## TS-2560/TS-2220 Release Notes

Version	Released Date	Classification	TS-2220-10 GNSS	TS-2560-11 GNSS	TS-2560-51 Secondary	Contents
			UNSS V	UNSS	~	Supported SNMPv3.
8. 0. 0			V	V		Added a feature to specify preferred primary NTP servers for synchronization.
		Added Features		<i>V</i>		Improved the root dispersion value used for NTP synchronization.  Enhanced the function to exclude abnormal satellites when receiving GNSS signal.
	Oct 15th, 2025		~	~		Improved the synchronization mechanism so that GNSS synchronization at startup
	OGT 15TH, 2025		•	•		doesn't take more than 15 minutes.
		Revised issues	~	~		Fixed a problem that GNSS daemon occasionally terminates abnormally when a leap second is inserted.
			~	~	~	Fixed a problem that unnecessary information may appear on the front LCD at
			<i>V</i>	<i>V</i>		startup. Added a feature to receive Galileo positioning system in EU.
7. 0. 0		Added Features				Added a feature to display jamming information and whether or not spoofing is
			~	~		detected.
			<i>V</i>	~		Added ACL(Access Control List) to TS-2220 as well as TS-2560.  Added a feature to send GARP when LAN port is linked up.
	Nov 29th, 2024		~	~		Added "NTP Service Status" to the top page of the Web.
			V	V	~	Enhanced SSH cipher suite.
			~	~		Added standard MIB object for SNMP interface group.  Added a feature to fix Ethernet communication speed(10/100/1000Mbps) and
			~	~		Added a reature to fix Ethernet communication speed(10/100/1000mbps) and
			<b>V</b>	<b>V</b>	<b>V</b>	Added log message when synchronization state transitions to local clock.
				<i>\</i>	<i>\</i>	Improved the process of getting system uptime in sysUpTime of SNMP standard MIB.
			~	~	~	Improved the name resolution procedure after NTP communication fails when the upper NTP server is registered with FQDN.
		Fixed Vulnerability	<b>V</b>	<b>V</b>		Fixed HTTP/HTTPS vulnerability(CVE-2018-25103).
		Revised issues	V	~		Fixed a problem in GNSS status display that satellite name with satellite number
						99 was not displayed correctly (occurred only in v6.0.0). Fixed a problem in which satellite number 99 could not be specified in the GNSS
			~	~		satellite number mask function (occurred only in v6.0.0).
6. 0. 0	Mar 7th, 2024	Added Features				Enhanced GNSS jamming and spoofing protection.
			~	~		Support for new revisions of GNSS receivers. [Caution!]
						GNSS models cannot be downgraded from version 6.0.0 to firmware prior to 5.0.0.
			<i>V</i>	<b>V</b>		Added a feature to automatically save logs per 1hour.
			~	~		Added trace command to capture packets sent and received by the time server.  Improved the displaying speed of the NTP traffic information. (Status and
		Improved features	~	~	~	Statistics—NTP Traffic on the Web screen and the show ntp monitor command)
			~	~	~	Improved NTP processing to reduce equipment load when receiving large numbers of
		Revised issues				NTP packets. Fixed "500 Internal Error" when exporting files from the Web(System
			~	~	~	control/Export).
			~	~		Corrected SYNTAX in tsNtpStratum of SNMP MIB object to Unsigned32.
5. 0. 0	Jan 31st, 2024	Added Features	~	~		Added dynamic measurement mode for vessels and vehicles to GNSS positioning method.
		Improved features	V	V		Added DESCRIPTION to trap OID in MIB file.
4. 2. 0	Mar 27th, 2023	Fixed Vulnerability	~	<b>/</b>		Fixed SSH vulnerability (CVE-2016-2183).
		Improved features	~	~	~	Fixed a problem in which the GNSS satellites were still being acquired but rarely remained out of sync (added automatic recovery process when the GNSS receiver
				·		detected an anomaly).
4. 1. 0	Mar 28th, 2022	Added Features  Improved features				Added support for Microsoft Edge.
			~	~		Fixed a problem that an error occasionally occurs when exporting files in version 4.0.0 or earlier via HTTPS.
			~	~		Improved a feature to avoid sending unnecessary link-up and link-down trap when
			,	•		SNMP parameters are changed.
	Dec 21th, 2021	Added Features				Added a feature to change the TCP port numbers of the following daemons to selectable number.
			~	~	~	TS-2560: Telnet (23) /SSH (22) /HTTP (80) /HTTPS (443)
						TS-2220: Telnet (23) /HTTP (80)
			~	~		Added a feature which saves the execution history of the username command with hashed password to the command-log.
						To clarify, Added the description "(as of boot)" to RTC Battery State displayed by
4. 0. 0			~	~		Web-UI and CLI to avoid misunderstandings.
		Revised issues	~	~		Fixed a problem which displays "short" as the antenna state when TimeServer is booted with Force sync mode.
			.,	.,		Fixed a problem which allowed users to input values outside the parameters set for
			~	~	•	timezones from CLI.
						Fixed a problem that command-log cannnot be refered from Web-UI.  Fixed a problem which caused an error message when setting the leap second
						adjustment method to Gradual.
			V	V	<b>V</b>	Revised a part of TS-NTP-MIB.txt content according to ASN.1 format.
3. 1. 0	Apr 9th, 2021	Added Features	~	~		Added a feature which enables to set multiple community to SNMP server.  Added a feature which avoids setting same network segment and IP address to
		Adda Foucures		~		different LAN interface of TS-2560.
		Revised issues	V			Fixed a problem which rarely occurred, making TS-2220-10GNSS enter restart mode
			_			repeatedly from the 2.1.0 or earlier update to 2.2.0 or 3.0.0.  Fixed a problem which removes the current configuration of name servers when it is
			V	V		configured from Web-UI which is directly accessed by inputting URL address of name
						servers configuration.
				٧	<	Added support for TS-2560-51 secondary server, which only supports other NTP
		Added Features	<u> </u>	~	<i>V</i>	server as a time source.  Added a feature to display system uptime by Web-UI/CLI.
			<i>V</i>	~	~	Added information of the firmware version to the result of SNMP sysDescr.
		Changed Specifications	~	~	~	Extended the number of the available syslog server from 3 to 5.
2 0 0	Dog 10±6 0000	Changea opcomoations				
3. 0. 0	Dec 18th, 2020	Changed opcomoducions	~	~		Fixed a problem that TimeServer automatically reboots after 388 days from the
3. 0. 0	Dec 18th, 2020				•	Fixed a problem that TimeServer automatically reboots after 388 days from the system starts up.  Fixed a problem that TimeServer goes to unsync after 99 hours even when Local
3. 0. 0	Dec 18th, 2020	Revised issues	<i>V</i>	>	<i>v</i>	system starts up. Fixed a problem that TimeServer goes to unsync after 99 hours even when Local clock Holding time is set to INF.
3. 0. 0	Dec 18th, 2020				<i>v</i>	system starts up. Fixed a problem that TimeServer goes to unsync after 99 hours even when Local

Regarding the firmware version, please reconfirm the actual Time Server by Web-UI or CLI.
TimeServer with the previous version might be shipped after new firmware is released.