

# NPort W2004

## 4-Port Wireless Serial Device Servers

### Features

- Link any serial device to an IEEE 802.11g/b network
- 4 RS-232/422/485 ports, at up to 460.8 Kbps
- Web-based configuration via built-in Ethernet or WLAN
- Supports Windows/Linux COM driver
- Supports TCP Server, TCP client, and UDP modes
- Enhanced remote configuration via HTTPS, SSH



### Overview

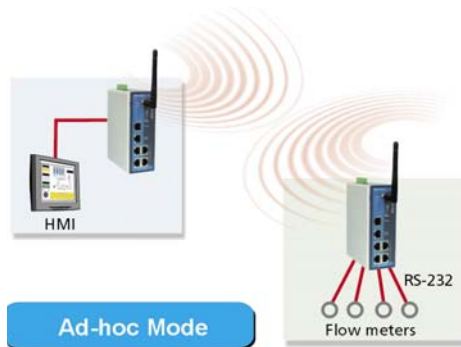
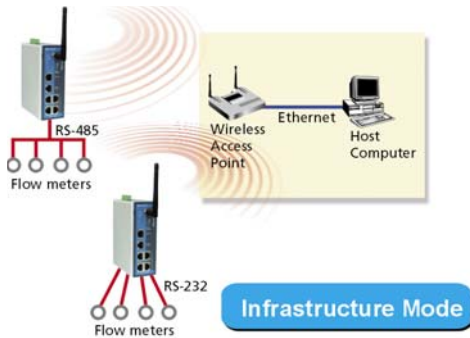
The NPort W2004 Series of Wireless Serial Device Servers extends wireless networking capabilities to printers, scales, medical equipment, manufacturing machinery, bar code readers, card readers, point-of-sale equipment, and other data

collection devices. NPort W2004's RS-232/422/485 3-in-1 serial interface is suitable for use with most serial devices. Link up to 4 serial devices to your wireless network via one NPort Server.

### 802.11g/b Wireless Connectivity to Serial Devices

For hard-to-wire situations, Wireless Serial Device Servers are the ideal solution to reduce the number of connection cables. When using Infrastructure Mode or Ad-Hoc Mode, NPort

W2004 can communicate with an access point or another NPort W2004 located up to 300 meters away in open areas.



### Works with Existing Software, Saving you Time and Money

NPort W2004 supports field proven Real COM/TTY drivers for Windows and Linux systems, ensuring that existing PC software will still work when used with the new Wireless LAN infrastructure. TCP Server, TCP Client, and UDP modes are also

supported so that IP-based software can directly access each device by knowing the IP address and TCP port number.

### Secure Remote Management and Configuration with SSH/SSL

Unauthorized access is one of the biggest headaches for system managers. In addition to WEP protection over a wireless LAN, and IP filtering and password protection, NPort W2004 also provides extra protection using SSH and SSL to protect NPort

W2004 from hackers. Use a web browser that supports https (e.g., Internet Explorer), or a Terminal Emulator that supports SSH (e.g., PuTTY), to open NPort W2004's web page or text-based menu safely.

## Specifications

### WLAN

**Standard Compliance:** IEEE 802.11g/b  
**Spread Spectrum Technology:** DSSS, OFDM  
**Tx Power 11b:** Maximum 20 dBm  
**Tx Power 11g:** Maximum 18 dBm  
**Rx Sensitivity:** -70 dBm @ 54 Mbps, -85 dBm @ 11Mbps  
**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 (@12 Mbps, in open areas)  
**Security:** WEP 64-bit/128-bit data encryption  
**Antenna Connector:** Reverse SMA  
**Network Mode:** Infrastructure, Ad-Hoc

### LAN

**Ethernet:** 10/100 Mbps, RJ45  
**Protection:** Built-in 1.5 KV magnetic isolation

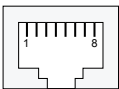
### Serial

**No. of ports:** 4  
**Interface:** RS-232/422/485 (8-pin RJ45) with 15 KV ESD for all signals  
**RS-485 Data direction:** Patented Automatic Data Direction Control (ADDC™)

### Serial Communication Parameters

**Parity:** None, Even, Odd, Space, Mark  
**Data bits:** 5, 6, 7, 8

## Pin Assignment



PIN	RS-232	RS-422, RS-485 (4-wire)	RS-485 (2-wire)
1	DSR	----	----
2	RTS	TxD+	----
3	GND	GND	GND
4	TxD	TxD-	----
5	RxD	RxD+	Data+
6	DCD	RxD-	Data-
7	CTS	----	----
8	DTR	----	----

## Ordering Information

**NPort W2004-US** 4-port RS-232/422/485 Device Server with 802.11g, antenna, US band, US plug  
**NPort W2004-EU** 4-port RS-232/422/485 Device Server with 802.11g, antenna, Euro band, Euro plug

\* China, UK packages available

**Stop bits:** 1, 1.5, 2

**Flow control:** RTS/CTS, XON/XOFF

**Speed:** 50 bps to 460.8 Kbps

### Console Ports

Ethernet x 1, RS-232 console x 1

### Software Features

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

**Utilities:** Windows utility for Windows 98/ME/2000/XP/2003

### Configuration

Web browser, serial/Telnet console, or Windows utility

### Power Requirements

**Power input:** 12-48 VDC

**Power consumption:** 685 mA @ 12V, 184 mA @ 48V, 340 mA @ 24V

### Mechanical Specifications

**Material:** SECC sheet metal (1 mm)

### Environmental

**Operating Temperature:** 0 to 60°C (32 to 140°F), 5 to 95% RH

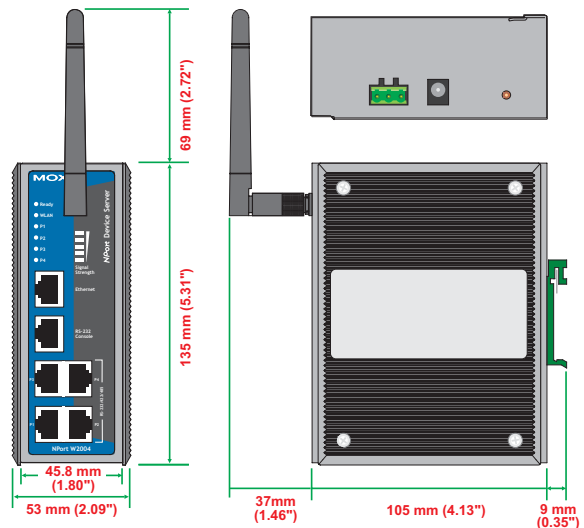
**Storage Temperature:** -20 to 85°C (-4 to 185°F), 5 to 95%RH

### Regulatory Approvals

**EMC:** FCC Class A, CE Class A

**Safety:** UL, CUL, TÜV

## Dimensions



### All item includes

- NPort W2004 x 1
- RJ45 to RJ45 Ethernet cross-over cable
- RJ45 to male DB9 cable
- RJ45 to female DB9 cable
- Power adaptor, Warranty booklet
- CD-ROM, Quick Installation Guide

### Optional Accessories

**CBL-RJ45M9-150:** 150 cm

**CBL-RJ45F9-150:** 150 cm