NPort 5600 Series

16/8-port RS-232/422/485 Rackmount Serial Device Servers

NPort 5610-8
NPort 5630-8
NPort 5650-8

NPort 5610-16
NPort 5630-16
NPort 5650-16

Features

- Easy-to-use LCM (Liquid Crystal Module) interface for IP address configuration
- Standard 19-inch rack-mountable
- Auto-detecting 10/100 Mbps Ethernet
- 16 or 8 RS-232/422/485 ports
- Surge protection for all serial signals (15 KV ESD)
- Supports TCP Server, TCP Client, UDP, and Real COM Modes
- Supports web, Telnet console
- Supports SNMP MIB-II for network management

Make Up to 16 RS-232/422/485 Serial Devices Internet Ready

NPort 5600 provides a convenient and transparent way for Ethernet connection that not only protects your current hardware investment, but also ensures future network expandability. Perform some simple configuration tasks, and you'll be ready to network your existing serial devices. NPort 5600 can transparently transmit data bi-directionally between the serial and Ethernet interfaces. By using NPort 5610, you can centralize serial device management and distribute the management hosts at the same time.

19-Inch Rackmount Device Server

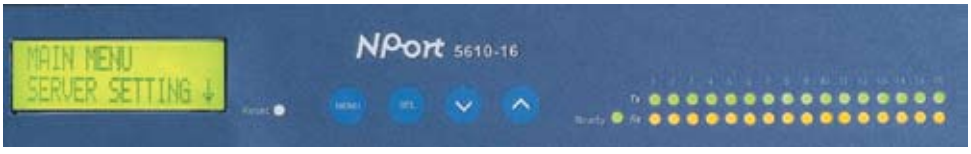
NPort 5600 Series has a professional cabinet design, with Tx/Rx LEDs for all ports on the front panel, and the 8/16 RS-232 RJ45 connectors on the rear panel. This makes NPort 5600 Series suitable for standard 19-inch rack mounting, simplifying operation, maintenance, and administration.

Real COM/TTY Port

After installing the real COM/TTY driver that comes with NPort 5600 Series, the serial ports on NPort 5600 Series are recognized as Real COM ports by the Windows operating system, or real tty ports by Linux environments. NPort provides both the basic transmit/receive data functions, as well as RTS, CTS, DTR, DSR, and DCD control signals.

Useful LED Indicators

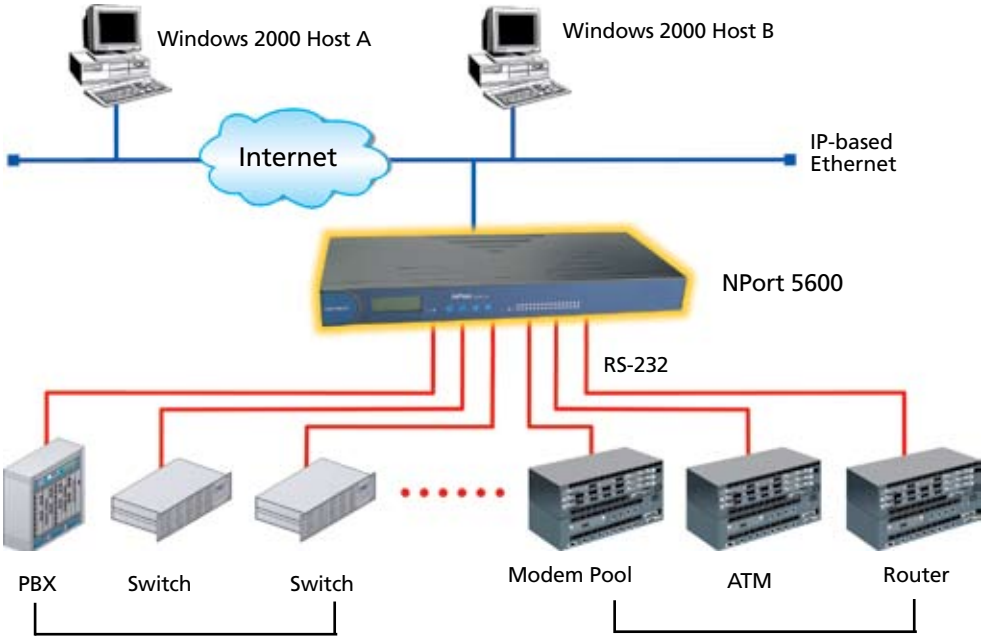
The system LED, Serial Tx/Rx LEDs, and Ethernet LED on the NPort help field engineers analyze field problems, and provide a simple way to ease monitoring tasks. NPort 5600's LEDs not only indicate current system and network status, but also assist field engineers in monitoring the status of attached serial devices.



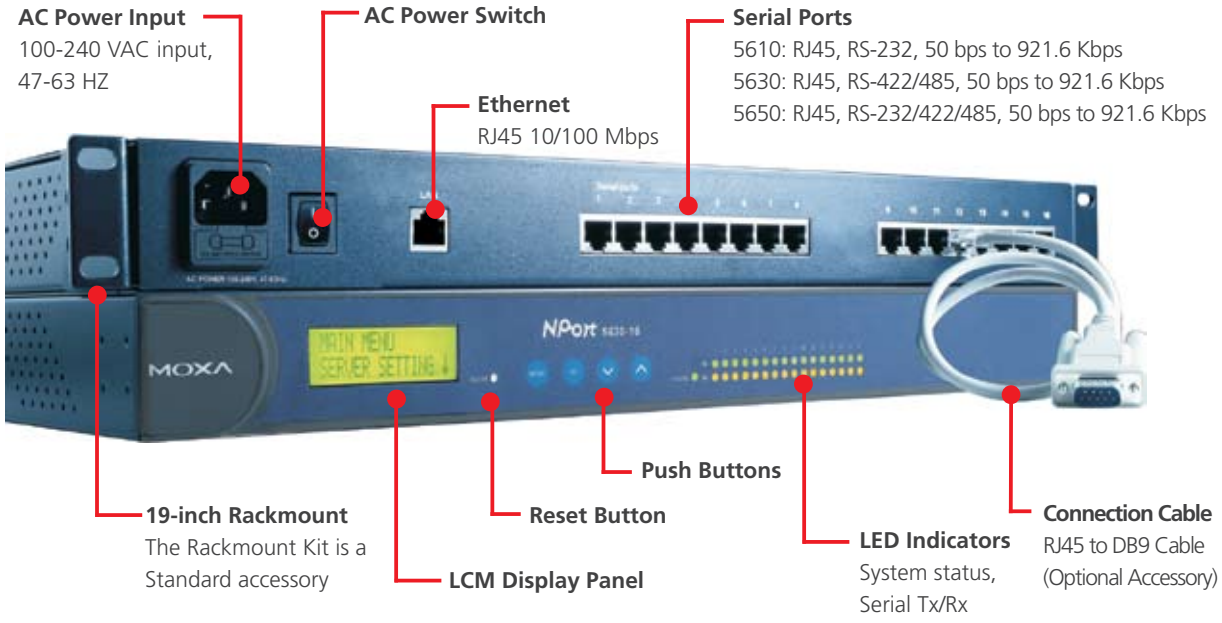
Typical Applications

1 NPort 5600 can be shared by several different host computers

Different host computers can share the same NPort 5600 to control different devices. For example, ports 1, 2, and 3 can be configured to Host A's COM3, COM4, and COM5, and ports 14, 15, and 16 can be confi gured to Host B's COM3, COM4, and COM5. By using NPort 5600, you can simultaneously centralize serial device management and distribute the management hosts over the network.



NPort 5600 Series Appearance



Ordering Information

NPort 5610-8: 8-Port RS-232 Serial Device Server, 100 to 240 VAC power input
NPort 5610-16: 16-Port RS-232 Serial Device Server, 100 to 240 VAC power input
NPort 5610-8-48V: 8-Port RS-232 Serial Device Server, 48 VDC power input
NPort 5610-16-48V: 16-Port RS-232 Serial Device Server, 48 VDC power input
NPort 5630-8: 8-Port RS-422/485 Serial Device Server, 100 to 240 VAC power input
NPort 5630-16: 16-Port RS-422/485 Serial Device Server, 100 to 240 VAC power input
NPort 5650-8: 8-Port RS-232/422/485 Serial Device Server, 100 to 240 VAC power input
NPort 5650-16: 16-Port RS-232/422/485 Serial Device Server, 100 to 240 VAC power input
NPort 5650-8-M-SC: 8-Port RS-232/422/485 Serial Device Server, 10/100BaseF(X), Multi Mode Fiber (SC Connector)
NPort 5650-16-M-SC: 16-Port RS-232/422/485 Serial Device Server, 10/100BaseF(X), Multi Mode Fiber (SC Connector)
NPort 5650-8-S-SC: 8-Port RS-232/422/485 Serial Device Server, 10/100BaseF(X), Single Mode Fiber (SC Connector)
NPort 5650-16-S-SC: 16-Port RS-232/422/485 Serial Device Server, 10/100BaseF(X), Single Mode Fiber (SC Connector)

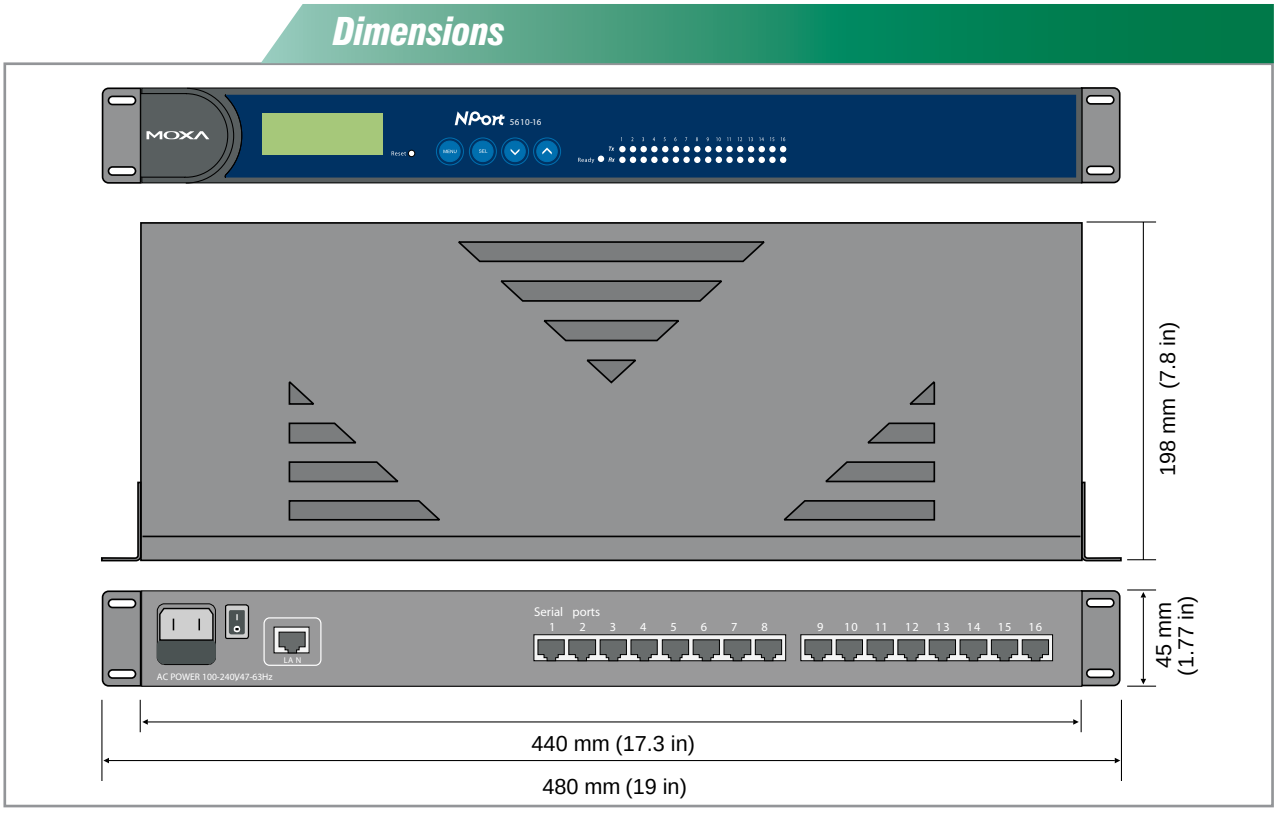
All items include

- 8/16-port serial device server x 1
- Quick Installation Guide
- NPort Document and Software CD-ROM
- Power Cord, excluded DC models

Optional Accessories

CBL-RJ45M9-150: 8-pin RJ45 to male DB9 cable, 150 cm, see page 5-4 for more information
CBL-RJ45F9-150: 8-pin RJ45 to female DB9 cable, 150 cm, see page 5-4 for more information
CBL-RJ45M25-150: 8-pin RJ45 to male DB25 cable, 150 cm, see page 5-4 for more information
CBL-RJ45F25-150: 8-pin RJ45 to female DB25 cable, 150 cm, see page 5-4 for more information

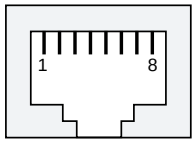
Dimensions



Pin Assignment

NPort 5610

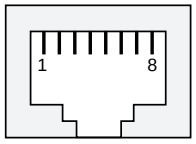
RJ45 RS-232 port



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 5630

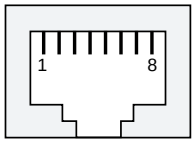
RJ45 RS-422/485 port



PIN	RS-422/485 (4W)	RS-485 (2W)
1	---	---
2	---	---
3	TxD+	---
4	TxD-	---
5	RxD-	Data-
6	RxD+	Data+
7	GND	GND
8	---	

NPort 5650

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)	---	

Specifications

LAN

Ethernet: 10/100 Mbps, RJ45, Auto MDI/MDIX
Protection: Built-in 1.5 KV magnetic isolation

Serial

NPort 5610

Interface: RS-232, 8-pin RJ45
Signals: TxD, RxD, RTS, CTS, DTR, DSR, GND, DCD

NPort 5630

Interface: RS-422/485, 8-pin RJ45
Signals: RS-422: Tx+, Tx-, Rx+, Rx-, GND
RS-485 (2-wire): Data+, Data-, GND
RS-485 (4-wire): Tx+, Tx-, Rx+, Rx-, GND
RS-485 Data Direction Control:
Patented Automatic Data Direction Control (ADDC™)

NPort 5650

Interface: RS-232/422/485, 8-pin RJ45
Signals: RS-232: TxD, RxD, RTS, CTS, DTR, DSR, GND, DCD
RS-422: Tx+, Tx-, Rx+, Rx-, GND
RS-485 (2-wire): Data+, Data-, GND
RS-485 (4-wire): Tx+, Tx-, Rx+, Rx-, GND
RS-485 Data Direction Control:
Patented Automatic Data Direction Control (ADDC™)
Serial line protection: 15 KV ESD for all signals
Power Line protection: 1 KV Burst (EFT), EN61000-4-4
0.5 KV Surge, EN61000-4-5

Optical Fiber:

Distance:
Multi mode: 0 to 2 km, 1310 nm (62.5/125 µm, 500 MHz*km)
Single mode: 0 to 40 km, 1310 nm (9/125 µm, 3.5 PS/(nm*km)
Min. TX Output: Multi mode: -20 dBm
Single mode: 0 to 40 km, -20 dBm
Max. TX Output: Multi mode: -14 dBm
Single mode: 0 to 40 km, 0 dBm
Sensitivity: -36 to -32 dBm (Single), -34 to -30 dBm (Multi)

Built-in HMI LCM display with four push buttons
Built-in Buzzer
Built-in Real Time Clock
Built-in Watchdog Timer

Serial Communication Parameters

Parity: None, Even, Odd, Space, Mark
Data bits: 5, 6, 7, 8
Stop bits: 1, 1.5, 2
Flow control: RTS/CTS, DTR/DSR (NPort 5610 only), XON/XOFF
Speed: 50 bps to 921.6 Kbps Software Features
Protocols: ICMP, IP, TCP, UDP, DHCP, BootP, Telnet, DNS, SNMP, HTTP, SMTP, SNTP, PPP, SLIP, RTelnet, RFC2217
Utilities: NPort Administration Suite for Windows 95/98/ME/NT/2000/XP/2003
OS Driver Support: Windows 95/98/ME/NT/2000/XP/2003/XP x64/2003 x64 COM driver, Linux real TTY driver, SCO Unix, SCO OpenServer 5, UnixWare 7, UnixWare 2.1.x, SVR4.2, QNX
Configuration: Web/Telnet console, or Windows utility

Power Requirements

Power Input: 110 to 220 VAC/VDC input, 47 to 63 Hz
Power Consumption:
5610-8/16: 200 mA for 100V, 145 mA for 240V
5610-8/16-48V: 215 mA (at 48V max.)
5630-8/16: 212 mA for 100V, 130 mA for 240V
5650-8/16: 158 mA for 100V, 102 mA for 240V
5650-S-SC-8/16: 164 mA for 100V, 110 mA for 240V
5650-M-SC-8/16: 174 mA for 100V, 113 mA for 240V

Mechanical Specifications

Material: SECC sheet metal (1 mm)

Environmental

Operating Temperature: 0 to 55°C (32 to 131°F), 5 to 95% RH
Storage Temperature: -20 to 75°C (-4 to 167°F), 5 to 95% RH

Regulatory Approvals

EMC: CE: EN55022 Class A/EN 55024
IEC 61000-4-12 (for NPort 5610-16, NPort 5610-8-48)
FCC: FCC Part 15 Subpart B Class A
Safety: UL: UL60950-1, TÜV: EN60950-1

Warranty: 5 years