



Firmware for PT-G7728 Series Release Notes

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