NPort 5600-DTL Series

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

Features and Benefits

- 8 serial ports supporting RS-232/422/485
- Compact desktop design
- 10/100M auto-sensing Ethernet
- Configure by Telnet, web browser, or Windows utility
- Supports Real COM and TCP server, TCP client, UDP socket modes
- SNMP MIB-II for network management

Certifications

Introduction

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 basic configurations. You can both centralize management of your serial devices and distribute management hosts over the network. The NPort® 5600-8-DTL device servers have a smaller form factor than our 19-inch models, making them a great choice for applications that need additional serial ports when mounting rails are not available.
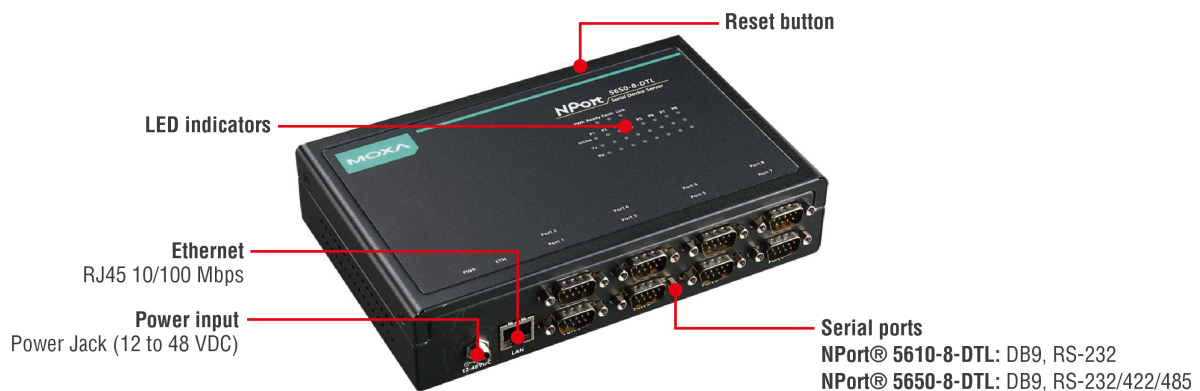
Convenient Design for RS-485 Applications

The NPort® 5650-8-DTL device servers support selectable 1 kilo-ohm and 150 kilo-ohms pull high/low resistors and a 120-ohm 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 they also help field engineers monitor the status of attached serial devices.

Appearance

Reset button

LED indicators

Ethernet
RJ45 10/100 Mbps

Power input
Power Jack (12 to 48 VDC)

Serial ports
NPort® 5610-8-DTL: DB9, RS-232
NPort® 5650-8-DTL: DB9, RS-232/422/485

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Specifications

Ethernet Interface

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

Ethernet Software Features

Configuration Options	Serial Console, Telnet Console, Web Console (HTTP/HTTPS), Windows Utility
Management	ARP, BOOTP, DHCP Client, DNS, HTTP, HTTPS, ICMP, IPv4, LLDP, Rtelnet, SMTP, SNMPv1/v2c, Telnet, TCP/IP, UDP
Filter	IGMP v1/v2
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 (x64), Windows Embedded CE 5.0/6.0, Windows XP Embedded
Fixed TTY Drivers	SCO UNIX, SCO OpenServer, UnixWare 7, QNX 4.25, QNX 6.x, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i, Mac OS X
Linux Real TTY Drivers	Kernel version: 2.4.x, 2.6.x, 3.x, 4.x
Android API	Android 3.1.x and later
MIB	RFC1213, RFC1317
Time Management	SNTP

Serial Interface

Connector	DB9 male
No. of Ports	8
Serial Standards	NPort 5610-8-DTL Series: RS-232 NPort 5650-8-DTL Series: RS-232, RS-422, RS-485
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	RTS/CTS, DTR/DSR, XON/XOFF
Isolation	NPort 5650I-8-DTL Series: 2 kV
Pull High/Low Resistor for RS-485	1 kilo-ohm, 150 kilo-ohms
RS-485 Data Direction Control	ADDC® (automatic data direction control)
Terminator for RS-485	NPort 5650 Series: 120 ohms

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-DTL Series: 340 mA @ 12 VDC NPort 5650-8-DTL Series: 470 mA @ 12 VDC NPort 5650I-8-DTL Series: 740 mA @ 12 VDC
No. of Power Inputs	1
Input Voltage	12 to 48 VDC
Reverse Polarity Protection	Supported
Source of Input Power	Power input jack

Physical Characteristics

Housing	Metal
Dimensions (with ears)	229 x 135.43 x 46 mm (9.02 x 5.33 x 1.81 in)
Dimensions (without ears)	197 x 135.43 x 44 mm (7.76 x 5.33 x 1.73 in)
Weight	NPort 5610-8-DTL Series: 1760 g (3.88 lb) NPort 5650-8-DTL Series: 1770 g (3.90 lb) NPort 5650I-8-DTL Series: 1850 g (4.08 lb)
Installation	Desktop, DIN-rail mounting (with optional kit), Wall mounting (with optional kit)

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 (package included)	-40 to 75°C (-40 to 167°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	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: 1 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 2 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 PFMF IEC 61000-4-11 DIPs
Safety	UL 60950-1

Declaration

Green Product	RoHS, CRoHS, WEEE

MTBF

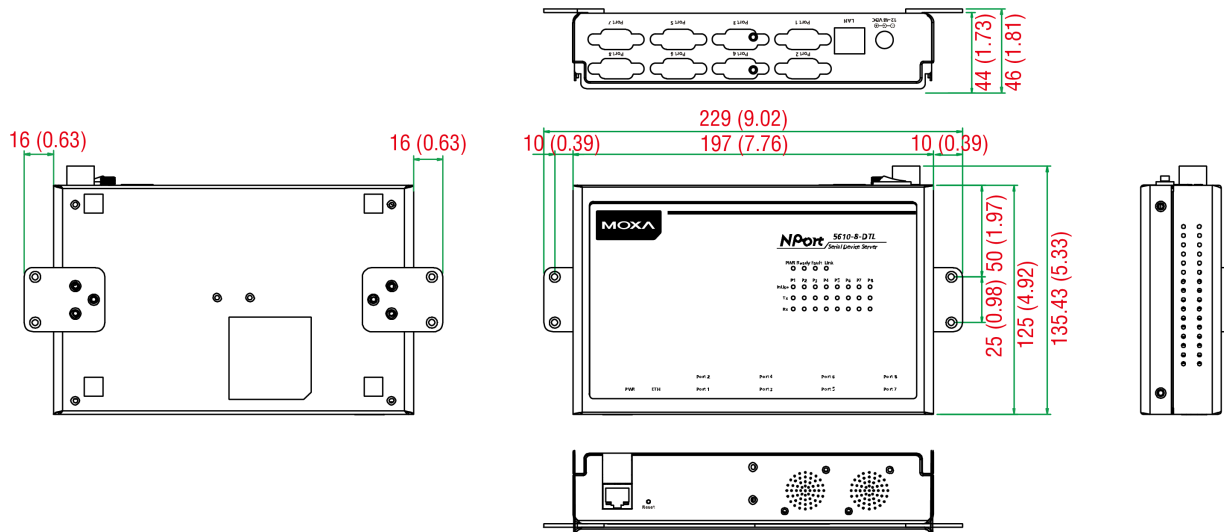|	
Time	NPort 5610-8-DTL Series: 953,388 hrs NPort 5650-8-DTL Series: 740,457 hrs NPort 5650I-8-DTL Series: 258,150 hrs
Standards	Telcordia (Bellcore) Standard TR/SR

Warranty

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

Package Contents

Device	1 x NPort 5600-DTL Series device server
Installation Kit	1 x wall-mounting kit
Cable	1 x Ethernet, RJ45
Power Supply	1 x power adapter, suitable for your region (except -T models)
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)

Ordering Information

Model Name	Serial Interface	Serial Interface Connector	Serial Interface Isolation	Operating Temp.	Input Voltage
NPort 5610-8-DTL	RS-232	DB9	–	0 to 60°C	12-48 VDC
NPort 5610-8-DTL-T	RS-232	DB9	–	-40 to 75°C	12-48 VDC
NPort 5650-8-DTL	RS-232/422/485	DB9	–	0 to 60°C	12-48 VDC
NPort 5650-8-DTL-T	RS-232/422/485	DB9	–	-40 to 75°C	12-48 VDC
NPort 5650I-8-DTL	RS-232/422/485	DB9	2 kV	0 to 60°C	12-48 VDC
NPort 5650I-8-DTL-T	RS-232/422/485	DB9	2 kV	-40 to 75°C	12-48 VDC

Accessories (sold separately)

Connectors

ADP-RJ458P-DB9F	DB9 female to RJ45 connector
Mini DB9F-to-TB	DB9 female to terminal block connector

DIN-Rail Mounting Kits

DK35A	DIN-rail mounting kit, 35 mm

Wall-Mounting Kits

WK-35-04	Wall-mount kit with 2 plates, 6 screws

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Power Adapters

PWR-12200-DT-S1	Desktop power supply (requires power cord), 12 VDC, 2 A, 100-240 VAC, 0 to 40°C operating temperature

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

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