Firmware for NPort 5000AI-M12 Series Release Notes

Version: v2.0	Build: 24072311
Release Date: Nov 13, 2024	

Applicable Products

NPort 5150AI-M12, NPort 5150AI-M12-CT, NPort 5150AI-M12-CT-T, NPort 5150AI-M12-T

Supported Operating Systems

N/A

New Features

- Supports new components Macronix MX29GL128 flash and RTC8130.
- New hardware board (MX29GL128) downgrade fails using FW prior to v2.0.

Enhancements

- Rejects an unrecognized host header in HTTP is configurable.

Bugs Fixed

- Setting an account might fail via NPort Administrator Suite - Configuration.
- Using the event group OpMode in the remote log might cause the NPort to reboot.
- An issue of the MXview One not recognizing NPort 5000 Series with SNMPv3.
- An issue where the NPort might occasionally send abnormal DHCP requests when using DHCP relay.
- An issue where the NPort might append unnecessary options to the DHCP request.
- Security patch - Fixes HTML XSS attack prevention on certain web pages.
- Corrects the data packing feature when the delimiter buffer is full.

Changes

N/A

Notes

- If your current firmware is v1.5 or prior, it is required to install the intermediate version v1.6 before installing v2.0. Alternatively, use the Device Search Utility to directly upgrade to v2.0.

Version: v1.6	Build: 24053015
Release Date: Nov 13, 2024	

Applicable Products

NPort 5150AI-M12, NPort 5150AI-M12-CT, NPort 5150AI-M12-CT-T, NPort 5150AI-M12-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

• This is an intermediate version for upgrading to firmware v2.0.
• Some functions in the web console were removed to reduce the code size.
• To upgrade firmware prior to v1.6 to v2.0, you may also use Device Search Utility instead of using this intermediate version.

Version: v1.5	Build: Build 20101317
Release Date: Oct 15, 2020	

Applicable Products

N/A

Supported Operating Systems

N/A

New Features

• Supports remote log function.
• Supports turning on HTTPS with TLS 1.2 by default.
• Supports MXconfig v2.6 and MXview v3.2.
• Supports SNMPv3.
• Supports daylight saving time settings.
• Supports beep service configuration.
• A notification regarding the limitation on the length of sensitive data.

Enhancements

• Solved Nessus CVSS v3.0 issues, which scores exceeded 7 and above.
• Solved security issues.
• Records username, source IP, and port number in "Event Log" and "System Log".
• Upgraded mbedTLS to v2.7.15.
• Disables Telnet console by default.
• Disables TLS 1.0/1.1 by default.
• Added an account lockout mechanism for web, Telnet, and MOXA service.
8: Removed SSL 2.0 and lower (keep TLS 1.0/1.1/1.2).
• Improved UI and UX on "Configuration file import/export and pre-shared key".

Bugs Fixed

• TCP used to duplicate ACK while handshaking.
• The NPort would still send "ALIVE" command packets after serial data
has been transmitted.
• The configuration on the DHCP server would be saved to flash frequently.
• Port Monitor did not display "Connection Status".
• The TCP client mode could not connect to the TCP server mode of the same NPort.
• The account's password could not be set correctly via NPort Administrator v1.x.
• The system would cold start after receiving MIB tcp Connection Remote Port (tcpConnRemPort).
• An email event could not be sent while the SNMP service was disabled.
• The system became invalid when the IP address ended with ".0"

Changes

N/A

Notes

N/A

Version: v1.4	Build: Build 19032122
Release Date: Mar 29, 2019	

Applicable Products

NPort 5150AI-M12, NPort 5150AI-M12-CT, NPort 5150AI-M12-T, NPort 5150AI-M12-CT-T

Supported Operating Systems

N/A

New Features

• Supports HTTPS.
• Supports MXview auto-topology function.
• Supports MXconfig.
• Supports SNMPv2c.

Enhancements

• Accessible IP list can now be used to restrict all device services.
• Complies with Moxa Security Guidelines on the following: Account Authentication Management, Network Service Management, and Audit and Log Management.
• CVE-2017-14028: An attacker may be able to exhaust memory resources by sending a large amount of TCP SYN packets.
• CVE-2017-16715: An attacker may be able to exploit a flaw in the handling of Ethernet frame padding that may allow for information exposure.
• CVE-2017-16719: An attacker may be able to inject packets that could potentially disrupt the availability of the device.
• Remove unnecessary information displayed on the Web, Telnet, and Serial consoles during the login process.
• Remove the TTL limitation (1) on multicast packets.

Bugs Fixed

• Pair connection mode cannot resolve the domain name.
• The password may be exposed in the Moxa service.

Changes

N/A

Notes

N/A

Version: 1.3	Build: Build 17030709
Release Date: Mar 15, 2017	

Applicable Products

NPort 5150AI-M12-CT, NPort 5150AI-M12-T, NPort 5150AI-M12-CT-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

• The user's password and SNMP community name may be exposed by a buffer overflow issue.

Changes

N/A

Notes

N/A

Version: v1.2	Build: Build 16100410
Release Date: N/A	

Applicable Products

NPort 5150AI-M12-CT, NPort 5150AI-M12-T, NPort 5150AI-M12-CT-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

• Enhanced web login security and supports 5 users logged in simultaneously.
• Extended HTTP challenge ID length from 32 bits to 256 bits.
• IP of NPort can be set to addresses ending with 0 or 255.
• Enabled the default password "moxa".
• Increased CSRF protection mechanism.
• Increased XSS protection mechanism.
• Supports "ARP probe" in RFC5227. NPort would respond to ARP requests with sender IP address 0.0.0.0.

Bugs Fixed

• NPort cannot send e-mail using Google's SMTP server.
• In pair connection mode, master does not pull down RTS/DTR signal after the TCP connection is broken.
• Command port sends lots of "D_ASPP_CMD_ALIVE" packets after running for 50 days.
• NPort may reboot or hang from several buffer overflow attacks through Telnet, SSH, DSCI, SNMP, HTTP, and HTTPS.
• Too many connections to the HTTP server at the same time would block new connections for a while.

Changes

N/A

Notes

N/A

Version: v1.1	Build: Build 15041515
Release Date: N/A	

Applicable Products

NPort 5150AI-M12-CT, NPort 5150AI-M12-T, NPort 5150AI-M12-CT-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

• Uses model name instead of "NULL" for SNMP object "sysDescr".
• Supports connecting to the server by domain name and the server IP will change dynamically.
• Supports updating the ARP table by gratuitous ARP.
• Supports time synchronization with an NTPv4 server.
• Supports RFC2217 NOTIFY-LINESTATE for Transfer Shift Register Empty and Transfer Holding Register Empty.

Bugs Fixed

• If an SNMP GETNEXT command is issued on an object that does not exist, 'no such name error' is displayed.
• In reverse telnet mode, the NPort will try to subnegotiate the COM port control options without option negotiation first.
• In RFC2217 Mode, if the Ethernet data has many FF characters, some data may be lost while passing the data to the serial side.
• Unable to see the baud rate through a Telnet console on the "View settings" side.
• Web Console cannot display web pages when refreshing or switching web pages frequently using IE8.

Changes

N/A

Notes

N/A

Version: v1.0	Build: Build 12072410
Release Date: N/A	

Applicable Products

NPort 5150AI-M12-CT, NPort 5150AI-M12-T, NPort 5150AI-M12-CT-T

Supported Operating Systems

N/A

New Features

• First release.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A