

Version No.	Build Date No./ Release Date	Supported OS	Apply to Models	New Features/ Enhancements	Bugs Fixed/Changes	Note
v1.17	Build 18082217	N/A	NPort 6100/6200 Series, NPort 6400/6600 Series	1 Supports new flash to address	 Bugs Fixed: 1. NPort reboots unexpectedly when opening a port twice in Reverse Real COM mode with secure enabled. 2. Cannot modify serial settings through telnet/ssh console. 3. Cannot set prefix netmask for the accessible IP list. 4. System may restart when running an SNMP walk. Changes: N/A 	N/A
v1.16	Build 17030709	N/A	NPort 6150, NPort 6150-T, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6250- T, NPort 6250-M-SC-T, NPort 6250-S-SC-T, NPort 6450, NPort 6450-T, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	New Features: N/A	Bugs Fixed: 1. The user's password and SNMP community name may be exposed by a buffer overflow issue. 2. Connection fails with OpenSSH client v7.2 legacy mode (diffie-hellman-group1-sha1). Changes: N/A	N/A



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v1.15	Build 17010610	N/A	NPort 6150, NPort 6150-T, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6250- T, NPort 6250-M-SC-T, NPort 6250-S-SC-T, NPort 6450, NPort 6450-T, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	N/A Enhancements: 1. Changed the default setting for password lifetime to disable.	 Bugs Fixed: 1. SNMP get next does not work on userAccount and accessPermission items of private MIB when set user account less than 16. 2. Password lifetime does not work on telnet/SSH/serial console. 3. When the RTC battery runs out of power, the password would expire at web login if the lifetime check function is enabled. 4. When the RTC battery runs out of power, the web session would expire unexpectedly. Changes: 	N/A



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v1.14	Build 16111111	N/A	NPort 6150, NPort 6150-T, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6250- T, NPort 6250-M-SC-T, NPort 6250-S-SC-T, NPort 6610- 8, NPort 6610-8, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	 100ms to 1000ms. Revised to comply with Moxa Security Guideline 2.0 which includes the following topics: Account Authentication Management, Network management, Audit and Log Management, System Security Guidelines, OpenSSL 1.0.2g /High Secure Mode, Cookie protection, 	 Bugs Fixed: 1. Freezing in Reverse SSH mode. 2. When the network is offline, the network link LED still flashes. 3. NPort may reboot or hang from several buffer overflow attacks from Telnet, SSH, DSCI, SNMP, HTTP, and HTTPS. 4. NPort may have a buffer overflow vulnerability when user imports/exports configuration. 5. In TCP server mode, the RTS line stays high and does not toggle. 6. With a loopback cable, the RTS/CTS flow control may be incorrect. 7. DROWN attack vulnerability. Changes: N/A 	N/A

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v1.13	Build 16011418	N/A	NPort 6150, NPort 6150-T, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6250- T, NPort 6250-M-SC-T, NPort 6250-S-SC-T, NPort 6450, NPort 6450-T, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	New Features: 1. Supports RTS toggle. Enhancements: N/A	 Bugs Fixed: 1. If RADIUS server is enabled, the NPort does not send RADIUS requests to the RADIUS server after the first successful login through HTTPS. 2. When "Port buffering" and "Force transmit" are enabled at the same time, the NPort 6000 will not send any data to Ethernet until the data buffer has been queued up to 1 Kbytes. Changes: N/A 	N/A
v1.12	Build 15063014	N/A	NPort 6150, NPort 6150-T, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6250- T, NPort 6250-M-SC-T, NPort 6250-S-SC-T, NPort 6450, NPort 6450-T, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	 Supports dynamic UDP option. When using the dynamic UDP option, the target address is decided by the source address of the last received data. Enhancements: The Ethernet frame should be 	 Bugs Fixed: 1. When multiple ports on an NPort are in Ethernet Modem mode, if one of them disconnects due to an ATH command, the other ports will stop communications. 2. TACACS+ configuration cannot be saved. 3. IP forwarding should not be triggered when the routing table is empty. Changes: N/A 	N/A

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v1.11	Build 13100403	N/A	NPort 6150, NPort 6150-T, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6250- T, NPort 6250-M-SC-T, NPort 6250-S-SC-T, NPort 6450, NPort 6450-T, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	New Features: 1. Supports NPort 6150-T, 6250-T, 6250-M-SC-T, 6250-S-SC-T, and 6450-T. Enhancements: 1. Supports SDHC.	Bugs Fixed: 1. Port buffering to an SD card does not work after one day of buffering. 2. "Ignore jammed IP" for TCP Client mode does not work when the "Max connection" is set to 1. 3. Enabling/disabling "Command by Command" for TCP Server mode through the web does not work. Changes: N/A	N/A
v1.10	Build 13032514	N/A	NPort 6150, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	New Features: 1. Supports "RIP-2", which is based on RFC 2453. Enhancements: 1. Obtained IPv6 Ready Logo (Phase- 2) certificate. 2. Supports NO-IP DDNS. 3. Changed original routing protocol "RIP-2" to "RIP-1 Compatible" since the system transmits RIP responses in broadcasts but not in multicasts (RFC 2453 section 5.1). 4. Uses model name instead of "NULL" for SNMP object "sysDescr". 5. The "NTP Connect Fail" event of "system log" may only be recorded once before the NTP server is connected successfully.	 Bugs Fixed: 1. "Serial to network connections" displays incorrectly through the text mode console when the operation mode is set to Dial in/out mode. 2. "Serial to network connections" displays incorrectly through the text mode console when the connection status is "disconnected" for any operation mode. 3. The "event" of "auto warning" displays "module settings" through the text mode console when there is no extended module. 4. The "LCM" status in the "Overview" page displays incorrectly in the web console. 5. Upgrading the firmware for the NPort 6450 may fail. 6. Compatibility issue with some 2 GB SD cards. 7. NPort would restart when it discovers an SD card with an illegal file format. 8. System Monitoring would not display used ciphers when NPort is running in secure Reverse Real COM mode. N/A 	N/A

Version No.	Build Date No./ Release Date	Supported OS	Apply to Models	New Features/ Enhancements	Bugs Fixed/Changes	Note
v1.9	Build 10102817	N/A	6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610-	N/A Enhancements: 1. Supports NPort 6650-8-T, 6650-16- T.	 Bugs Fixed: 1. When there are multiple ports simultaneously set to PPP mode, authentication may fail. 2. In TCP server mode, command by command operation will display a fail status through the web console. Changes: N/A 	N/A

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No.	Release Date	Supported OS	Apply to Models	New Features/ Enhancements	Bugs Fixed/Changes	Note
v1.8	Build 10081211	N/A	NPort 6150, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	New Features: N/A Enhancements: 1. Port buffering now supports SD cards with up to 2 GB. 2. The timeout mechanism of the web console has been removed to allow multiple users to configure the NPort simultaneously. 3. SIGNATURE command in RFC2217 mode now supported. 4. The timeout mechanism of the serial console has been removed.	 Bugs Fixed: 1. NPort cannot retrieve netmask information from BOOTP. 2. Routing information was not always transmitted through a PPP connection. 3. Loops occasionally occur when using Turbo Ring V2. 4. When serial ports receive NETBIOS packets while in PPP mode, memory for communication will be used up and the NPort will not receive any packets through serial ports or LAN ports. 5. In pair connection mode, when the DCD and DSR signal has been changed, events will not be properly handled. 6. NPort may not boot up successfully when NM-GPRS/GSM modules are inserted. 7. In TCP server mode, "inactivity time" was inaccurate. 8. In UDP mode, when set to "end destination address", data cannot be sent out. 9. The contents of the system log may be incorrect when several events occur simultaneously. 10. In PPP mode, the NPort does not always boot up successfully. 11. SNMP manager software was unable to clear the PIN code of NM-GPRS/GSM modules. 12. The TCP Client and UDP port numbers were not set properly when configured from the web console. 13. When NM-GPRS/GSM and NM-Modem modules are set to "Connection control" or "Remote host fail/remote host has failed or if it is operating normally. 14. "IP configuration" cannot be set up correctly with an imported configuration file. 15. When port buffering is enabled, buffered data will be lost due to a network timeout. 16. SNMP manager software is unable to set up Turbo Ring V2. 17. When using the WinCE driver to open a Real COM port, it takes about 6 seconds for the port to open. 18. Port buffering may cause data loss and may not work properly with the delimiter. 19. When there are multiple ports simultaneously set to 	N/A



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					LPD mode, Windows is unable to add new LPD print devices. 20. The RTS signal can't be changed when set to DTR/DSR flow control. Changes: N/A	
v1.7	Build 08061815	N/A	NPort 6150, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	V2. 4. When using the Web console and login fails, a "Login Fail" message will be displayed. Enhancements: N/A	 Bugs Fixed: 1. Changed the syntax of localTime in the MIB file from DateAndTime to DisplayString so that the local time is accurate and can be properly set. 2. When the LAN module is inserted and the LAN port on the module is active but the built-in LAN port is inactive, the status of the built-in LAN is incorrectly displayed as link up. 3. Syslog does not send logs to the server for the following Network events: DHCP/BOOTP/PPPoE Get IP/Renew, IP Conflict, and Network Link Down. 4. When plugging certain SIM cards and setting PIN codes, the NPort buzzer sounds. 5. When setting SNMP system variables "sysContact", "sysName", and "sysLocation" with a string length over 40 bytes through the MIB browser, the NPort will not function properly. To resolve this, characters exceeding the 40-byte limit are truncated. 6. The "Band", "Dial-in number", and "APN" of the GSM/GPRS Settings are not saved when doing a Configuration Import. M/A 	N/A



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v1.6	Build 08012911	N/A	NPort 6150, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	New Features: N/A Enhancements: N/A	Bugs Fixed: 1. Ports 9 to 16 and ports 17 to 24 are exchanged for the NPort 6610-32/6650-32. Changes: N/A	N/A
v1.5	Build 07120313	N/A	NPort 6150, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV-	New Features: 1. Supports V.92 modem modules. 2. Supports NM-TX02 LAN modules. 3. Supports TACACS+ authentication protocol for Operation mode and console login functions. 4. Supports Real COM+ function. 5. "Validate caller's phone number" function in GSM mode. Enhancements: N/A	 Bugs Fixed: 1. System log was not cleared when setting the NPort back to factory default settings. 2. Offline port buffering did not work in pair connection mode. 3. The length of username was not correct when performing PPP/CHAP authentication. 4. SMS alerts for serial port events did not take effect when they were enabled through a telnet console. 5. Ignore IP option did not take effect when importing a configuration file through the serial console. Changes: 	N/A



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v1.4	Build 07080317	N/A	NPort 6150, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	N/A Enhancements: N/A	 Bugs Fixed: 1. User cannot set GSM/GPRS PIN code via telnet console. 2. In pair connection mode, when two NPorts are connected, the Ethernet cable of one NPort(A) is unplugged and mass data is sent to another NPort(B), plugging the Ethernet cable in again would cause Ethernet traffic to NPort(A) to be jammed. 3. If an incorrect console password was entered through the Windows utility, the NPort would not log this event or send out SNMP trap/email alerts. 4. "Outgoing PAP ID" and "PAP password" fields were added for GSM/GPRS modules (for NPort 6450, NPort 6650, and NPort 6610). 5. The NPort would data abort when users set the IP configuration to DHCP and rebooted. 6. The NPort would crash when "flash erase" and "reboot" are performed at the same time. 7. Users could not use pair connection mode through GSM/GPRS networks. 8. In Real COM mode, users could not open COM ports when offline port buffering was enabled. 9. The GSM/GPRS PPP-trace would display incorrectly through the text console. 10. GSM will not answer calls if the IP address on the PPP server side was not configured. M/A 	N/A



Version No.	Build Date No./ Release Date	Supported OS	Apply to Models	New Features/ Enhancements	Bugs Fixed/Changes	Note
v1.3	Build 07062617	N/A	NPort 6150, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	New Features: N/A Enhancements: N/A	 Bugs Fixed: 1. In Real COM mode, user could set ASPP commands successfully even if the corresponding data port was closed. This problem is limited to firmware v1.2. 2. Users cannot enable or disable the port buffering and serial data log functions through the web console. This problem is limited to firmware v1.2. 3. When loading an older version of the firmware (<= ver 1.1.0) into PCB version 1.4 of the NPort 6650-8/16, the NPort will not function properly. This problem is limited to the NPort 6650-8/16. Changes: 	N/A
v1.2	Build 07061119	N/A	NPort 6150, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	New Features: 1. Supports RSTP (Rapid Spanning Tree Protocol) (NPort 6450, NPort 6650, and NPort 6610) 2. Supports GSM/GPRS modules (NPort 6450, NPort 6650, and NPort 6610) 3. Supports selectable cipher method. 4. Supports selectable cipher method. 4. Supports offline port buffering in Real COM mode. Enhancements: N/A	Bugs Fixed: 1. Cannot log in to the SSH console when the telnet console is disabled. Changes: N/A	N/A



Version I No.	Build Date No./ Release Date	Supported OS	Apply to Models	New Features/ Enhancements	Bugs Fixed/Changes	Note
v1.1 Bu	uild 07050817	N/A	NPort 6150, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort 6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T	 Added apply settings to specific port functions. Enhancements: In Reverse Terminal Mode, the Applet Console function is supported. 	 Bugs Fixed: When querying the modem register in Ethernet modem mode, the register value will be incorrect. The NPort was sometimes unable to boot normally. When disable operation mode is set through telnet or serial, the web console cannot access the port. Cannot log in to the SSH console when only the telnet console is disabled. Cannot disconnect in Ethernet modem Mode when DTR drops off. Using the "atz" command should load the stored register value. Corrected "RIP v1 function" for certain subnets. Corrected "linear baud rate function" for certain baudrates. The User Name and Password were available through the web console only when the "IP configuration" was set to PPPoE. Using the SecureCRT utility with SSH caused the NPort to hang. Cannot configure or save the proper SNMP version from the Web console. When using the Serial/IP Redirector utility, the NPort's baudrate would be reset to the default. The NPort cannot log in to SUSE Linux when in SSH-terminal mode. MA 	N/A



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v1.0	N/A	N/A	NPort 6150, NPort 6250, NPort 6250-M-SC, NPort 6250-S-SC, NPort 6450, NPort 6610-8, NPort 6610-8-48V, NPort 6610- 16, NPort 6610-16-48V, NPort 6610-32, NPort 6610-32-48V, NPort 6650-8, NPort 6650-8-T, NPort 6650-8-HV-T, NPort 6650-8-48V, NPort 6650-16, NPort 6650-16-48V, NPort	1. First release. Enhancements:	Bugs Fixed: N/A Changes: N/A	N/A
			6650-16-T, NPort 6650-16-HV- T, NPort 6650-32, NPort 6650- 32-48V, NPort 6650-32-HV-T			