

NPort® 6150

1-port RS-232/422/485 secure terminal server



- > Simple solution for connecting serial devices to a network
- > Secure operation modes for Real COM, TCP Server, TCP Client, Pair Connection, Terminal, and Reverse Terminal
- > Non-standard baudrates supported with high precision
- > Automatic RS-485 data direction control with Moxa's patented ADDC®
- > Enhanced remote configuration with HTTPS and SSH
- > Port buffers for storing serial data when the Ethernet is off-line
- > Supports IPv6



: Overview

The NPort® 6150 is a 1-port device server that uses the SSL and SSH protocols to transmit encrypted serial data over Ethernet. The NPort®

6150's 3-in-1 serial port supports RS-232, RS-422, and RS-485, with the interface selected from an easy-to-access configuration menu.

: 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® 6150 supports the SSL and SSH

protocols, which work by encrypting data before sending it over the network. With the NPort® 6150, users can rest assured that serial data is transmitted securely over both private and public networks.

: Specifications

Ethernet Interface

Number of Ports: 1
Speed: 10/100 Mbps, auto MDI/MDIX
Connector: 8-pin RJ45
Magnetic Isolation: 1.5 kV built-in

Serial Interface

Number of Ports: 1
Serial Standards: RS-232/422/485
Connector: DB9 male
RS-485 Data Direction Control: ADDC® (Automatic Data Direction Control)

Serial Line Protection: 15 kV ESD protection for all signals
Console Port: Serial port doubles as RS-232 console port

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, DTR/DSR, XON/XOFF
Baudrate: 50 bps to 921.6 Kbps (supports non-standard baudrates)
Pull High/Low Resistor for RS-485: 1 kΩ, 150 kΩ

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/v6, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP V1/V2c/V3, HTTP, SMTP, ARP, PPPoE
Security Protocols: DES, 3DES, AES, SSH, SSL
Configuration Options: Web Console, Serial Console, Telnet Console, Windows Search Utility
Windows Real COM Drivers: Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8 x86/x64, 2012 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
Linux Real TTY Drivers: Linux kernel 2.4.x, 2.6.x, 3.x
Management: SNMP MIB-II
IP Routing: Static, RIP-I, RIP-II

Operation Modes

Standard: Real COM, TCP Server, TCP Client, UDP, Pair Connection, RFC2217, Terminal, Reverse Telnet, Ethernet Modem, Printer, PPP, Disabled
Secure: Secure Real COM, Secure TCP Server, Secure TCP Client, Secure Pair Connection, SSH, Reverse SSH

Applications

Terminal Sessions: 8 sessions per port

Physical Characteristics

Housing: Metal
Weight: 700 g
Dimensions:
 Without ears: 67 x 100.4 x 29 mm (2.64 x 3.95 x 1.1 in)
 With ears: 90 x 100.4 x 29 mm (3.54 x 3.95 x 1.1 in)

Environmental Limits

Operating Temperature: 0 to 55°C (32 to 131°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: 285 mA @ 12 V, 150 mA @ 24 V
Alarm Contact: Relay output with current carrying capacity of 1 A @ 24 VDC
Power Line Protection: 1 kV burst (EN 61000-4-4: EFT/B), 0.5 kV surge (EN 61000-4-5)

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,
 EN 61000-4-2 (ESD) Level 2/3,
 EN 61000-4-3 (RS) Level 2,
 EN 61000-4-4 (EFT) Level 2,
 EN 61000-4-5 (Surge) Level 2,
 EN 61000-4-6 (CS) Level 2,
 EN 61000-4-8 Level 1,
 EN 61000-4-11
Freefall: IEC-68-2-6, IEC-68-2-34, IEC-68-2-32
Vibration: IEC-68-2-6, IEC-68-2-34
Green Product: RoHS, CRoHS, WEEE

Reliability

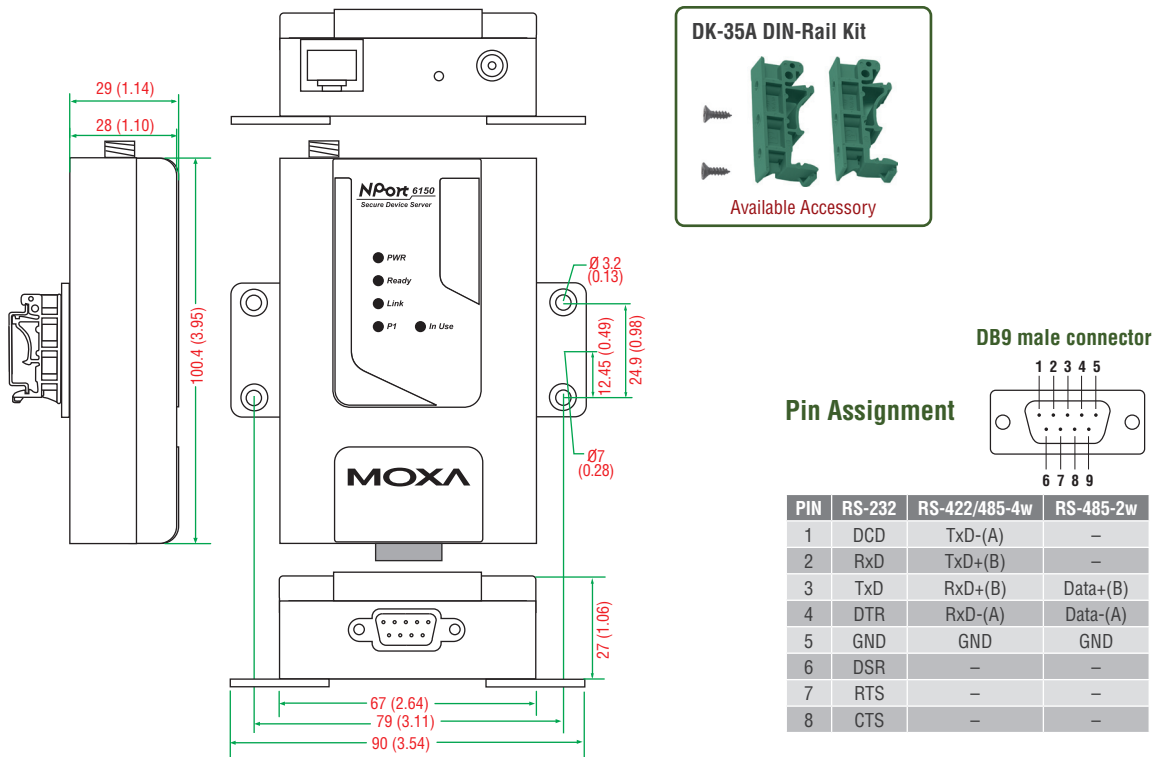
Alert Tools: Built-in buzzer and RTC (real-time clock)
Automatic Reboot Trigger: Built-in WDT (watchdog timer)
MTBF (mean time between failures): 231,709 hrs

Warranty

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

Dimensions and Pin Assignment

Unit: mm (inch)



Ordering Information

Available Models

NPort 6150: 1-port RS-232/422/485 secure device server

Optional Accessories (can be purchased separately)

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

NP21101: DB25 male to DB9 female RS-232 cable, 30 cm

Package Checklist

- 1 NPort 6150 device server
- Power adaptor
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card