Firmware for PT-G7728 Series Release Notes

Version: v6.6	Build: Build_26013009
Release Date: Feb 09, 2026	

Applicable Products

PT-G7728

Supported Operating Systems

N/A

New Features

• Displays the status Last Reported Time of the NTP server.
• Adds MAC Address Table Full event in System Event Settings.
• Supports SCP for Firmware Upgrade, Configuration Backup and Restore, and Log File Backup functions.
• Adds Enable VRRP Advertisement forward to interlink as an optional setting on the IEC 62439-3 Protocol page.
• Supports the Forward External BPDU function.
• Supports BPDU Guard and BPDU Filter for MSTP[CF2.1].
• QoS Scheduling supports SP and WRR Hybrid modes.
   Also adds three new scheduling mechanisms to the Egress Scheduling Settings:
      - 1 Strict, 7 Weighted Fair
      -      2 Strict, 6 Weighted Fair
      -      3 Strict, 5 Weighted Fair
• Supports User-defined (Mbps) mode for Egress Rate Limit.
• Support MS-CHAPv2 authentication type for RADIUS in Login Authentication.
• Supports an independent SNMPv3 Account Database for accessing SNMP information only. Private MIB for SNMPv3 Account Database is also supported.
• Supports SNMPv3 Authentication types MD5, SHA, SHA256, SHA 512, and Data Encryption types DES and AES.
• Supports the RX Blocked option for a Mirror Port.
• Supports RSPAN.
• Supports Acceptable Frame Type for VLAN trunk ports in CLI.
• Implements a mechanism to identify different flash chips on the LM-7000H-2GPHR module.
• Supports DSCP remarking in ACL IP-based rules.
• Supports override CoS in MAC-based ACLs.
• Supports MRP Interconnection Settings.
• Supports Unaware VLAN mode.
• Supports Enable VRRP Advertisement forward to Interlink option in PRP/HSR Status and Settings.
• Supports MAC Address Table Full system event.
• Supports IF-MIB ifAlias (.1.3.6.1.2.1.31.1.1.1.18) OID.
• Supports the following settings for exporting configuration file (*.ini):
a.   SNMP Trap Server
b.   RSPAN
c.   BPDU Guard/Filter for MSTP
d.   Egress Rate Limiting
e.   QoS Scheduling Mode

Enhancements

• Adds a Description column in the Port Status page to include user-configured text (similar to the

Port Settings page).

- Increases syslog servers from 3 to 4.
- Increases Trusted Access IP list from 10 sets to 20 sets.
- Increases RADIUS server from 1 to 2 servers.
- Increases SNMP Trap servers from 2 to 5 servers.
- Shows additional MSTP Status information including CIST Root, Regional Root, MSTI Root, and Bridge ID in CLI
- Enhances MSTP recovery time
- Supports the use of "_" and "-" in ACL profile names.
- Supports SCP for Firmware Upgrades, and Configuration Backup and Restore functions.
- Adds 60 sec timeout when SSH sessions are created but no login occurs.
- Web Login Message changes to Login Banner Message.
-     Supports configuring the Login Banner Message via CLI
-     Login Banner Message will show for the Menu mode and CLI mode (SSH, Console, Telnet)
-     Login Banner Message is displayed above "Moxa Industrial Ethernet Switch" on the web login page.
-     When configuring the Login Banner Message via the CLI, commands are changed as follows:

i.   Space: _0_ (for specific customized firmware, ^^ is considered as space)
ii.   Change raw[CF4.1]: __ (two underscores)

- Updates panel image to remove "micro USB" for alignment with the latest product outlook.
- TLS key length supports 256-bit ECC key, which provides security strength equivalent to a 3072-bit RSA key.

Bugs Fixed

- When the NTP server is using FQDN instead of IP, the NTP service takes around 70 seconds to work after a restart
- Cannot import configuration from an ICD file.
- PTP status keeps at free run and syncing status.
- CVE-2020-11868 (MPSA-258680) in NTP.
- MSTP Cost value is lost on instance 2 after configuration saved on ABC-02 is reimported.
- Compatibility issue of the PT-G7728/PT-G7828 and MDS-G4000 in the MSTP topology.
- PTP under TC mode fails to lock master time in the MSTP topology.
- Misspelled city name "Auckland WIlington" in the time zone options of NTP settings.
- Port trunking LACP fails if the ports that are added to the group were in disabled state.
- Port trunking VLAN is missing after configuration import via the Web UI.
- Incorrect spelling in VLAN CLI help message: Reset system valn settings
- When configure a trunk port to an access port, the port still sends tagged packets. There's still tagged VLAN for the access port on the web interface.
- The rate limitation of 30M does not work on fixed Ethernet ports.
- After importing an INI file via the web interface or console, the SSH/Telnet login mode does not

change to CLI mode.
- The "Description" column displays the user-defined description of the port in the web interface, while the media type is shown in the same column on the CLI.
- A case of the switch not being accessible after a CLI config import via SSH.
- Configuration file can't be imported after a SFP-1FESLC is installed.
- When ACL names are configured using SNMP and include special characters such as "*/()", the ACL name cannot be set after exporting and importing the ini file from the web or CLI.
- System time is reset to default after importing a configuration via CLI.
- After changing the Redundancy Protocol from RSTP to Turbo Ring V2, exporting the device's config, and then re-importing it to the same device will result in an import failure.
- When the NTP server is using FQDN instead of IP, the NTP service takes around 70 seconds to work after a restart.
- When the DA of LLDP is the same as BPDU, it is mistakenly identified as BPDU.
- Long switchover time in PTP.
- VLAN information is missing in an imported configuration file.
- Pings the RADIUS server before RADIUS protocol can be used for authentication.
- Some IEDs set their time zone based on the "currentOffset" field in the Alternate Time Offset Indicator TLV of the Announce packet. In BC mode, PT-G7728/PT-G7828 sends the currentOffset as 0, causing these IEDs to set an incorrect time zone.
- Device stops responding when showing running-config via CLI and cold starts.
- The serail number for SFP-1FESLC-T on the Fiber Check page is missing two digits.
- VLAN can't be accessed in L3 environment.
- Login fail message not displayed in CLI.
- Unable to access the web UI via the router's 1-to-1 NAT.
- An issue with importing the .ini configuration file.
- MSTP configuration in the CLI leads to duplicate VLAN to MSTI mappings.
- Cannot access web console for a while after creating account.
- CVE-2025-1679, CVE-2025-1680, CVE-2020-11868, CVE-1999-0524, CVE-2024-9404, and CVE-2024-12297 security vulnerability issues.
For details, search the Security Advisories section on the Moxa website for the following Security Advisory IDs: MPSA-257420, MPSA-258680, MPSA-257360, MPSA-240162/241154/240930, and MPSA-241407.

Changes

- Remove CLI + Xmodem and SNMP + TFTP for FPGA upgrade method
- PT-G7728/G7828 supports LM-7000H-4PoE/-4GPoE modules HW rev 2.0.0, HW rev 3.0.0 is not supported.

Notes

N/A

Version: v6.5	Build: Build_24111411
Release Date: Nov 18, 2024	

Applicable Products

PT-G7728

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Upgrades openSSL 1.1.1p to support TLS 1.3.
- Upgrades Javascript library to jquery-3.7.0.min.js.
- Initial PTP time from RTC.

Bugs Fixed

- MSTP compatibility issue with MDS-G4000
- Increase the number of MMS client connection from 4 to 6
- The first letter of MMS data object name is in lower case.
- After configuring trunk port through CLI and reverting it back to an access port, the configuration change does not take effect.
- In a setup with four PT-G7000, PTP Parent Identity and Grandmaster Identity are correct, but sync status shows freerun and sync LED are displayed incorrectly.
- In the TC mode environment with four PT-G7000, under E2E and Two-step settings, the sync status of two switches remains in "syncing" status and cannot achieve the "locked" status.
- The sync packet forwarding decision may cause loops when running HSR and E2E modes.
- In a system topology with Power Profile 2011 P2P TC mode, when switching the GM, some switches continue to remain in the "syncing" status.
- System time display is incorrect when it is synced from PTP.
- When SNMP service is closed, other task might be stuck
- When SNMP service is enabled, the switch might crash after configuration import.
- When SNMP service is enabled, the switch will reboot after a configuration import with SNMP enabled through CLI.
- When SNMP service is enabled, SNMP service can't function normally after a configuration import with SNMP enabled through the Web UI.
- Need to be able to export SNMP CLI configuration under enable SNMP status.
- CVE-2009-3563, CVE-2016-2183, CVE-2013-2566, CVE-2015-2808, CVE-2024-7695, and CVE-2024-9137 vulnerability issues.
  For more details, search the Security Advisories section on the Moxa website for the following Security Advisory ID:
  MPSA-230307, MPSA-240162, MPSA-241154

Changes

- Disables SNMP, MMS, and Modbus TCP by default for security purposes.

Notes

- Passwords with >16 characters are only supported via the "unlock" function in MXconfig and can only be changed via the Web UI.
- The password length has been increased from 16 to 32 bytes starting with firmware v6.4.

Due to the difference in password length, some upgrade/downgrade paths will result in some configurations being reset to factory default.
- v6.3 and prior -> v6.4 (some configurations set to factory default)
- v6.4 -> v6.3 (some configurations set to factory default)
- v6.5 and later -> v6.3 (some configurations set to factory default)
- v6.3 and prior -> v6.5 by export and import of configurations (some configurations set to factory default)
We recommend upgrading directly to firmware v6.5.
- v6.3 and prior -> v6.5 and later (configuration settings will be retained)
- v6.4 -> v6.5 (configuration settings will be retained)
For more details, please refer to user manual.

Version: v6.4	Build: Build_24061115
Release Date: Jun 18, 2024	

Applicable Products

PT-G7728 Series

Supported Operating Systems

N/A

New Features

• Supports IP-based ACL with DSCP remark.
• Supports MAC-based ACL with CoS remark.
• Supports RADIUS with MSCHAPv2 for Login Authentication.

Enhancements

• Increases password length from 16 to 32 characters.

Bugs Fixed

• Import of configuration fails when the PT-G7728/G7828 is installed with an SFP-1FESLC module.
• When polling MMS status, the default value is "True" for MMS LN 'Inconsistent' and 'Inaccurate' flags.

Changes

N/A

Notes

• Passwords with >16 characters are only supported via the "unlock" function in MXconfig and can only be changed via the Web UI.
• For security purpose, password length has been increased from 16 to 32 bytes from this (v6.4) version. We recommend upgrading directly to v6.5 from v6.3 and previous versions to avoid the following from being reset to the default. This issue will be fixed in v6.5. When you upgrade to V6.4, the following will be reset; all other configuration settings will be retained.
  - Admin/User password
  - Account List
  - Login Authentication configuration
  - SNMP v3 account
  For details of firmware upgrade/downgrade between different version, refer to the latest user manual.

Version: v6.3	Build: N/A
Release Date: Apr 25, 2023	

Applicable Products

N/A

Supported Operating Systems

N/A

New Features

• [PRP/HSR] Added support for Static MAC Address.

Enhancements

• [PTP] The PTP domain number will change depending on the parameters of the PTP profile.
• [PRP/HSR] Added a new event for detecting PRP LAN-A to LAN-B cross-connection events.

Bugs Fixed

• [PTP] The "UTC Offset Valid" field shows incorrectly on the System Time page.
• [PTP] The path delay is calculated twice.
• [PTP] The system does not send inaccurate power profile TLV received from the Master to the Slave.
• [PTP] When the device is configured for one-step sync but receives two-step sync, the correction field is not properly updated.
• [PRP/HSR] The HSR tag LAN ID is not properly tagged according to the output port.
• [OpenSSL] [CVE-2022-0778] Vulnerability in OpenSSL.
• [PoE] Navigating to the PoE Diagnostic page through HTTPS causes a memory leak.
• [Fiber Check] TX/RX power warnings are shown for the SFP-RJ45 module.
• [Fiber Check] The event for low RX power does not trigger correctly.
• [MMS] The character restrictions for the IED name are not applied.
• [MMS] Changing the IED name will cause the system to reboot.
• [GOOSE Check] The GOOSE tampered port event is recorded incorrectly in the event log.
• [GOOSE Check] GOOSE Check does not work if Unaware VLAN mode is enabled.
• [Loop Protection] If Loop Protection is disabled while looped ports are blocked, those ports will be stuck in a blocked state.
• [MRP] When MRP is enabled and there is a change to the topology, the event log will show an incorrect GOOSE Check.
• [Web] The encryption key shows in plain text in the web interface.

Changes

• Updated the PT-G7X28 panel image to match the EC version appearance which has no Micro USB on the front panel.

Notes

N/A

Version: v6.2	Build: Build_22011817
Release Date: Feb 11, 2022	

Applicable Products

PT-G7728 Series

Supported Operating Systems

N/A

New Features

• Supports the LM-7000H-2GPHR module, which supports the IEC 62439-3 PRP/HSR Protocol.
• Supports Nodes Table, which displays the supervision frame information.
• Supports RSTP Grouping on HSR mode.
• Supports IEC 62439-2 Media Redundancy Protocol (MRP).
• Supports IEEE 1588 PTP power profile: IEEE C37.238-2011, IEEE C37.238-2017, and IEC 61850-9-3-2016.
• Users can configure the time accuracy threshold.
• The PTP synchronization status is displayed on the WebGUI.
• Users can customize the Switch Name in the ICD file.
• The MMS function now supports four more events (Trigger Option), which users can receive notifications about.
• Users can download the Configured IED Description (CID) file.
• Users can configure Unaware VLANs on the PT-G7728 Series.
• Users can update the FPGA firmware.

Enhancements

• Supports TLS 1.2.

Bugs Fixed

• When the device has enabled the Modbus TCP/IP protocol, the transmission status of RSTP was incorrect.
• There were no follow-up packets sent to the device ports when tuning the synchronization mechanism to fix an error.
• Under certain circumstances, a GOOSE Application Identifier settings error for GOOSE Check would cause error notification packet flooding.

Changes

N/A

Notes

N/A

Version: v5.7	Build: Build_20062914
Release Date: Jul 03, 2020	

Applicable Products

PT-G7728 Series

Supported Operating Systems

N/A

New Features

• Supports the following modules: PWR-HV-NP and PWR-LV-NP.

Enhancements

• The SSH connection supports timeout to avoid occupying the console task.

Bugs Fixed

• The Fiber Check function required frequent internal hardware communication, which resulted in the CPU usage being too high.
• Fixed the memory leak issue of HTTPS.

Changes

N/A

Notes

N/A

Version: v5.6	Build: Build_20031813
Release Date: Apr 10, 2020	

Applicable Products

PT-G7728 Series

Supported Operating Systems

N/A

New Features

• Supports the following modules: LM-7000H-4TX and LM-7000H-4PoE.
• Supports modifying the IED name to allow it to integrate with Power SCADA.
• Supports Transport Layer Security (TLS) Protocol Version 1.2.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A

Version: v5.5	Build: N/A
Release Date: Oct 22, 2019	

Applicable Products

N/A

Supported Operating Systems

N/A

New Features

• Supports advanced GOOSE check functions.

Enhancements

• Supports newline in Switch location/Web Login Message/Login Authentication Failure Message.

Bugs Fixed

• Fixed the login issue when using Chrome 65.0.
• Fixed RSTP Grouping import failure.
• Fixed RSTP and Dual homing issue.
• Fixed NTP 2 server sync issue.
• Fixed configuration import issue when HTTP is disabled.

Changes

N/A

Notes

N/A

Version: v5.4	Build: Build_18032313
Release Date: Feb 26, 2019	

Applicable Products

PT-G7728

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

Fixed ptp packet forwarding mechanism when Power Profile is configured

Changes

N/A

Notes

N/A

Version: v5.3	Build: Build_17091117
Release Date: Jan 12, 2018	

Applicable Products

PT-G7728

Supported Operating Systems

N/A

New Features

First Release:
following the major new function
- Moxa standard L2 features (Except Profinet)
- All Turbo Pack 3 features
- 1588 PTP design (1-Step / 2-Step, BC/TC, P2P / E2E, Default Profile /Power Profile)
- RSTP Grouping, 61850 QoS, MMS, GOOSE Check
- Dying Gasp

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A