# NPort® W2004

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



# **\* 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

# **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

# **Specifications**

#### Ethernet Interface

Number of Ports: 1 Speed: 10/100 Mbps, auto MDI/MDIX Connector: RJ45

Magnetic Isolation Protection: 1.5 KV built-in

## WLAN Interface

Standard Compliance: 802.11b/g Network Modes: Infrastructure, Ad-Hoc TX Transmit Power:

## 802.11b: 20 dBm maximum

802.11g: 18 dBm maximum

RX Sensitivity: -80 dBm

Radio Frequency Type: DSSS/OFDM

**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)

Wireless Security: WEP: 64/128-bit data encryption Antenna Connector: Reverse SMA

#### **Serial Interface**

Number of Ports: 4 Serial Standards: RS-232/422/485 (RJ45 connector) Console Port: RS-232 console port on the front panel 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.

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.

## **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, DTR/DSR Baudrate: 50 bps to 460.8 Kbps Serial Data Log: 64 KB

#### **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 V1/V2c, HTTP, SMTP, SNTP, SSH, HTTPS Configuration Options: Web Console, Serial Console, Telnet Console, Windows Utility Secure Configuration Options: HTTPS, SSH Windows Beal COM Drivers: Windows 95/88/ME/NT/2000, Windows

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

 $\textbf{Utilities:} \texttt{NPort} \circledast \texttt{Search Utility} and \texttt{NPort} \circledast \texttt{Windows Driver} manager$ 

#### **Physical Characteristics**

Housing: SECC sheet metal (1 mm), providing IP30 protection Weight: 1730 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)

#### Dimensions

## **Power Requirements**

Input Voltage: 12 to 48 VDC Power Consumption: 685 mA @ 12 V, 340 mA @ 24 V, 185 mA @ 48 V

#### **Regulatory Approvals**

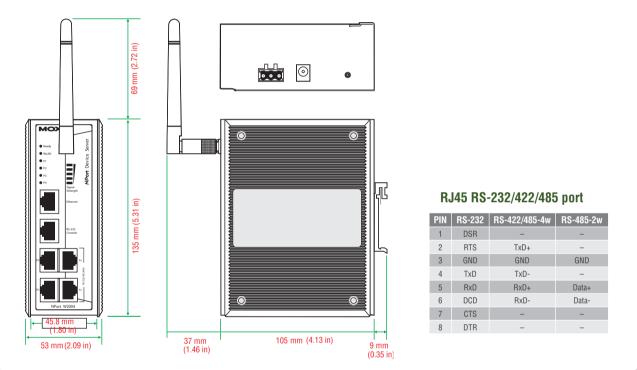
EMC: CE (EN55022 and EN55024 Class A, ETSI EN 301 489-17, ETSI EN 301 489-1) Safety: UL (UL60950-1), TÜV (EN60950-1) EMI: FCC (Part 15 Subpart B Class A, Subpart C) Radio: CE (ETSI EN 300 328)

#### Reliability

# MTBF (mean time between failures): 81501 hrs

## Warranty

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



## **Crdering Information**

MOXA

#### **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-6 for details

#### 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