

NPort 5600-DT-G2 Series

8/16-port RS-232/422/485 compact desktop serial device servers

Preliminary



Features and Benefits

- 10/100/1000M auto-sensing Ethernet
- Compact desktop design: 8-port DTS and 16-port slim models available
- One-click log collection and application analysis for easy troubleshooting
- Data encryption with secure operation modes for Real COM, TCP Server, TCP Client, Pair Connection, Terminal, and Reverse Terminal
- Secure Boot only allows Moxa-authorized firmware to run on devices
- Supports SSL certificate signing by RSA-4096 and ECC-521

Certifications



Introduction

NPort 5600-8-DT-G2 device servers can conveniently and transparently connect up to 16 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-DT-G2 device servers have a slim form factor compared to our other device servers, they are a great choice for applications that need additional serial ports, but for which mounting rails are not available. The device servers also come with one-click log collection and one-click application analyzer for easy troubleshooting.

Secure Data Transmission

For many applications, guaranteeing secure data transmission is an important concern when connecting serial devices to a network. To answer this concern, the NPort@5600-DT-G2 secure terminal servers support the TLS and SSH protocols, which work by encrypting data before sending it over the network. With the NPort@5600-DT-G2, you can be rest assured that serial data is transmitted securely over both private and public networks.

One-click Logs and Application Analysis for Easy Troubleshooting

During the deployment stage, system integrators must connect devices and ensure the communication is smooth. They may encounter issues and will require tools to troubleshoot issues. Moxa provides an application analyzer that generates a report at the click of a button to help the system integrator easily identify potential issues and understand how to resolve them.

At the maintenance stage, system errors may require you to call for help. Device vendors might take a long time to troubleshoot issues because they need to collect information and then hold discussions with the technical support team. The NPort@5600-DT-G2 comes with a one-click log collection function, which can provide all the data that a technical support team needs to quickly troubleshoot system issues.

Specifications

Ethernet Interface

10/100/1000BaseT(X) Ports (RJ45 connector)	2 Auto MDI/MDI-X connection
Magnetic Isolation Protection	1.5 kV (built-in)

Ethernet Software Features

Configuration Options	Web Console (HTTPS) Windows Utility Device Search Utility (DSU) MCC Tool Serial Console
Management	ARP DHCP Client DNS

	HTTPS ICMP IPv4/IPv6 SMTP SMTPS SNMPv1/v2c/v3 SNTP TCP/IP UDP WINS
Windows Real COM Drivers	Windows 11, 10, 8.1, 8, and 7 Windows Server 2022, 2019, 2016, 2012 R2, 2012, and 2008 R2
Linux Real TTY Drivers	Kernel versions 6.x, 5.x, and 4.x
Fixed TTY Drivers	macOS versions: 14, 13, 12, and 11
Arm®-based Platform Support	Windows 11 Linux Kernel 6.x, 5.x and 4.x macOS 14, 13, 12 and 11
Virtual Machine	VMWare ESXi (Windows 11/10/8.1/8/7 & Linux 6.x, 5.x, and 4.x) VMware Fusion (Windows on macOS 14, 13, 12, and 11) Parallels Desktop (Windows on macOS 14, 13, 12, and 11)
Time Management	SNTP Client
MIB	MIB-II RFC1213, RFC1317 Private MIB

Security Functions

Root of Trust	Secure Boot True Random Number Generator (TRNG)
Authentication	Local database (RBAC support)
Encryption	HTTPS: ECC-256, ECC-384, ECC-521, RSA-1024, RSA-2048, RSA-3072, RSA-4096, AES-128, AES-256, CHACHA20, SHA-256, SHA-384, HMAC SNMPv3: AES-128, SHA-256, SHA-384 Secure OP mode: HTTPS: ECC-256, ECC-384, ECC-521, RSA-1024, RSA-2048, RSA-3072, RSA-4096, AES-128, AES-256, CHACHA20, SHA-256, SHA-384, HMAC Config Import/Export: AES-256, SHA-256, HMAC
Security Protocols	HTTPS (TLS 1.2) SNMPv3

Serial Interface

Connector	NPort 5600-8-DT-G2 models: DB9 male NPort 5600-16-DT-J-G2 models: 8-pin RJ45 NPort 5600-8-DTS-J-G2 models: 10-pin RJ50
No. of Ports	NPort 5600-8-DT-G2/5600-8-DTS-J-G2 models: 8 NPort 5600-16-DT-G2 models: 16
Serial Standards	NPort 5610-DT-G2/5610-DTS-G2 models: RS-232 NPort 5650-DT-G2/5650-DTS-G2 models: RS-232, RS-422, RS-485
Secure Operation Modes	Secure Pair Connection Secure Real COM Secure TCP Client Secure TCP Server
Standard Operation Modes	Disabled Pair Connection Real COM RFC2217 TCP Client

	TCP Server UDP
Baudrate	50 bps to 921.6 kbps (supports non-standard baudrates)
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	None RTS/CTS DTR/DSR XON/XOFF
RS-485 Data Direction Control	Automatic Data Direction Control (ADDC)
Terminator for RS-485	120 ohms
Pull High/Low Resistor for RS-485	1 kilo-ohm, 150 kilo-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

No. of Power Inputs	1
Input Current	800 mA (max.)
Input Voltage	12 to 48 VDC
Reverse Polarity Protection	Supported
Source of Input Power	Terminal block

Reliability

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

Physical Characteristics

Housing	Metal
Dimensions (without ears)	NPort 5600-DT-G2 models: 197 x 125 x 44 mm (7.76 x 4.92 x 1.73 in) NPort 5600-DTS-G2 models: 210 x 95 x 25 mm (8.27 x 3.74 x 0.98 in)
Weight	NPort 5600-8-DT-G2 models: 880 g (1.94 lbs) NPort 5600-16-DT-J-G2 models: 875 g (1.93 lbs) NPort 5600-8-DTS-J-G2 models: 610 g (1.34 lbs)
Installation	Desktop Wall mounting DIN-rail mounting (with optional kit)

Environmental Limits

Operating Temperature	Standard models: -10 to 60°C (14 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 55032/35
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 0.5 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
Safety	IEC 62368-1 UL 62368-1 EN 62368-1
Vibration	IEC 60068-2-6
Package Drop Test	ISTA 1A

Declaration

Green Product	RoHS, CRoHS, WEEE
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MTBF

Time	NPort 5610-8-DT-G2: 29,666 hrs NPort 5610-8-DT-G2-T: 2,729,079 hrs NPort 5650-8-DT-G2: 29,612 hrs NPort 5650-8-DT-G2-T: 2,339,917 hrs NPort 5650I-8-DT-G2: 29,543 hrs NPort 5650I-8-DT-G2-T: 1,971,992 hrs NPort 5610-16-DT-J-G2 models: 2,043,468 hrs NPort 5650-16-DT-J-G2 models: 1,638,263 hrs NPort 5610-8-DTS-J-G2 models: 3,499,034 hrs NPort 5650-8-DTS-J-G2 models: 2,883,685 hrs
Standards	Telcordia Standard SR-332 Telcordia SR-332 Issue 4

Warranty

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

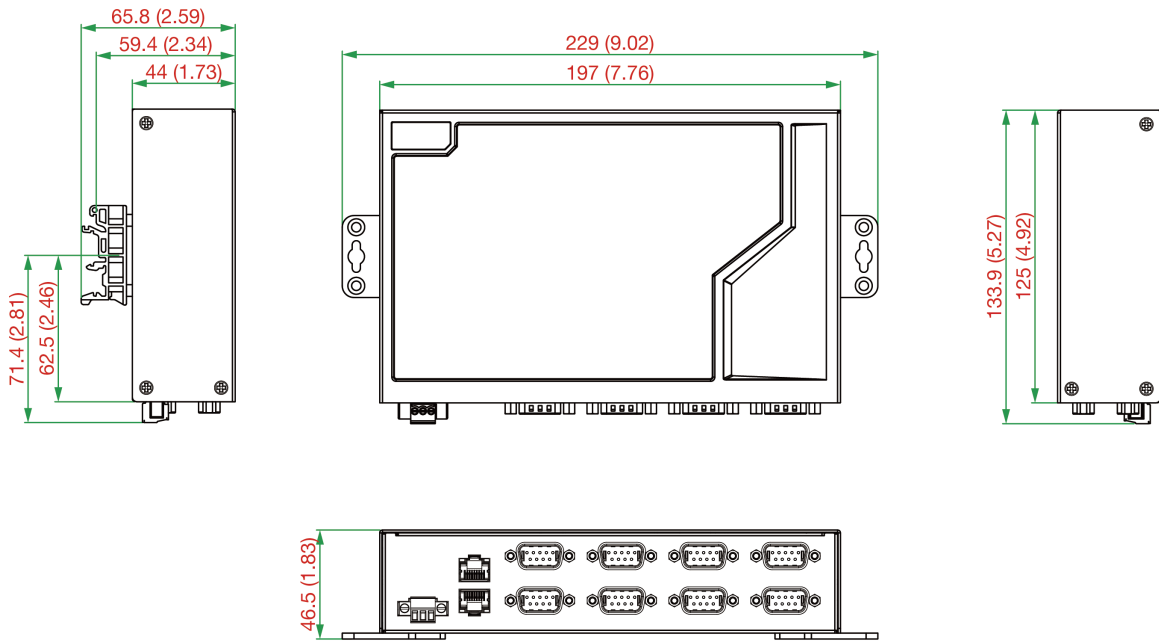
Package Contents

Device	1 x NPort 5600-DT-G2 Series device server
Installation Kit	1 x wall-mounting kit
Documentation	1 x quick installation guide

Dimensions

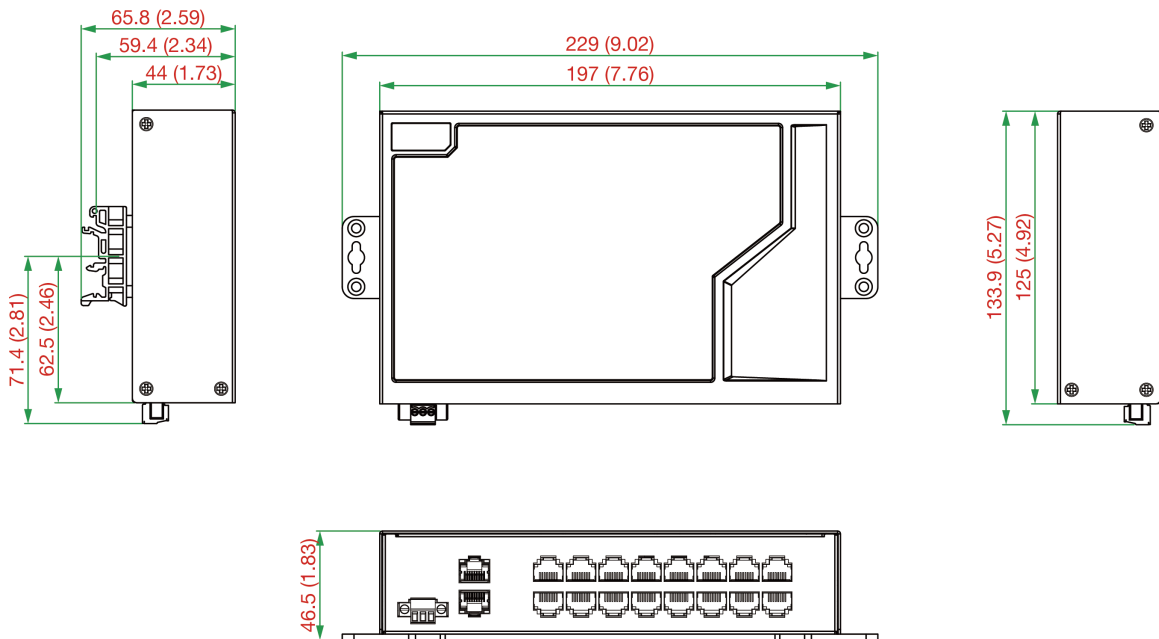
NPort 5600-8-DT-G2 Models

Unit: mm (inch)



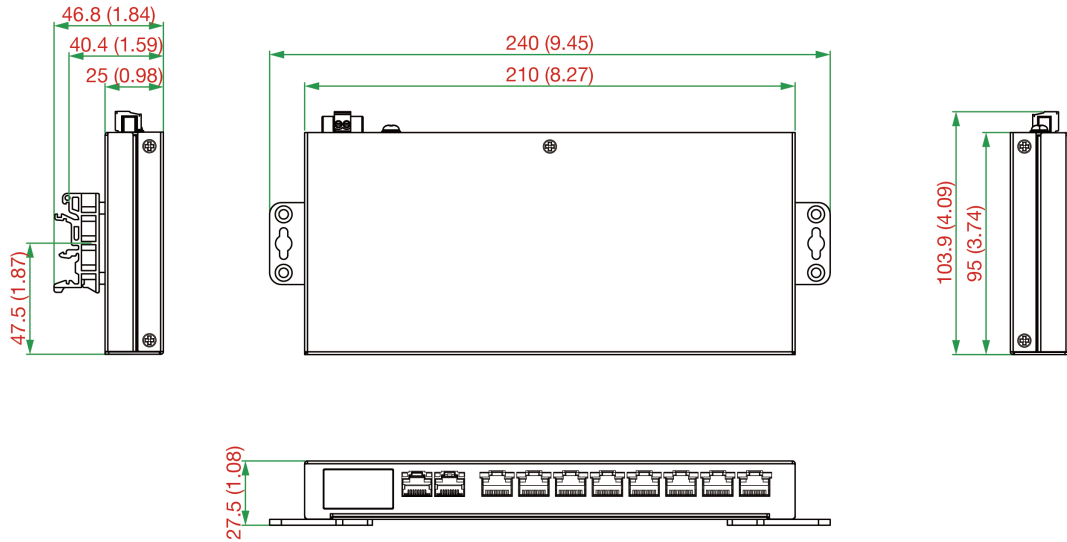
NPort 5600-16-DT-J-G2 Models

Unit: mm (inch)



NPort 5600-8-DTS-J-G2 Models

Unit: mm (inch)



Ordering Information

Model Name	Ethernet Interface	No. of Serial Ports	Serial Standards	Serial Interface Connector	Serial Interface Isolation	Operating Temp.
NPort 5610-8-DT-G2	2 x 10/100/1000M RJ45	8	RS-232	DB9 Male	-	-10 to 60°C
NPort 5610-8-DT-G2-T	2 x 10/100/1000M RJ45	8	RS-232	DB9 Male	-	-40 to 75°C
NPort 5650-8-DT-G2	2 x 10/100/1000M RJ45	8	RS-232/422/485	DB9 Male	-	-10 to 60°C
NPort 5650-8-DT-G2-T	2 x 10/100/1000M RJ45	8	RS-232/422/485	DB9 Male	-	-40 to 75°C
NPort 5650I-8-DT-G2	2 x 10/100/1000M RJ45	8	RS-232/422/485	DB9 Male	2 kV	-10 to 60°C
NPort 5650I-8-DT-G2-T	2 x 10/100/1000M RJ45	8	RS-232/422/485	DB9 Male	2 kV	-40 to 75°C
NPort 5610-16-DT-J-G2	2 x 10/100/1000M RJ45	16	RS-232	8-pin RJ45	-	-10 to 60°C
NPort 5610-16-DT-J-G2-T	2 x 10/100/1000M RJ45	16	RS-232	8-pin RJ45	-	-40 to 75°C
NPort 5650-16-DT-J-G2	2 x 10/100/1000M RJ45	16	RS-232/422/485	8-pin RJ45	-	-10 to 60°C
NPort 5650-16-DT-J-G2-T	2 x 10/100/1000M RJ45	16	RS-232/422/485	8-pin RJ45	-	-40 to 75°C
NPort 5610-8-DTS-J-G2	2 x 10/100/1000M RJ45	8	RS-232	10-pin RJ50	-	-10 to 60°C
NPort 5610-8-DTS-J-G2-T	2 x 10/100/1000M RJ45	8	RS-232	10-pin RJ50	-	-40 to 75°C
NPort 5650-8-DTS-J-G2	2 x 10/100/1000M RJ45	8	RS-232/422/485	10-pin RJ50	-	-10 to 60°C
NPort 5650-8-DTS-J-G2-T	2 x 10/100/1000M RJ45	8	RS-232/422/485	10-pin RJ50	-	-40 to 75°C

Accessories (sold separately)

Cables

CBL-F9M9-150	DB9 female to DB9 male serial cable, 1.5 m
CBL-F9M9-20	DB9 female to DB9 male serial cable, 20 cm
CBL-RJ45F25-150	8-pin RJ45 to DB25 female serial cable, 1.5 m
CBL-RJ45F9-150	8-pin RJ45 to DB9 female serial cable, 1.5m
CBL-RJ45M25-150	8-pin RJ45 to DB25 male serial cable, 1.5m
CBL-RJ45M9-150	8-pin RJ45 to DB9 male serial cable, 1.5m
CBL-RJ45SF25-150	8-pin RJ45 to DB25 female serial cable with shielding, 1.5m

CBL-RJ45SF9-150	8-pin RJ45 to DB9 female serial cable with shielding, 1.5m
CBL-RJ45SM25-150	8-pin RJ45 to DB25 male serial cable with shielding, 1.5m
CBL-RJ45SM9-150	8-pin RJ45 to DB9 male serial cable with shielding, 1.5m
CN20070	10-pin RJ50 to DB9 female serial cable

Connectors

A-ADP-RJ458P-DB9F-ABC01	DB9 female to RJ45 connector for the ABC-01 Series
Mini DB9F-to-TB	DB9 female to terminal block connector
LB-DB9F-G-01	Serial loopback DB9 adaptor
LB-RJ5010P-G-01	Serial loopback 10-pin RJ50 adapter
LB-RJ458P-G-01	Serial loopback 8-pin RJ45 adapter

DIN-Rail Mounting Kits

DK-43-01	DIN-rail mounting kit with 2 plates (42.5 x 19.3 mm), 4 M3 x 6 mm screws, black, works with the wall-mounting kit of your product
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Wall-Mounting Kits

WK-44-04	Wall-mounting kit with 2 plates (35 x 44 x 2.5 mm), 6 screws (M3 x 5 mm)
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Power Cords

CBL-PJTB-10	Non-locking barrel plug to bare-wire cable
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