

NPort® 5200 Series

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



- > Compact design for easy installation
- > Socket modes: TCP server/TCP client/UDP
- > Easy-to-use Windows utility for configuring multiple device servers
- > Supports 10/100M Ethernet
- > Patented ADDC® (Automatic Data Direction Control) for 2-wire and 4-wire RS-485
- > SNMP MIB-II for network management



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: 2
Serial Standards:
 NPort 5210: RS-232
 NPort 5230: 1 RS-232 port, 1 RS-422/485 port
 NPort 5232/5232I: RS-422/485

Connector:

NPort 5210: RJ45 (8 pins)
 NPort 5230/5232/5232I: Terminal Block (5 contacts per port)

Serial Line Protection: 2 kV isolation protection (NPort 5232I/5232I-T)

RS-485 Data Direction Control: ADDC® (automatic data direction control)

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 (RS-232 only), DTR/DSR (NPort 5210 only), XON/XOFF
Baudrate: 110 bps to 230.4 kbps

Serial Signals

RS-232:
 NPort 5210: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
 NPort 5230: TxD, RxD, RTS, CTS, 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, IPv4, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP V1, HTTP, SMTP, SNTP

Configuration Options: Web Console, Serial Console (NPort 5210/5230 only), Telnet Console, Windows Utility

Windows Real COM Drivers: Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1 (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, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i, Mac OS X
Linux Real TTY Drivers: Linux 2.4.x, 2.6.x, 3.x

Physical Characteristics

Housing: Metal
Weight:
 NPort 5210: 340 g
 NPort 5230/5232: 360 g
 NPort 5232I: 380 g
Dimensions:
 NPort 5210/5230/5232:
 Without ears: 67 x 100.4 x 22 mm (2.64 x 3.95 x 0.87 in)
 With ears: 90 x 100.4 x 22 mm (3.54 x 3.95 x 0.87 in)
 NPort 5232I:
 Without ears: 67 x 100.4 x 35 mm (2.64 x 3.95 x 1.37 in)
 With ears: 90 x 100.4 x 35 mm (3.54 x 3.95 x 1.37 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)
Altitude: Up to 2000 m
Note: Please contact Moxa if you require products guaranteed to function properly at higher altitudes.

Power Requirements

Input Voltage: 12 to 48 VDC
Power Consumption:
 NPort 5210: 325 mA @ 12 V, 190 mA @ 24 V
 NPort 5230: 325 mA @ 12 V, 190 mA @ 24 V
 NPort 5232: 280 mA @ 12 V, 150 mA @ 24 V
 NPort 5232I: 365 mA @ 12 V, 200 mA @ 24 V

Standards and Certifications

EMI: EN55022 Class A, FCC part 15 Subpart B Class A

EMS:

- EN 61000-4-2 ESD: contact 4 kV; air 8 kV
- EN 61000-4-3 RS: 3 V/m (80 MHz to 1 GHz)
- EN 61000-4-4 EFT: Power 1 kV; Signal 0.5 kV
- EN 61000-4-5 Surge: AC 1 kV
- EN 61000-4-6 CS: 3 V
- EN 61000-4-8
- EN 61000-4-11

Safety: UL 60950-1, EN 60950-1

EMC: 55022/24

Marine: DNV

Medical: (NPort 5210 only) EN 60601-1-2 Class B, EN55011

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 5210: 134,850 hrs

NPort 5230: 106,955 hrs

NPort 5232: 102,344 hrs

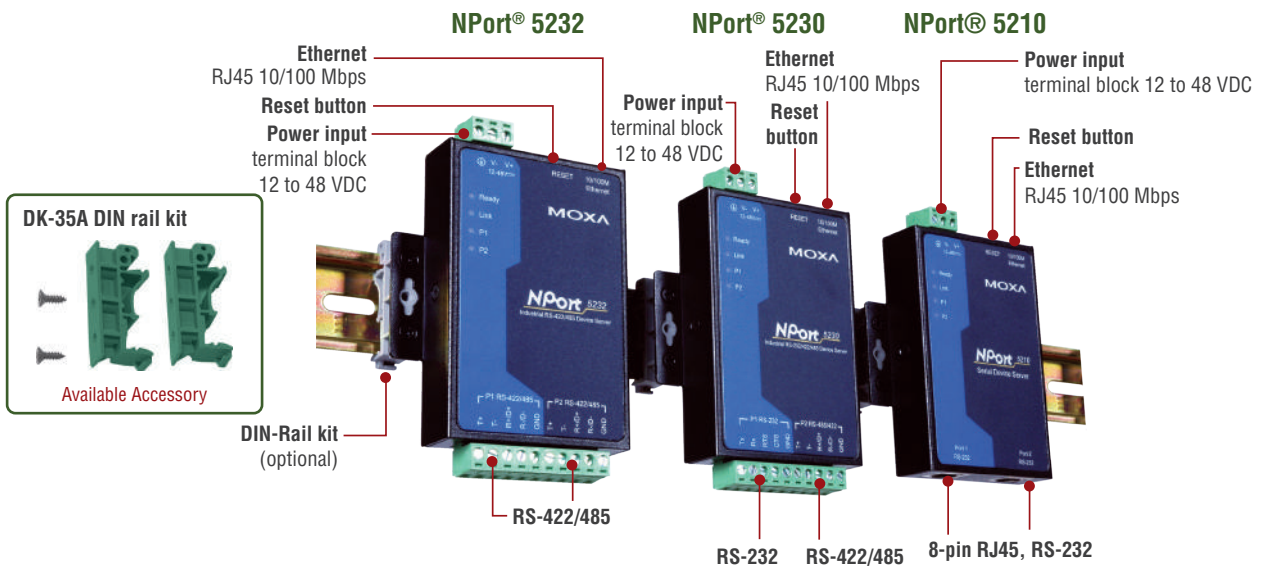
NPort 5232i: 87,083 hrs

Warranty

Warranty Period: 5 years

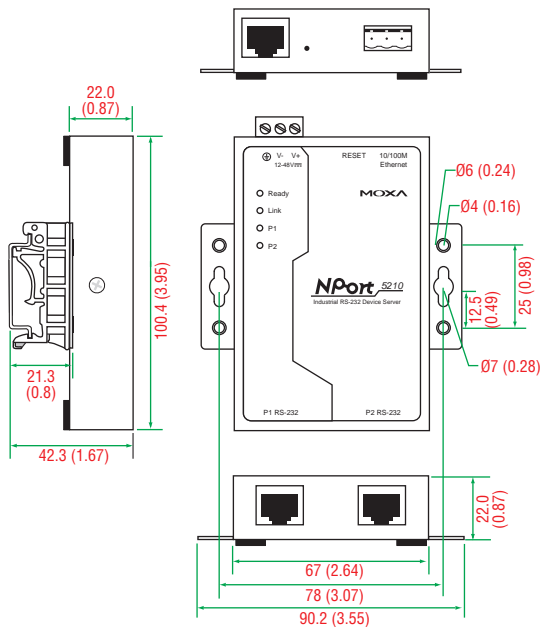
Details: See www.moxa.com/warranty

Appearance

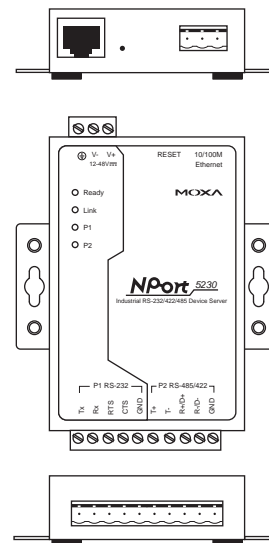


Dimensions

NPort® 5210

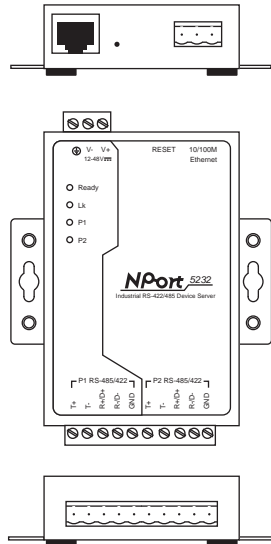


NPort® 5230

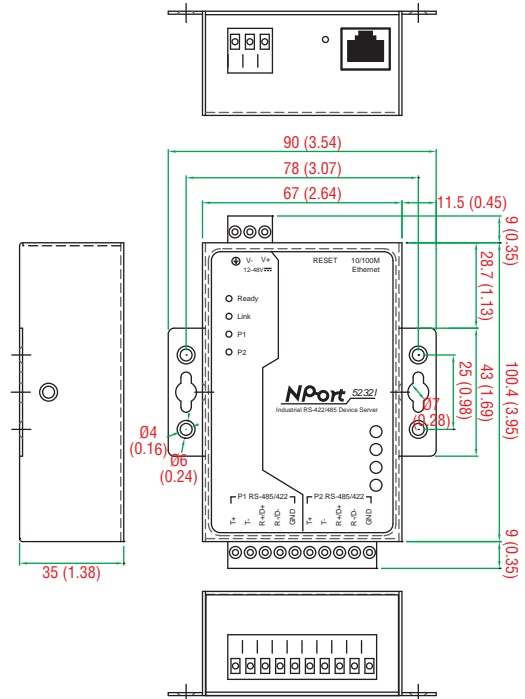


Dimensions

NPort® 5232



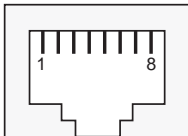
NPort® 5232I



Unit: mm (inch)

Pin Assignment

8-pin RJ45 connector



NPort® 5210/5210-T (RS-232)

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)

Ordering Information

Available Models

- NPort 5210:** 2-port RS-232 device server, 0 to 55°C operating temperature
- NPort 5230:** 2-port device server with 1 RS-232 port and 1 RS-422/485 port, 0 to 55°C operating temperature
- NPort 5232:** 2-port RS-422/485 device server, 0 to 55°C operating temperature
- NPort 5232I:** 2-port RS-422/485 device server with 2 kV optical isolation, 0 to 55°C operating temperature
- NPort 5210-T:** 2-port RS-232 device server, -40 to 75°C operating temperature
- NPort 5230-T:** 2-port device server with 1 RS-232 port and 1 RS-422/485 port, -40 to 75°C operating temperature
- NPort 5232-T:** 2-port RS-422/485 device server, -40 to 75°C operating temperature
- NPort 5232I-T:** 2-port RS-422/485 device server with 2 kV optical isolation, -40 to 75°C operating temperature

Optional Accessories (can be purchased separately)

DK-35A: Mounting kit for 35-mm DIN-Rail

Package Checklist

- NPort 5200 device server
- 100 to 240 VAC power adapter (excluding T models)
- Power jack to a 3-pin terminal block adaptor
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card