

NPort W2150A-W4/W2250A-W4シリーズ

ワイヤレスクライアント付きの1ポート/2ポートシリアル to Wi-Fi（802.11a/b/g/n）デバイスサーバー



機能と特長

- シリアルデバイスとイーサネットデバイスをIEEE 802.11a/b/g/nネットワークに接続
- イーサネットまたはWLANを使用するWebベースの設定
- Moxa認証済みファームウェアのみ実行可能なセキュアブート機能
- HTTPS（TLS 1.3）、SSHによるリモート設定
- WEP/WPA/WPA2によるセキュアなデータアクセス
- WPA/WPA2 エンタープライズ IEEE 802.1X/RADIUS（EAP-TLS 1.3）
- 複数のアクセスポイント間ですばやい自動切り替えを行うための高速ローミング
- オフラインポートバッファリングとシリアルデータログ
- シリアル、LAN、電源に対する強化されたサージ保護
- デュアル電源（1つはネジ式電源ジャック、1つはターミナルブロック）

認証



製品紹介

NPort® W2150A-W4とW2250A-W4は、PLC、メーター、センサーなどのシリアルデバイスとイーサネットデバイスを無線LANに接続するための理想的な選択肢です。通信ソフトウェアは、無線LANを介してどこからでもシリアルデバイスにアクセスできるようになります。さらに、有線配線が難しい環境においても、無線デバイスサーバはケーブルの使用を最小限に抑えられるため、設置が容易です。インフラストラクチャーモードで、NPort® W2150A-W4とNPort® W2250A-W4は、オフィスや工場でWi-Fiネットワークに接続でき、これによりユーザーは複数のアクセスポイント（AP）間をシームレスに移動（ローミング）しながら使用可能です。特に、機器を頻繁に移動させる用途において、柔軟かつ効率的なソリューションを提供します。

仕様

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	1
Magnetic Isolation Protection	1.5 kV (built-in)
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X)

Ethernet Software Features

Configuration Options	Web Console (HTTP/HTTPS) Windows Utility
Management	DHCP Option 82 HTTP IPv4 SMTP SNMPv1/v2c/v3 Syslog Telnet Web Console

Windows Real COM Drivers	Windows 11, 10, 8.1, 8, 7, Vista, XP, ME, 98 and 95 Windows Server 2022, 2019, 2016, 2012 R2, 2012, 2008 R2, 2008, 2003, 2000 and NT Windows Embedded CE 5.0 and 6.0, Windows XP Embedded
Linux Real TTY Drivers	Kernel Versions: 6.x, 5.x, 4.x, 3.x, 2.6.x and 2.4.x
Fixed TTY Drivers	macOS versions: 14, 13, 12, 11 and 10.1x SCO UNIX, SCO OpenServer, UnixWare 7, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i, Mac OS X
Arm®-based Platform Support	Windows 11 Linux Kernel 6.x, 5.x and 4.x macOS 14, 13, 12 and 11
Virtual Machine	VMWare ESXi (Windows 11 / 10) VMware Fusion (Windows on macOS 14, 13, 12, 11 and 10.1x) Parallels Desktop (Windows on macOS 14, 13, 12, 11 and 10.1x)
Android API	Android 3.1.x and later
MIB	Device Settings MIB RFC1213, RFC1317
Security	HTTPS/SSL User Authentication Management: local database, RADIUS Secure Protocols: HTTPS (TLSv1.3), SSH, SNMPv3 Cryptography: HMAC, SHA-1, SHA-256, SHA-384, RSA-1024, AES-128, AES-256
Time Management	NTP Client SNTP Client

WLAN Interface

WLAN Standards	802.11a/b/g/n
Receiver Sensitivity for 802.11a (measured at 5.680 GHz)	Typ. -91 @ 6 Mbps Typ. -74 @ 54 Mbps
Receiver Sensitivity for 802.11b (measured at 2.437 GHz)	Typ. -92 dBm @ 1 Mbps Typ. -84 dBm @ 11 Mbps
Receiver Sensitivity for 802.11g (measured at 2.437 GHz)	Typ. -91 dBm @ 6 Mbps Typ. -73 dBm @ 54 Mbps
Receiver Sensitivity for 802.11n (2.4 GHz; measured at 2.437 GHz)	Typ. -89 dBm @ 6.5 Mbps (20 MHz) Typ. -71 dBm @ 72.2 Mbps (20 MHz)
Receiver Sensitivity for 802.11n (5 GHz; measured at 5.680 GHz)	Typ. -89 dBm @ 6.5 Mbps (20 MHz) Typ. -71 dBm @ 72.2 Mbps (20 MHz) Typ. -85 dBm @ 13.5 Mbps (40 MHz) Typ. -67 dBm @ 150 Mbps (40 MHz)
Modulation Type	DSSS OFDM
Transmission Distance	Up to 100 meters (in open areas)
Transmission Rate	802.11a/g: 54 Mbps 802.11b: 11 Mbps 802.11n: 6.5 to 150 Mbps
Transmitter Power for 802.11b	16±1.5 dBm @ 1 Mbps 16±1.5 dBm @ 11 Mbps
Transmitter Power for 802.11g	16±1.5 dBm @ 6 Mbps 14±1.5 dBm @ 54 Mbps
Transmitter Power for 802.11a	15±1.5 dBm @ 6 Mbps 14±1.5 dBm @ 54 Mbps

Transmitter Power for 802.11n (2.4 GHz)	16 dBm @ 1.5 Mbps (6.5 MHz) 12 dBm @ 1.5 Mbps (72.2 MHz)
Transmitter Power for 802.11n (5 GHz)	15 dBm @ 1.5 Mbps (6.5 MHz) 12 dBm @ 1.5 Mbps (150 MHz)
Frequency Band for CN (20 MHz operating channels)	2.412 to 2.472 GHz (13 channels) 5.180 to 5.240 GHz (4 channels) 5.260 to 5.320 GHz (4 channels) ¹ 5.745 to 5.825 GHz (5 channels)
Frequency Band for EU (20 MHz operating channels)	2.412 to 2.472 GHz (13 channels) 5.180 to 5.240 GHz (4 channels) 5.260 to 5.320 GHz (4 channels) ¹ 5.500 to 5.700 GHz (11 channels) ¹
Frequency Band for JP (20 MHz operating channels)	2.412 to 2.472 GHz (13 channels) 5.180 to 5.240 GHz (4 channels) 5.260 to 5.320 GHz (4 channels) ¹ 5.500 to 5.700 GHz (11 channels) ¹
Frequency Band for US (20 MHz operating channels)	2.412 to 2.462 GHz (11 channels) 5.180 to 5.240 GHz (4 channels) 5.260 to 5.320 GHz (4 channels) ¹ 5.500 to 5.700 GHz (11 channels) ¹ 5.745 to 5.825 GHz (5 channels)
Wireless Security	WEP encryption (64-bit and 128-bit) WPA/WPA2-Enterprise (IEEE 802.1X/RADIUS, TKIP, AES) WPA/WPA2-Personal
WLAN Modes	Infrastructure mode

Antenna Characteristics

Connector	RP-SMA (male)
Antenna Type	Omni-directional

Security Functions

Authentication	Local database RADIUS
Encryption	AES-128 AES-256 HMAC RSA-1024 SHA-1 SHA-256 SHA-384
Security Protocols	SNMPv3 SSHv2 HTTPS (TLS 1.3)
Wireless Security	WEP WPA/WPA2-Enterprise (IEEE 802.1X/RADIUS support EAP-TLS 1.3) WPA/WPA2-Personal
Hardware-based Security	Secure Boot

Serial Interface

Connector	DB9 male
No. of Ports	NPort W2150A-W4/W2150A-W4-T: 1 NPort W2250A-W4/W2250A-W4-T: 2

1. DFS (Dynamic Frequency Selection) channel support: In AP mode, when a radar signal is detected, the device will automatically switch to another channel. However, according to regulations, after switching channels, a 60-second availability check period is required before starting the service.

Serial Standards	RS-232 RS-422 RS-485
Operation Modes	Real COM mode TCP Server mode TCP Client mode UDP mode RFC2217 mode Pair Connection mode Ethernet Modem mode Disabled
Baudrate	300 bps to 921.6 kbps
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	None RTS/CTS XON/XOFF
RS-485 Data Direction Control	Automatic Data Direction Control (ADDC)
Pull High/Low Resistor for RS-485	1 kilo-ohm, 150 kilo-ohms
Terminator for RS-485	120 ohms
Surge	1 kV

Physical Characteristics

Housing	Metal
Installation	Desktop DIN-rail mounting (with optional kit) Wall mounting
Dimensions (with ears, without antenna)	100 x 111 x 26 mm (3.94 x 4.37 x 1.02 in)
Dimensions (without ears or antenna)	77 x 111 x 26 mm (3.03 x 4.37 x 1.02 in)
Weight	NPort W2150A-W4/W2150A-W4-T: 185 g (0.41 lb) NPort W2250A-W4/W2250A-W4-T: 191 g (0.42 lb)
Antenna Length	108 mm (4.25 in)

Environmental Limits

Operating Temperature	Standard Models: 0 to 55°C (32 to 131°F) Wide Temp. Models: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 75°C (-40 to 167°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Power Parameters

Input Current	NPort W2150A-W4/W2150A-W4-T: 429 mA @ 12 VDC NPort W2250A-W4/W2250A-W4-T: 455 mA @ 12 VDC
Input Voltage	12 to 48 VDC

Standards and Certifications

EMC	EN 55032/35
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMF IEC 61000-4-11
Radio Frequency	CE (ETSI EN 301 893, ETSI EN 300 328, ETSI EN 301489-1/-17), MIC, KC, RCM, WPC
Safety	UL 62368-1 IEC 62368-1

Reliability

Alert Tools	RTC (real-time clock)
Automatic Reboot Trigger	Built-in WDT

MTBF

Time	NPort W2150A-W4/W2150A-W4-T: 1,356,464 hrs NPort W2250A-W4/W2250A-W4-T: 1,187,539 hrs
Standards	Telcordia SR332

Warranty

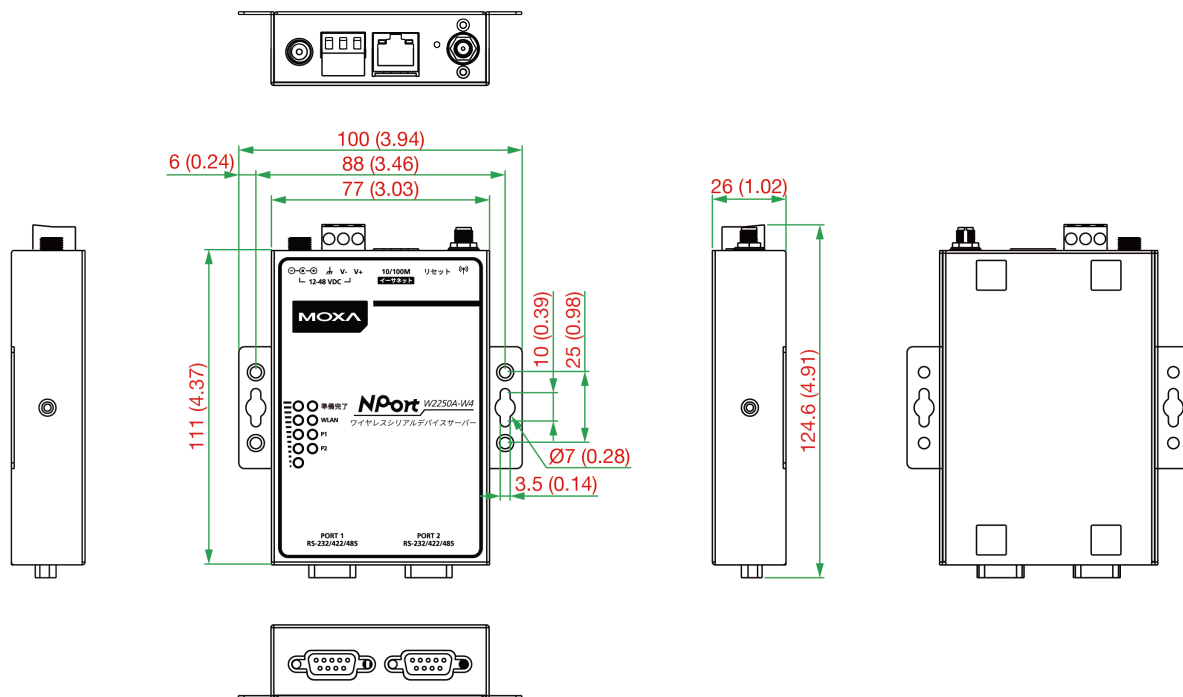
Warranty Period	5 years
Details	See www.moxa.com/jp/warranty

Package Contents

Device	1 x NPort W2150A-W4/W2250A-W4 Series device server
Power Supply	1 x power adapter, suitable for your region (standard temp. models only)
Antenna	1 x 2.4/5 GHz antenna
Documentation	1 x quick installation guide 1 x warranty card

寸法

単位: mm (インチ)



注文情報

Model Name	No. of serial ports	WLAN Channels	Input Current	Operating Temp.	Power Adapter in Box	Notes
NPort W2150A-W4-CN	1	China bands	429 mA @ 12 VDC	0 to 55°C	Yes (CN plug)	—
NPort W2150A-W4-EU	1	Europe bands	429 mA @ 12 VDC	0 to 55°C	Yes (EU/UK/AU plug)	—
NPort W2150A-W4-EU/KC	1	Europe bands	429 mA @ 12 VDC	0 to 55°C	Yes (KR plug)	KC certificate
NPort W2150A-W4-JP	1	Japan bands	429 mA @ 12 VDC	0 to 55°C	Yes (JP plug)	—
NPort W2150A-W4-US	1	US bands	429 mA @ 12 VDC	0 to 55°C	Yes (US plug)	—
NPort W2150A-W4-T-CN	1	China bands	429 mA @ 12 VDC	-40 to 75°C	No	—
NPort W2150A-W4-T-EU	1	Europe bands	429 mA @ 12 VDC	-40 to 75°C	No	—
NPort W2150A-W4-T-JP	1	Japan bands	429 mA @ 12 VDC	-40 to 75°C	No	—
NPort W2150A-W4-T-US	1	US bands	429 mA @ 12 VDC	-40 to 75°C	No	—
NPort W2250A-W4-CN	2	China bands	455 mA @ 12 VDC	0 to 55°C	Yes (CN plug)	—
NPort W2250A-W4-EU	2	Europe bands	455 mA @ 12 VDC	0 to 55°C	Yes (EU/UK/AU plug)	—
NPort W2250A-W4-EU/KC	2	Europe bands	455 mA @ 12 VDC	0 to 55°C	Yes (KR plug)	KC certificate
NPort W2250A-W4-JP	2	Japan bands	455 mA @ 12 VDC	0 to 55°C	Yes (JP plug)	—
NPort W2250A-W4-US	2	US bands	455 mA @ 12 VDC	0 to 55°C	Yes (US plug)	—
NPort W2250A-W4-T-CN	2	China bands	455 mA @ 12 VDC	-40 to 75°C	No	—
NPort W2250A-W4-T-EU	2	Europe bands	455 mA @ 12 VDC	-40 to 75°C	No	—
NPort W2250A-W4-T-JP	2	Japan bands	455 mA @ 12 VDC	-40 to 75°C	No	—
NPort W2250A-W4-T-US	2	US bands	455 mA @ 12 VDC	-40 to 75°C	No	—

アクセサリ（別売）

Antennas

ANT-WDB-ASM-03 BK	2 dBi at 2.4 GHz or 2 dBi at 5 GHz, RP-SMA (male) omnidirectional rubber-duck antenna
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Cables

CBL-F9M9-150	DB9 female to DB9 male serial cable, 1.5 m
CBL-F9M9-20	DB9 female to DB9 male serial cable, 20 cm

Connectors

ADP-RJ458P-DB9F	DB9 female to RJ45 connector
Mini DB9F-to-TB	DB9 female to terminal block connector

DIN-Rail Mounting Kits

DK35A	DIN-rail mounting kit, 35 mm
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Power Adapters

PWR-12050-AU-S1	Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, AU plug, 0 to 40°C operating temperature
PWR-12050-CN-S1	Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, CN plug, 0 to 40°C operating temperature
PWR-12050-EU-S1	Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, EU plug, 0 to 40°C operating temperature
PWR-12050-UK-S1	Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, UK plug, 0 to 40°C operating temperature
PWR-12050-USJP-S1	Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, US/JP plug, 0 to 40°C operating temperature
PWR-12050-KR-S1	Locking barrel plug, 12 VDC, 0.5 A, 100 to 240 VAC, KR plug, 0 to 40°C operating temperature
PWR-12150-AU-SA-T	Locking barrel plug, 12 VDC, 1.5 A, 100 to 240 VAC, AU plug, -40 to 75°C operating temperature Applicable Models: NPort W2150A-W4-T-CN NPort W2150A-W4-T-EU NPort W2150A-W4-T-JP NPort W2150A-W4-T-US NPort W2250A-W4-T-CN NPort W2250A-W4-T-EU NPort W2250A-W4-T-JP NPort W2250A-W4-T-US
PWR-12150-CN-SA-T	Locking barrel plug, 12 VDC, 1.5 A, 100 to 240 VAC, CN plug, -40 to 75°C operating temperature Applicable Models: NPort W2150A-W4-T-CN NPort W2150A-W4-T-EU NPort W2150A-W4-T-JP NPort W2150A-W4-T-US NPort W2250A-W4-T-CN NPort W2250A-W4-T-EU NPort W2250A-W4-T-JP NPort W2250A-W4-T-US
PWR-12150-EU-SA-T	Locking barrel plug, 12 VDC, 1.5 A, 100 to 240 VAC, EU plug, -40 to 75°C operating temperature Applicable Models: NPort W2150A-W4-T-CN NPort W2150A-W4-T-EU NPort W2150A-W4-T-JP NPort W2150A-W4-T-US NPort W2250A-W4-T-CN NPort W2250A-W4-T-EU NPort W2250A-W4-T-JP NPort W2250A-W4-T-US
PWR-12150-UK-SA-T	Locking barrel plug, 12 VDC, 1.5 A, 100 to 240 VAC, UK plug, -40 to 75°C operating temperature Applicable Models: NPort W2150A-W4-T-CN NPort W2150A-W4-T-EU NPort W2150A-W4-T-JP

	NPort W2150A-W4-T-US NPort W2250A-W4-T-CN NPort W2250A-W4-T-EU NPort W2250A-W4-T-JP NPort W2250A-W4-T-US
PWR-12150-USJP-SA-T	Locking barrel plug, 12 VDC 1.5 A, 100 to 240 VAC, US/JP plug, -40 to 75°C operating temperature Applicable Models: NPort W2150A-W4-T-CN NPort W2150A-W4-T-EU NPort W2150A-W4-T-JP NPort W2150A-W4-T-US NPort W2250A-W4-T-CN NPort W2250A-W4-T-EU NPort W2250A-W4-T-JP NPort W2250A-W4-T-US

Power Cords

CBL-PJ21NOPEN-BK-30	Locking barrel plug to bare-wire cable
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