



Firmware for NPort 5000AI-M12 Series (NPort 5450AI-M12) Release Notes

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.
- 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 5450AI-M12, NPort 5450AI-M12-CT, NPort 5450AI-M12-T, NPort 5450AI-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 5450AI-M12

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 5450AI-M12

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 5450AI-M12

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 5450AI-M12

Supported Operating Systems

N/A

New Features

- First release.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A