

# 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 K $\Omega$ , 150 K $\Omega$

#### Serial Signals

**RS-232:** Tx+, Rx+, 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, IP, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP V1/V2c/V3, HTTP, SMTP, ARP, PPPoE, DDNS

**Security Protocols:** DES, 3DES, AES, SSH, SSL, HTTPS, RADIUS, PAP, CHAP, TACACS+

**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 x86/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, HP-UX 11i

**Linux Real TTY Drivers:** 2.4.x, 2.6.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 28 mm (2.64 x 3.95 x 1.1 in)

With ears: 90 x 100.4 x 28 mm (3.54 x 3.95 x 1.1 in)

## Environmental Limits

**Operating Temperature:** 0 to 55°C (32 to 131°F)

**Operating Humidity:** 5 to 95% RH

**Storage Temperature:** -20 to 85°C (-4 to 185°F)

## Power Requirements

**Input Voltage:** 12 to 48 VDC

**Power Consumption:** 285 mA @ 12 V, 150 mA @ 24 V

**Power Line Protection:** 1 KV burst (EN61000-4-4: EFT/B), 0.5 KV surge (EN61000-4-5)

## Regulatory Approvals

**EMC:** CE (EN55022 Class A, EN55024), FCC Part 15 Subpart B Class A

**Safety:** UL (UL60950-1), TÜV (EN60950-1)

**EN61000-4-2 (ESD):** Level 3

**EN61000-4-4 (EFT):** Level 2

**EN61000-4-5 (Surge):** Level 2

## Reliability

**Alert Tools:** Built-in buzzer and RTC (real-time clock)

**Automatic Reboot Trigger:** Built-in WDT (watchdog timer)

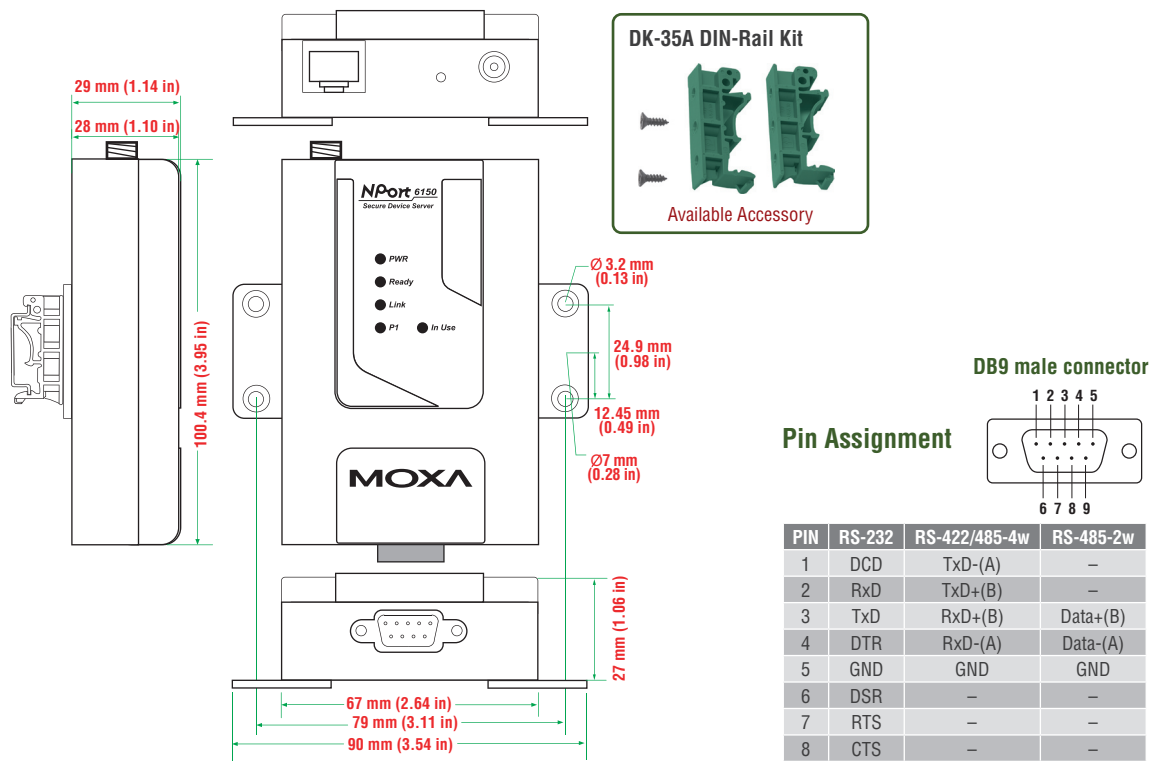
**MTBF (mean time between failures):** 231709 hrs

## Warranty

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

## Dimensions



## 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

- NPort® 6150 device server
- Power Adaptor
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card