

NPort® 5100 Series

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



- > Small size for easy installation
- > Real COM/TTY drivers for Windows and Linux
- > Standard TCP/IP interface and versatile operation modes
- > Easy-to-use Windows utility for configuring multiple device servers
- > Built-in 15 kV ESD protection for all serial signals
- > SNMP MIB-II for network management
- > Configure by Telnet, web browser, or Windows utility
- > Adjustable pull high/low resistor for RS-485 ports



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: 1
Serial Standards:
 NPort 5110: RS-232
 NPort 5130: RS-422/485
 NPort 5150: RS-232/422/485
Connector: DB9 male
Serial Line Protection: 15 kV ESD protection for all signals
RS-485 Data Direction Control: ADDC® (automatic data direction control)
Pull High/Low Resistor for RS-485: 1 kΩ, 150 kΩ

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:
 NPort 5110: 110 bps to 230.4 kbps
 NPort 5130/5150: 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, IPv4, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP V1, HTTP, SMTP
Configuration Options: Web Console, Serial Console (NPort 5110/5150 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: 340 g
Dimensions:
 Without ears: 52 x 80 x 22 mm (2.05 x 3.15 x 0.87 in)
 With ears: 75.2 x 80 x 22 mm (2.96 x 3.15 x 0.87 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: -20 to 75°C (-4 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 5110: 128.7 mA @ 12 V, 72 mA @ 24 V
 NPort 5130/5150: 200 mA @ 12 V, 106 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

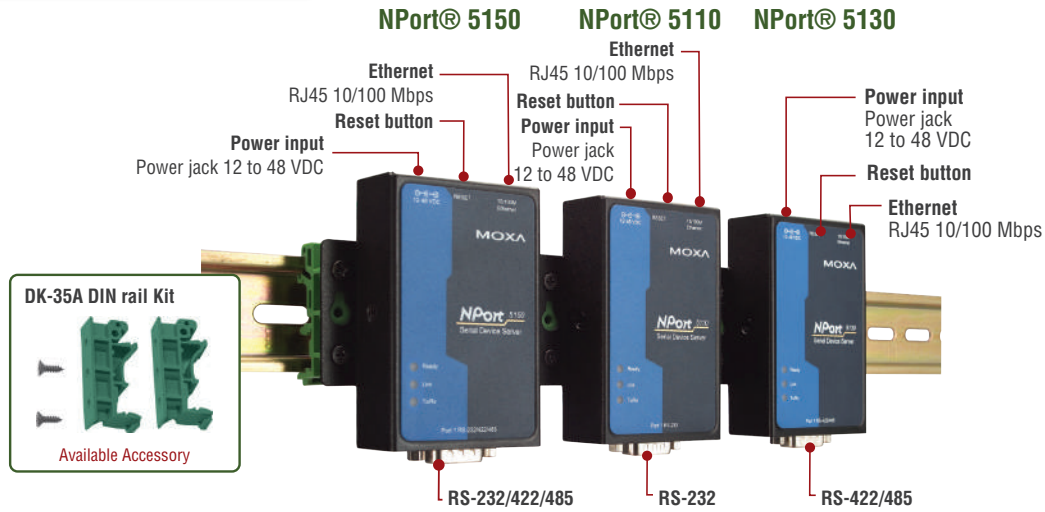
Reliability

Automatic Reboot Trigger: Built-in WDT (watchdog timer)
MTBF (mean time between failures):
 NPort 5110: 279,122 hrs
 NPort 5130: 246,505 hrs
 NPort 5150: 246,034 hrs

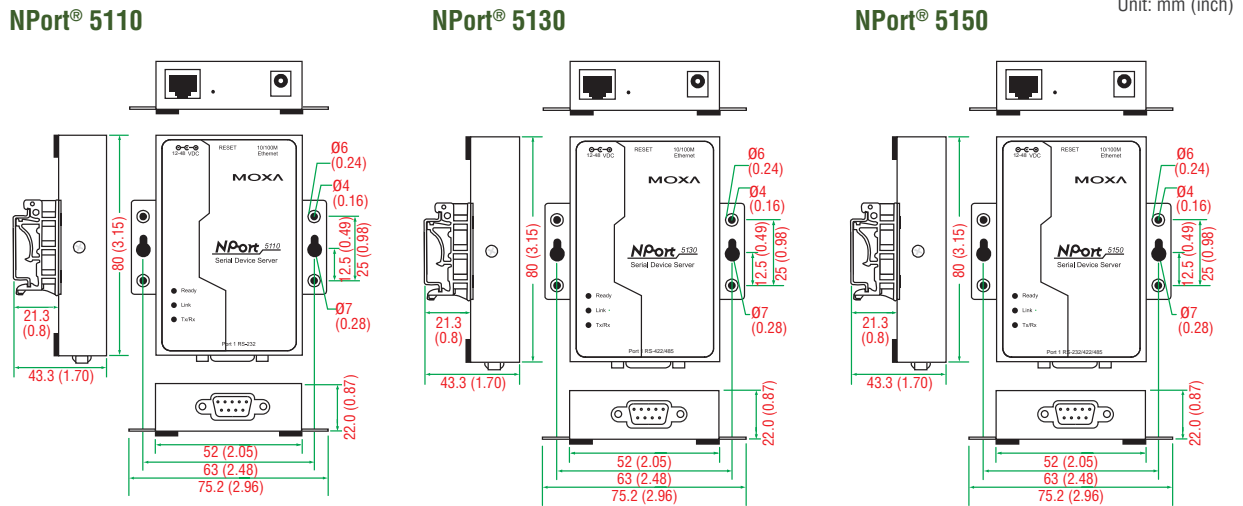
Warranty

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

Appearance

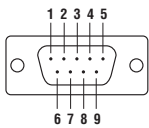


Dimensions



Pin Assignment

DB9 male connector



NPort® 5110 (RS-232)

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

NPort® 5130 (RS-422/485)

PIN	RS-422/485-4w	RS-485-2w
1	TxD-(A)	-
2	TxD+(B)	-
3	RxD+(B)	Data+(B)
4	RxD-(A)	Data-(A)
5	GND	GND
6	-	-
7	-	-
8	-	-

NPort® 5150 (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 5110:** 1-port RS-232 device server, 0 to 55°C operating temperature
- NPort 5130:** 1-port RS-422/485 device server, 0 to 55°C operating temperature
- NPort 5150:** 1-port RS-232/422/485 device server, 0 to 55°C operating temperature
- NPort 5110-T:** 1-port RS-232 device server, -40 to 75°C operating temperature

Optional Accessories (can be purchased separately)

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

Package Checklist

- NPort 5100 device server
- 100 to 240 VAC power adapter (excluding T models)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card