MOXA®

MiiNePort W1 Series
Quick Installation Guide

Second Edition, June 2012

1. Overview

The Moxa MiiNePort W1 Series is an embedded serial-to-WLAN module that allows you to connect serial devices to the wireless Ethernet without dealing with the complexities of RF.

The MiiNePort W1 Series supports and is compliant with the 802.11b/g radio specification.

2. Package Checklist

The MiiNePort W1 Series Starter Kit contains the following items:

- 1 MiiNePort W1 series wireless module
- MiiNePort W1 evaluation board
- Antenna - ANT-WDB-ARM-02
- Antenna - CRF-MHF/SMA(M)-14.2
- 1 cross-over Ethernet cable
- 1 null modem serial cable
- Universal power adaptor
- Documentation and software CD
- Quick installation guide
- Warranty card

3. Hardware Installation

Follow these steps to prepare the module and evaluation board for testing and application development.

STEP 1: Plug the module into its socket on the evaluation board. For detailed information about the pin assignments, wiring, LED indicators, and board layouts, refer to the MiiNePort W1 Series User's Manual.
STEP 2: Connect the evaluation board to the Ethernet network using an RJ45 Ethernet cable.
STEP 3: Plug the 12 VDC power line into the evaluation board's power jack.
STEP 4: Connect a serial device to the evaluation board using a serial data cable.

4. Software Installation

STEP 1: Open NPort Search Utility to begin installation. A **Welcome** window will appear. Click **Next** to proceed.
STEP 2: Click **Install** to install the program files in the default directory.
STEP 3: The installation wizard will show the progress of the installation as the files are installed.
STEP 4: After the files have been installed, click **Finish** to complete the installation.

Module Configuration

STEP 1: Run NPort Search Utility.
STEP 2: Press **Search** to search for MiiNePort W1/MiiNePort W1-T modules on the LAN.
STEP 3: When the search is complete, all modules that were found will be listed. If more than one module has been found, you can identify your module by referring to its MAC address.
STEP 4: Please refer to the MiiNePort W1 Series User's Manual for additional configuration instructions.

5. Product Specifications

Form Factor

Type:	Drop-in module
Dimensions:	44.4 x 44.4 mm (1.75 x 1.75 in)

System Information
Ethernet Interface

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

WLAN Interface

Standard Compliance:	IEEE 802.11b/g
Network Modes:	Infrastructure mode (b/g), Ad-Hoc mode (b/g)
Spread Spectrum Technology:	DSSS, CCK, OFDM
Transmit Power:	IEEE 802.11b: 16 dBm (typical) IEEE 802.11g: 14 dBm (typical)
Receive Sensitivity:	-71 dBm (Min)
Transmission Rate:	IEEE 802.11b: 11 Mbps IEEE 802.11g: 54 Mbps
Transmission Distance:	Up to 100 meters (in open areas)
Wireless Security:	AES, WEP 64/128-bit, WPA, WPA2, PSK, 802.11i

Serial Interface

Number of Ports:	1
Serial Standards:	TTL

Serial Communication Parameters

Data Bits:	7, 8
Stop Bits:	1, 2
Parity:	None, Even, Odd
Flow Control:	RTS/CTS, XON/XOFF
Baudrate:	50 bps to 921.6 Kbps

Serial Signals

TTL:	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

Software

Network Protocols:	ICMP, IP, TCP, UDP, DHCP, Telnet, DNS, SNMP V1/V2c/V3, HTTP, SMTP, SNTP, SSH, HTTPS
Configuration Options:	Web Console, Telnet Console, Windows Utility, Serial command mode (configured through the data port)
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
Linux Real TTY Drivers:	Linux kernel 2.4.x, 2.6.x, 3.0.x
Operation Modes:	Real COM, TCP Server, TCP Client, UDP, RFC2217

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:	-40 to 60°C (-40 to 140°F)
Ambient Relative Humidity:	5 to 95% (non-condensing)

Power Requirements

Input Voltage:	3.3 to 5 VDC (±5%)
Power Consumption:	400 mA @ 3.3 VDC, 330 mA @ 5 VDC input max.

Standards and Certifications

Safety:	UL 60950-1, EN 60950-1
EMC:	CE, FCC
EMI:	EN 55022 Class A, FCC Part 15 Subpart B Class A
EMS:	EN 55024, EN 61000-4-2 (ESD), EN 61000-4-3 (RS), EN 61000-4-4 (EFT), EN 61000-4-5 (Surge), EN 61000-4-6 (CS), EN 61000-4-8, EN 61000-4-11

P/N: 1802000013010

Radio:	EN301 489, EN300 328, EN300 893, FCC 15C, EN61121/EN500 385
Shock:	IEC-68-2-27
Freefall:	IEC-68-2-34, IEC-68-2-32
Vibration:	IEC-68-2-6
Green Product:	RoHS, CRoHS, WEEE

Reliability

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

Warranty

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

6. Reference Material

Detailed user's guides can be found on the Documentation and Software CD that is shipped with your MiiNePort W1 Series.

7. Certification

This product complies with RoHS (Restriction of Hazardous Substances) regulations for Electronic Information Products in China.