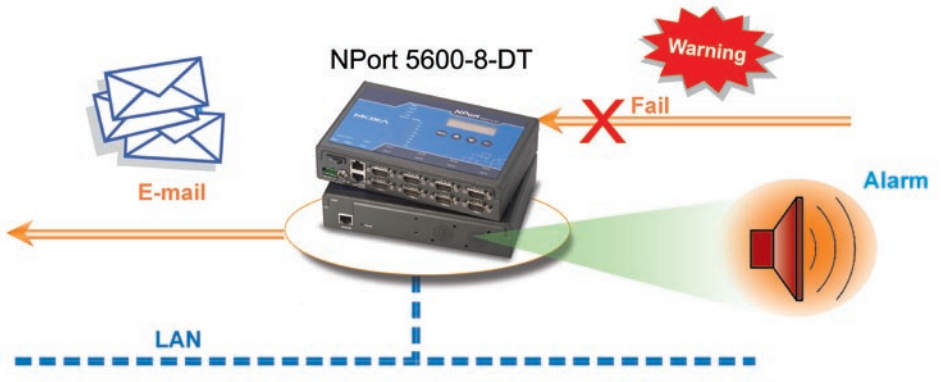
Two Ethernet ports for convenient cascade-style wiring

The NPort 5600-8-DT device servers come with two Ethernet ports that can be used as Ethernet switch ports. Connect one port to the network or server, and the other port to another Ethernet device. The dual Ethernet ports eliminate the need to connect each device to a separate Ethernet switch, reducing wiring costs.

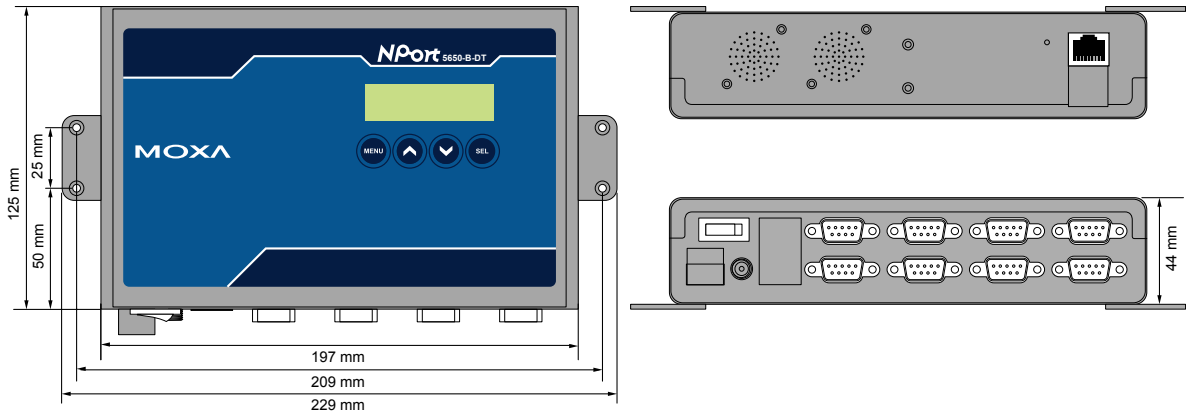


Automatic warning function by speaker and/or e-mail

The built-in speakers can be used to alert administrators of problems with the Ethernet links or power input. The web console indicates which Ethernet link or power input has failed. An e-mail warning can also be issued when an exception is detected. These functions are valuable tools that enable maintenance engineers to react promptly to emergency situations.



Dimensions



Flexible mounting design

NPort 5600-8-DT series is desktop, DIN Rail mountable and Wall mountable. You can attach a DIN-Rail Kit to the NPort 5600-8-DT's bottom panel to save space on the rail, or place the NPort 5600-8-DT in a smaller cabinet.

I. Desktop

II. Wall Mount

III. DIN-Rail

DIN-Rail Kit on Bottom Panel

DIN-Rail Kit on Rear Panel

DIN-Rail with DK-35A

Ordering Information

NPort 5610-8-DT: 8-port RS-232 serial device server, DB9 connectors, desktop model
NPort5610-8-DT-J: 8-port RS-232 serial device server, RJ45 connectors, desktop model
NPort 5650-8-DT: 8-port RS-232/422/485 serial device server, 12 to 48 VCD power input, desktop model
NPort 5650I-8-DT: NPort 5650-8-DT with 2 KV isolation
NPort 5650-8-DT-J: 8-port RS-232/422/485 serial device server, RJ45 connectors, desktop model

Included Items

- 1 NPort 5600-8-DT Device Server
- Quick Installation Guide
- Document and Software CD ROM
- Power Cord (AC Model Only)
- Power Adaptor
- DIN-Rail Kit

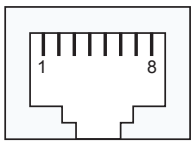
Optional Accessories

DK-35A: DIN-Rail Mounting Kit (35 mm)
CBL-RJ45M9-150: 8-pin RJ45 to male DB9 cable, 150 cm
CBL-RJ45F9-150: 8-pin RJ45 to female DB9 cable, 150 cm
CBL-RJ45M25-150: 8-pin RJ45 to male DB25 cable, 150 cm
CBL-RJ45F25-150: 8-pin RJ45 to female DB25 cable, 150 cm
NP21101: DB25(M) to DB9(F) RS-232 cable, 30 cm

Pin Assignment

NPort 5610-8-DT-J

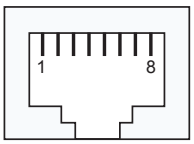
RJ45 RS-232 Port



PIN	RS-232
1	DSR (in)
2	RTS (out)
3	GND
4	TxD (out)
5	RxD (in)
6	DCD (in)
7	CTS (in)
8	DTR (out)

NPort 5650-8-DT-J

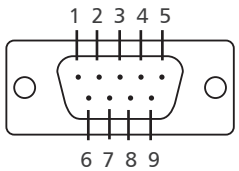
RJ45 RS-232/422/485 Port



PIN	RS-232	RS-422/485 (4W)	RS-485 (2W)
1	DSR (in)	---	---
2	RTS (out)	TxD+	---
3	GND	GND	GND
4	TxD (out)	TxD-	---
5	RxD (in)	RxD+	Data+
6	DCD (in)	RxD-	Data-
7	CTS (in)	---	---
8	DTR (out)	---	---

NPort 5610-8-DT

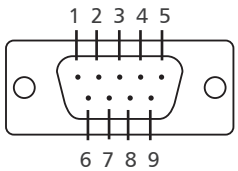
Male DB9 RS-232 Port



PIN	RS-232
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS

NPort 5650-8-DT / NPort 5650I-8-DT

Male DB9 RS-232/422/485 Port



PIN	RS-232	RS-422/485 (4W)	RS-485 (2W)
1	DCD	TxD-(A)	–
2	RxD	TxD+(B)	–
3	TxD	RxD+(B)	Data+(B)
4	DTR	RxD-(A)	Data-(A)
5	GND	GND	GND
6	DSR	–	–
7	RTS	–	–
8	CTS	–	–
9	---	–	–

Specifications

LAN

Ethernet: 2 10/100 Mbps, RJ45

Protection: Built-in 1.5 KV magnetic isolation

NPort 5610-8-DT Serial Interface

Interface: RS-232

No. of Ports: 8

Port Type: RJ45 (8-pin) or DB9 (male)

Signals: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

NPort 5650-8-DT Serial Interface

Interface: RS-232/422/485

No. of Ports: 8

Port Type: RJ45 (8-pin) or DB9 (male)

Signals:

RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

RS-422: Tx+, Tx-, Rx+, Rx-, GND

RS-485 (2-wire): Data+, Data-, GND

RS-485 (4-wire): Tx+, Tx-, Rx+, Rx-, GND

Serial Line Protection: 15 KV ESD for all signals

Isolation: 2 KV (NPort 5650I-8-DT)

RS-485 Data Direction: ADDC™ (Automatic Data Direction Control)

Power Line Protection

4 KV burst (EFT), EN6 000-4-4

2 KV surge, EN6 000-4-5

Advanced Built-in Features

HMI: LCM display with four push buttons

Buzzer

Real-Time Clock

Watchdog Timer

Serial Communication Parameters

Parity: None, Even, Odd, Space, Mark

Data Bits: 5, 6, 7, 8

Stop Bit(s): 1, 1.5, 2

Flow Control: RTS/CTS, XON/XOFF, DSR/DTR (only for RS-232)

Transmission Speed: 50 bps to 921.6 Kbps

Software Features

Protocols:

ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP, HTTP, SMTP, SNTP, Rtelnet, ARP, RFC2217

Utilities:

NPort Administrator for Windows 95/98/ME/NT/2000/XP/2003/Vista

OS Driver Support:

Windows 95/98/ME/NT/2000//XP/2003/2003 x64/Vista/Vista x64 Real COM driver/Linux Real TTY driver/SCO Unix/SCO OpenServer 5/OpenServer 6/UnixWare7/UnixWare 2.1/SVR4.2/QNX 4.25/QNX 6/Solaris 10/FreeBSD 5/FreeBSD 6

Configuration: Web Browser, Telnet Console, or NPort Administrator

Power Requirements

Power Input:

Desktop model: 12 to 48 VDC

Power Consumption:

NPort 5610-8-DT: 621 mA for 12V, 140 mA for 48V

NPort 5610-8-DT-J: 621 mA for 12V, 140 mA for 48V

NPort 5650-8-DT: 580 mA for 12V, 156 mA for 48V

NPort 5650I-8-DT: 1066 mA for 12V, 200 mA for 48V

NPort 5650-8-DT-J: 580 mA for 12V, 156 mA for 48V

Mechanical

Material: SECC sheet metal (0.8 mm)

Dimensions (W × D × H):

197 x 135.5 x 44 mm (without ears)

229 x 135.5 x 46 mm (with ears)

197 x 135.5 x 53 mm (with DIN-Rail kit on bottom panel)

Gross Weight:

NPort 5610-8-DT: 1.76 kg

NPort 5610-8-DT-J: 1.17 kg

NPort 5650-8-DT: 1.77 kg

NPort 5650I-8-DT: 1.85 kg

NPort 5650-8-DT-J: 1.71 kg

Environment

Operating Temperature: 0 to 55°C (32 to 131°F), 5 to 95%RH

Storage Temperature: -20 to 70°C (-4 to 158°F), 5 to 95%RH

Regulatory Approvals

EMC:

CE: EN55022 Class A/EN55024

FCC: FCC Part 15 Subpart B, Class A

Safety:

UL: UL60950-1

TÜV: EN60950-1

Warranty: 5 years