NPort 5600-8-DT Lite

Preliminary

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



- 8 serial ports supporting RS-232/422/485
- Compact desktop design
- 10/100M auto-sensing Ethernet
- Built-in 15 KV ESD protection for all serial signals
- Choice of configuration methods: Web console, Telnet console, and Windows utility
- Versatile socket operation modes, including TCP Server, TCP Client, UDP, and Real COM
- SNMP MIB-II for network management

Overview

NPort® 5600-8-DTL device servers can conveniently and transparently connect 8 serial devices to an Ethernet network, 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. Since the NPort® 5600-8-DTL device servers have a smaller form factor compared to our 19-inch models, they are a great choice for applications that need additional serial ports, but for which mounting rails are not available.

Convenient Design for RS-485 Applications

The NPort® 5650-8-DTL device servers support selectable 1 KΩ and 150 KΩ pull high/low resistors and a 120 Ω 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-DTL device servers use DIP switches to allow users to adjust termination and pull high/low resistor values manually for each serial port.

LED Indicators to Ease Your Maintenance Tasks

The System LED, Serial Tx/Rx LEDs, and Ethernet LEDs (located on the RJ45 connector) provide a great tool for basic maintenance tasks and help engineers analyze problems in the field. The NPort® 5600's LEDs not only indicate current system and network status, but also help field engineers monitor the status of attached serial devices.

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: 8
Serial Standards:
NPort 5610-8-DTL: RS-232
NPort 5650-8-DTL/5650I-8-DTL: RS-232/422/485
Connector: DB9 male
Serial Line Protection:
15 KV ESD protection for all signals
2 KV isolation protection (NPort 5650I-8-DTL only)
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: DSR/DTR and RTS/CTS (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, RFC2217
Configuration Options: Web Console, Telnet Console, Serial 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

Physical Characteristics
Housing: Metal, IP30 protection
Weight:
NPort 5610-8-DTL: 1760 g
NPort 5650-8-DTL: 1770 g
NPort 5650I-8-DTL: 1850 g
Dimensions:
Without ears: 197 x 44 x 125 mm (7.76 x 1.73 x 4.92 in)
With ears: 229 x 46 x 125 mm (9.01 x 1.81 x 4.92 in)
With DIN-Rail kit on bottom panel: 197 x 53 x 125 mm (7.76 x 2.09 x 4.92 in)

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)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Power Requirements
Input Voltage: 12 to 48 VDC
Power Consumption:
NPort 5610-8-DTL:
340 mA @ 12 V, 180 mA @ 24 V, 110 mA @ 48 V
NPort 5650-8-DTL:
470 mA @ 12 V, 250 mA @ 24 V, 140 mA @ 48 V
NPort 5650I-8-DTL:
740 mA @ 12 V, 370 mA @ 24 V, 220 mA @ 48 V

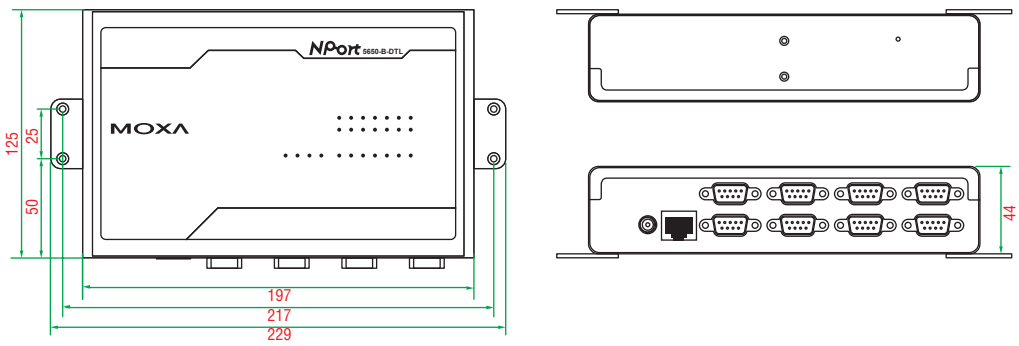
Standards and Certifications
Safety: UL 60950-1, EN 60950-1
EMC: CE, FCC
EMI: EN 55022 Class A, FCC Part 15 Subpart B Class A
EMS: EN 55024

Reliability
Alert Tools: Built-in buzzer and RTC (real-time clock)
Automatic Reboot Trigger: Built-in WDT (watchdog timer)

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

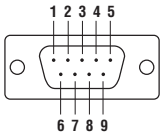
Dimensions

Unit: mm (inch)



Pin Assignment

DB9 male connector



NPort® 5610-8-DTL (RS-232)

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

NPort® 5650-8-DTL/5650I-8-DTL (RS-232/422/485)

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	–	–

Ordering Information

Available Models

NPort 5610-8-DTL: 8-port RS-232 desktop device server with DB9 male connectors, 0 to 60°C operating temperature
NPort 5650-8-DTL: 8-port RS-232/422/485 desktop device server with DB9 male connectors, 0 to 60°C operating temperature
NPort 5650I-8-DTL: 8-port RS-232/422/485 desktop device server with DB9 male connectors and 2 KV isolation, 0 to 60°C operating temperature
NPort 5610-8-DTL-T: 8-port RS-232 desktop device server with DB9 male connectors, -40 to 75°C operating temperature
NPort 5650-8-DTL-T: 8-port RS-232/422/485 desktop device server with DB9 male connectors, -40 to 75°C operating temperature
NPort 5650I-8-DTL-T: 8-port RS-232/422/485 desktop device server with DB9 male connectors and 2 KV isolation, -40 to 75°C operating temperature

Package Checklist

- NPort 5600-8-DTL device server
- Power cord and adaptor (standard temp. models only)
- 2 metal plates (wall mount kit)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

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