

# NPort® W2004

4-port RS-232/422/485 IEEE 802.11b/g wireless device server



- > Link any serial device to an IEEE 802.11b/g network
- > 460.8 Kbps baudrate for RS-232/422/485 transmissions
- > Web-based configuration using built-in Ethernet or WLAN
- > Windows real COM and Linux real TTY drivers provided
- > Real COM, TCP Server, TCP Client, and UDP modes
- > Enhanced remote configuration with HTTPS, SSH



The certification logos shown here apply to some or all of the products in this section. Please see the **Specifications** section or Moxa's website for details.

13

WLAN & Cellular Solutions > NPort® W2004

## 802.11b/g Wireless Connectivity to Serial Devices

The NPort® W2004 wireless device server provides a convenient means of reducing the number of cables for hard-to-wire applications. Both Infrastructure and Ad-Hoc modes are supported, and the NPort®

W2004 can connect to access points or another NPort® W2004 located up to 300 meters away.

## Works with Existing Software, Saving Time and Money

Field-proven Windows real COM and Linux real TTY drivers are provided for the NPort® W2004, ensuring that existing PC software will work with your wireless LAN infrastructure. In addition, the NPort® W2004 supports TCP Server, TCP Client, and UDP operation

modes that allow IP-based software to use the IP address and TCP port number to access devices directly.

## Secure Remote Management and Configuration with SSH/SSL

The NPort® W2004 supports several functions to help prevent unauthorized access to your wireless LAN. In addition to WEP protection, IP filtering, and password protection, the NPort® W2004 also supports SSH and SSL to thwart hacker attacks. Using web

browsers that support https (Internet Explorer, for example) provides secure access by browser to your wireless LAN. In addition, using terminal emulators that support SSH (PuTTY, for example) provides secure Telnet access.

## Specifications

### LAN Interface

**Ethernet:** 10/100 Mbps, RJ45 connector, Auto MDI/MDIX

**Magnetic Isolation Protection:** 1.5 KV built-in

### WLAN Interface

**Standard Compliance:** 802.11b/g

**Radio Frequency Type:** DSSS/OFDM

### Tx Power:

802.11b: 20 dBm maximum

802.11g: 18 dBm maximum

**Rx Sensitivity:** -80 dBm

**Transmission Rate:** 54 Mbps (max.) with auto fallback (54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps)

**Transmission Distance:** Up to 300 meters (at 12 Mbps in open areas)

**Antenna Connector:** Reverse SMA

**Network Modes:** Infrastructure, Ad-Hoc

**Wireless Security:** 64-bit/128-bit data encryption with WEP

### Serial Interface

**Serial Standards:** RS-232/422/485

**Number of Ports:** 4

**Connectors:** RJ45

**Console Port:** RS-232 console port on front panel

### 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, XON/XOFF

**Baudrate:** 50 bps to 460.8 Kbps

### Serial Signals

**RS-232:** TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

**RS-422:** TxD+, TxD-, RxD+, RxD-, GND

**RS-485-4w:** TxD+, TxD-, RxD+, RxD-, GND

**RS-485-2w:** Data+, Data-, GND

### Software

**Network Protocols:** ICMP, IP, TCP, UDP, DHCP, Telnet, DNS, SNMP, HTTP, SMTP, SNT, SSH, HTTPS

**Configuration Options:** Web Console, Serial Console, Telnet Console

**Utilities:** NPort® Search Utility and NPort® Windows Driver manager

**Driver Support:** Windows Real COM driver (for Windows 95, 98, ME, NT, 2000, XP, 2003, Vista, XP x64, 2003 x64, Vista x64), Linux Real TTY driver, Fixed TTY driver (for 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)

### Physical Characteristics

**Housing:** SECC sheet metal (1 mm), providing IP30 protection

**Weight:** 873 g

#### Dimensions:

Without antenna: 45.8 x 135 x 105 mm (1.80 x 5.31 x 4.13 in)

With antenna: 45.8 x 204 x 142 mm (3.94 x 8.03 x 5.59 in)

### Environmental Limits

**Operating Temperature:** 0 to 60°C (32 to 140°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:** 685 mA @ 12 V, 340 mA @ 20 V, 184 mA @ 48 V

### Regulatory Approvals

**EMC:** CE (EN55022 and EN55024 Class A, ETSI EN 301 489-17, ETSI EN 301 489-1), FCC (Part 15 Subpart C, Part 17 Subpart B Class A)

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

### Reliability

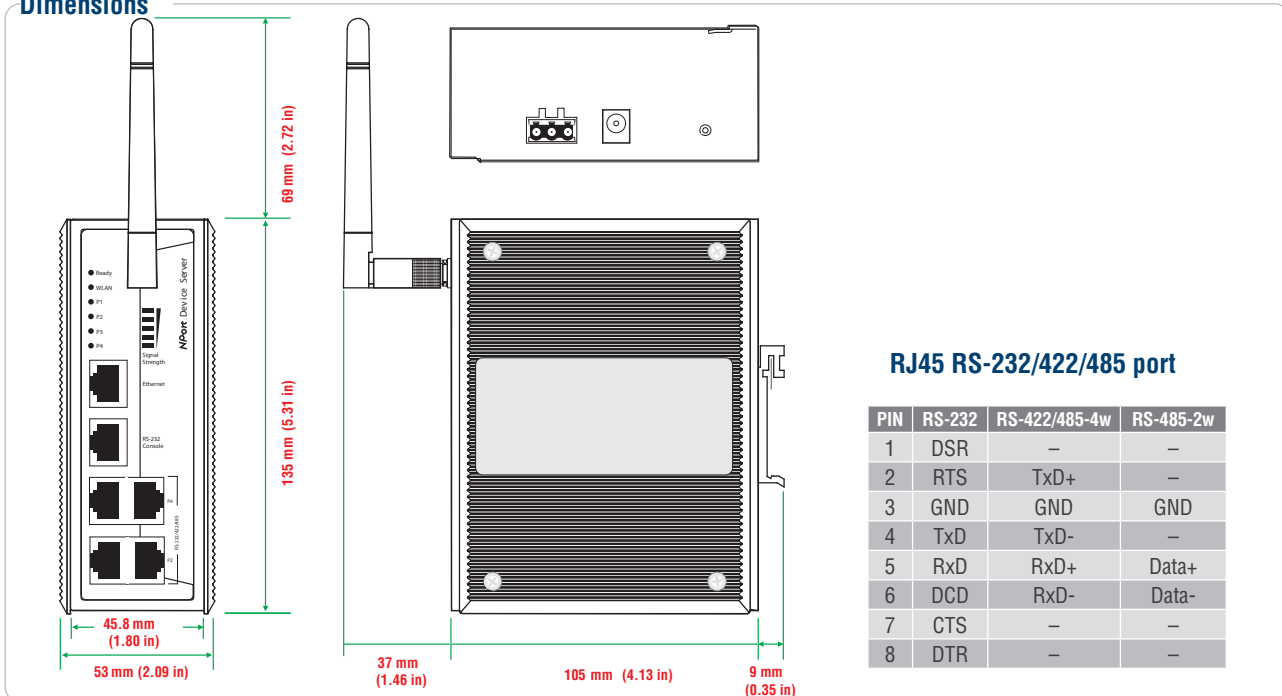
**MTBF (mean time between failures):** 81501 hrs

### Warranty

**Warranty Period:** 5 years

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

### Dimensions



### Ordering Information

#### Available Models

**NPort® W2004-US:** 4-port RS-232/422/485 wireless device server with 802.11b/g WLAN, antenna, US band, US plug

**NPort® W2004-EU:** 4-port RS-232/422/485 wireless device server with 802.11b/g WLAN, antenna, Euro band, Euro plug

**NPort® W2004-CN:** 4-port RS-232/422/485 wireless device server with 802.11b/g WLAN, antenna, Euro band, US plug, CCC

**NPort® W2004-UK:** 4-port RS-232/422/485 wireless device server with 802.11b/g WLAN, antenna, Euro band, UK plug

**NPort® W2004-SAA:** 4-port RS-232/422/485 wireless device server with 802.11b/g WLAN, antenna, Euro band, Australia plug

#### Optional Accessories (can be purchased separately)

Serial cables and adaptors (see page A-10)

#### Package Checklist

- NPort® W2004 wireless device server
- Ethernet cable: RJ45 to RJ45 cross-over cable, 100 cm
- CBL-RJ45M9-150: RJ45 (8 pins) to DB9 male serial port cable, 150 cm
- Power adaptor
- Antenna
- Document and Software CD
- Quick Installation Guide (printed)
- Warranty Card