NPort® 5400 Series

4-port RS-232/422/485 serial device servers

- 10/100M auto-sensing Ethernet
- 4 serial ports supporting RS-232/422/485
- Built-in 15 KV ESD surge protection for all serial signals
- Socket modes: TCP server/TCP client/UDP/Real COM
- Configure via Telnet/Web/Windows utility
- SNMP MIB-II for network management
- 2 KV isolation protection for NPort 5430I/5450I/5450I-T
- -40 to 75°C operating temperature range (T model)

Network Readiness for up to Four Serial Devices

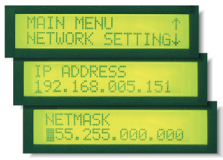
NPort® 5400 device servers can conveniently and transparently connect up to four serial devices to an Ethernet network, allowing you to network your existing serial devices with only basic configuration. Data transmission between the serial and Ethernet interfaces is bi-directional. By using NPort® device servers, you not only protect your current hardware investment, but also allow for future network expansion. You can both centralize the management of your serial devices, and distribute management hosts over the network.

Independent Operation Mode for Each Serial Port

NPort® 5400 device servers can be used to connect different devices for remote data polling or event handling over a TCP/IP network. Each serial port on the NPort® 5400 operates independently to provide maximum versatility. For example, port 1 can operate in Driver mode, port 2 in TCP Server mode, and ports 3 and 4 in TCP Client mode.

User-friendly LCD Panel for Easy Installation

An LCD panel is built into the NPort® 5400's top panel, with four buttons for inputting data, configuration, and selecting the operation mode. The LCD panel displays the server name, serial number, and IP address, and can be used to enter or modify parameters such as IP address, netmask, and gateway. (The LCD panel is not available on wide temperature models.)



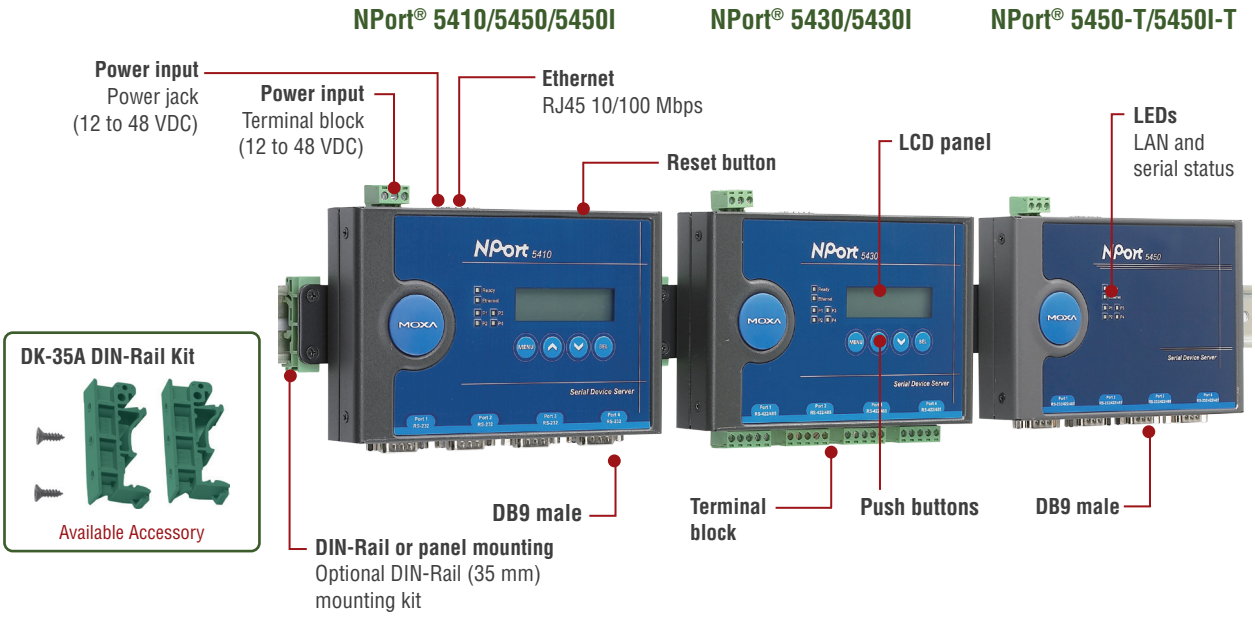
Dual DC Power Inputs

NPort® 5400 device servers support dual power sources by providing both a DC terminal block input and a DC power jack input. Providing two types of power input gives users greater flexibility for use with different applications.

Adjustable Termination and Pull High/Low Resistors

The NPort 5400 series provides adjustable termination and pull high/low resistors for RS-485 applications. In some critical environments, termination resistors may be needed to prevent the reflection of serial signals, and the pull high/low resistors may need adjusting to maintain the integrity of the electrical signal. Since no set of resistor values is universally compatible with all environments, the NPort® 5400 has four sets of DIP switches on the bottom panel to set the termination and pull high/low resistor values.

Appearance



Specifications

Ethernet Interface

Number of Ports: 1
Speed: 10/100 Mbps, auto MDI/MDIX
Connector: 8-pin RJ45
Magnetic Isolation Protection: 1.5 KV built-in

Serial Interface

Number of Ports: 4
Serial Standards:
NPort 5410: RS-232
NPort 5430/5430I: RS-422/485 (software selectable)
NPort 5450/5450I/5450-T/5450I-T: RS-232/422/485 (software selectable)
Connector:
NPort 5410/5450/5450I/5450-T/5450I-T: DB9 male
NPort 5430/5430I: Terminal block
Serial Line Protection:
15 KV ESD protection for all signals
2 KV isolation protection (NPort 5430I/5450I/5450I-T)
RS-485 Data Direction Control: ADDC® (automatic data direction control)
Pull High/Low Resistor for RS-485: 1 KΩ, 150 KΩ
Terminator for RS-485: 120 Ω

Serial Communication Parameters

Data Bits: 5, 6, 7, 8
Stop Bits: 1, 1.5, 2
Parity: None, Even, Odd, Space, Mark
Flow Control: RTS/CTS and DTR/DSR (RS-232 only), XON/XOFF
Baudrate: 50 bps to 921.6 Kbps

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

Software

Network Protocols: ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP V1, HTTP, SMTP, SNTP, Rtelnet, ARP
Configuration Options: Web Console, Telnet Console, Windows Utility
Windows Real COM Drivers: Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7 x86/x64, Embedded CE 5.0/6.0, XP Embedded
Fixed TTY Drivers: SCO Unix, SCO OpenServer, UnixWare 7, UnixWare 2.1, SVR 4.2, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i
Linux Real TTY Drivers: Linux kernel 2.4.x, 2.6.x, 3.0.x

Mini Screen with Push Buttons (standard temp. models only)

LCD Panel: Liquid Crystal Display on the case
Push Buttons: Four push buttons for convenient on-site configuration

Physical Characteristics

Housing: Metal
Weight: 740 g
Dimensions:
Without mounting kit: 158 x 103 x 33 mm (6.22 x 4.06 x 1.30 in)
With mounting kit: 181 x 103 x 33 mm (7.14 x 4.06 x 1.30 in)

Environmental Limits

Operating Temperature:
Standard Models: 0 to 55°C (32 to 131°F)
Wide Temp. Models: -40 to 75°C (-40 to 167°F)
Storage Temperature: -40 to 75°C (-40 to 167°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Power Requirements

Input Voltage: 12 to 48 VDC
Power Consumption:
NPort 5410: 350 mA @ 12 V, 190 mA @ 24 V
NPort 5430: 320 mA @ 12 V, 175 mA @ 24 V
NPort 5430I: 530 mA @ 12 V, 280 mA @ 24 V
NPort 5450/5450-T: 350 mA @ 12 V, 190 mA @ 24 V
NPort 5450I/5450I-T: 554 mA @ 12 V, 294 mA @ 24 V

Standards and Certifications

Safety: UL 60950-1, EN 60950-1
EMC: CE, FCC
EMI: EN 55022 Class A, FCC Part 15 Subpart B Class A
EMS: EN 55024
Marine: DNV (standard temp. models only)
Medical: EN 60601-1-2 Class B, EN 55011 (NPort 5410/5450/5450I only)

Reliability

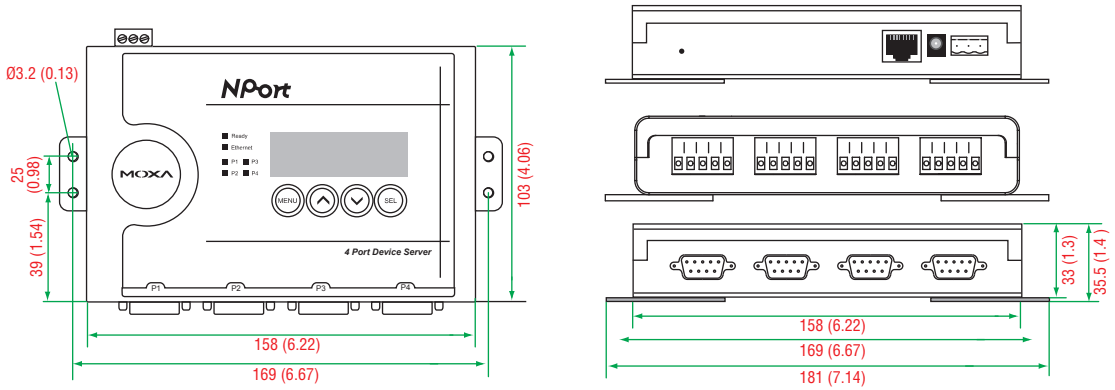
Alert Tools: Built-in buzzer and RTC (real-time clock)
Automatic Reboot Trigger: Built-in WDT (watchdog timer)
MTBF (mean time between failures):
NPort 5410: 205,153 hrs
NPort 5430: 201,699 hrs
NPort 5430I: 114,540 hrs
NPort 5450/5450I: 206,903 hrs
NPort 5450-T/5450I-T: 206,903 hrs

Warranty

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

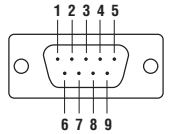
Dimensions

Unit: mm (inch)



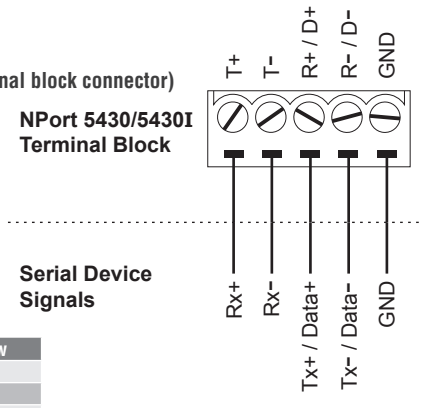
Pin Assignment

NPort® 5410
(RS-232, DB9 male connector)

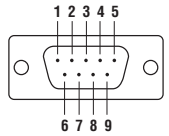


PIN	RS-232
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	–

NPort® 5430/5430I
(RS-422/485, terminal block connector)



NPort® 5450/5450I/5450-T/5450I-T
(RS-232/422/485, DB9 male connector)



PIN	RS-232	RS-422/RS-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	–	–

Ordering Information

Available Models

NPort 5410: 4-port RS-232 device server
NPort 5430: 4-port RS-422/485 device server
NPort 5430I: 4-port RS-422/485 device server with 2 KV isolation protection
NPort 5450: 4-port RS-232/422/485 device server
NPort 5450I: 4-port RS-232/422/485 device server with 2 KV isolation protection
NPort 5450-T: 4-port RS-232/422/485 device server, -40 to 75°C operating temperature (without LCM)
NPort 5450I-T: 4-port RS-232/422/485 device server with 2KV isolation protection, -40 to 75°C operating temperature (without LCM)

Package Checklist

- NPort 5400 device server
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

Optional Accessories (can be purchased separately)

DK-35A: Mounting Kit for 35-mm DIN-Rail
DIN-Rail Power Supply: See page A-8 for details
Terminal Block: See page A-7 for details
Power Adaptor: See page A-9 for details
PWR-12150-USJP-SA-T: 100 to 240 VAC input, 12 VDC/1.5A output, -40 to 75°C, screw type, US/JP Plug
PWR-12150-EU-SA-T: 100 to 240 VAC input, 12 VDC/1.5A output, -40 to 75°C, screw type, EU Plug
PWR-12150-UK-SA-T: 100 to 240 VAC input, 12 VDC/1.5A output, -40 to 75°C, screw type, UK Plug
PWR-12150-CN-SA-T: 100 to 240 VAC input, 12 VDC/1.5A output, -40 to 75°C, screw type, CN Plug
PWR-12150-AU-SA-T: 100 to 240 VAC input, 12 VDC/1.5A output, -40 to 75°C, screw type, AU Plug

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Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.

AutoCont IPC a.s.

Váš dodavatel průmyslových počítačů, komponent a speciálních průmyslových IT systémů.

Uhlířská 1064/3, 710 00 Ostrava, Česká republika

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Záruka 2 roky na vyráběné počítače s možností jejího prodloužení až na 5 let.

ODMĚNA ZA VĚRNOST
Pravidelní zákazníci u nás nakupují za nižší ceny. Výše slevy se odvíjí od realizovaného obratu.

SERVIS ON-SITE A IN-TIME
K projektovým dodávkám nabízíme rozšířenou podporu a servis s garancí výměny zařízení do 48 hodin.