



Firmware for PT-7728 Series Release Notes

Version: v3.9	Build: FWR_PT7728_V3.9_Build_23120510
Release Date: Dec 28, 2023	

Applicable Products

N/A

Supported Operating Systems

N/A

New Features

- Added support for new MOXA commands:
 - change network setting
 - broadcast search
 - import config (sys.ini)
 - import cli
 - upgrade firmware (firmware.rom)
 - export plaintext config
 - export encrypted config
 - get device information
 - verify account
 - add/remove account
 - register a web session id
 - set mac address
 - export debug log
 - factory default
 - load commands from a file and sent to the DUT
 - Perform broadcast search 100000 times
- Added support for TLS v1.3.
- Added support for Account Password Policy.
- Added support for Account Login Failure Lockout.
- Added support for SSL Certificate Import.
- Added support for Encrypted Configuration.
- Added support for Management Interface in the Security section.

Enhancements

- Upgraded the JavaScript library to jquery-3.7.0.min.js.
- Upgraded the SSH package (dropbear_2019.78) to support “hmac-sha2-256 & diffie-hellman-group14-sha256”.
- IP forwarding between interfaces is now enabled.

Bugs Fixed

- XSS vulnerabilities
 - LLDP diagnostic page
 - Time page (1st Time Server IP/Name & 2nd Time Server IP/Name)
 - Remote TFTP page (all input filed)
 - SNMP Settings page (Admin/User Data Encryption Key, 1st Trap Server IP/Name, 2nd Trap Server IP/Name)
 - Email Setup page (email address)
 - DHCP Relay Agent page (Value)
- [CVE-2021-27417]: If the file size is exceptionally large, undefined behavior can't be prevented.



- [MSRV-2019-003] Denial of Service (web service) by improper HTTP GET command (CNVD-2019-116145)
- [MSRV-2019-004] Denial of Service (web service) by over-sized (more than 12 MB) firmware upgrade through HTTP/HTTPS.
- [MSRV-2019-005] Denial of Service (web service) by excessive length of HTTP GET command.
- [MSRV-2017-011] Cross-Site Request Forgery (CSRF).
- [MSRV-2017-021] Release the cookie once the session expires to avoid the old cookie value being reused.
- [CVE-2022-0778] Import certificate issue: Updates OpenSSL package.
- [TALOS-2022-1621] A specially crafted HTTP request can lead to the disclosure of sensitive information.
- [TALOS-2022-1619] A specially crafted HTTP request can lead to an arbitrary JavaScript execution,
- [TALOS-2022-1618] A specially crafted HTTP message header can lead to denial of service.
- [TALOS-2022-1616] A specially crafted network sniffing can lead to the disclosure of sensitive information.
- [CVE-2022-40214] Potential tampered messages.
- [CVE-2022-40691] A specially crafted HTTP request can lead to disclosure of sensitive information.
- [nessus-43156] The remote network time service has a denial-of-service vulnerability.
- [nessus-97861] The remote NTP server responds to mode 6 queries, which can potentially be used in NTP amplification attacks.
- [Nessus-85582]: Web application potentially vulnerable to clickjacking.
- After configuring the NTP local time, if two configured NTP servers are configured, the NTP function does not work properly and may result in time sync failures.
- The SNMPv3 encryption data and shared key of the TACACS and RADIUS server can be viewed by snooping the web interface.

Changes

- Removed "IE 11" and "IE 7" wording from the web interface.
- Removed the CBC and SHA1 ciphers from TLSv1.2 for security reasons.
- Disabled TLS v1.0 and v1.1 for security reasons.
- Replaced the Monitoring page with a non-Java version.
- Removed the banner with device-related information from the login page.

Notes

- This firmware version can only be applied to PT-7728 HW Rev. 3.1.0 and higher.

Version: v3.8	Build: Build_17041116
Release Date: May 04, 2017	

Applicable Products

PT-7728-F-24, PT-7728-F-24-24, PT-7728-F-24-48, PT-7728-F-24-HV, PT-7728-F-48, PT-7728-F-48-48, PT-7728-F-48-HV, PT-7728-F-HV, PT-7728-F-HV-HV, PT-7728-F-HV-HV/KC, PT-7728-R-24, PT-7728-R-24-24, PT-7728-R-24-48, PT-7728-R-24-HV, PT-7728-R-48, PT-7728-R-48-48, PT-7728-R-48-HV, PT-7728-R-HV, PT-7728-R-HV-HV, PT-7728-R-HV-HV/KC

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Added warning message when default password was not changed.
- Encrypted security keys in user interface.
- Enhanced RSTP compatibility.

Bugs Fixed

- Cross-site scripting vulnerability.
- Denial of service attack vulnerability.
- Privilege escalation vulnerability.
- SSL v2/v3 vulnerability in HTTPS.
- Web console cannot be accessed when the SNMP get bulk service is running.
- Specific CLI command caused the switch to reboot with default settings.
- Adding a new VLAN changed IGMP querier state from disable to enable.
- Could not save configurations to the ABC-01 via IE browser.
- Corrected RSTP auto-edge behavior.
- Rate limit could not be set in web UI.
- PTP timestamp error in announce message.
- Removed 1588v2 PTP message of IEC 61850 QoS.
- Ports on slot 4 back to default setting after system reboot.
- Corrected RSTP edge definition in exported configuration file.
- Corrected authorization of Radius/TACACS+ login.

Changes

N/A

Notes

N/A



Version: v3.5	Build: Build_16052014
Release Date: N/A	

Applicable Products

PT-7728-F-24, PT-7728-F-24-24, PT-7728-F-24-48, PT-7728-F-24-HV, PT-7728-F-48, PT-7728-F-48-48, PT-7728-F-48-HV, PT-7728-F-HV, PT-7728-F-HV-HV, PT-7728-F-HV-HV/KC, PT-7728-R-24, PT-7728-R-24-24, PT-7728-R-24-48, PT-7728-R-24-HV, PT-7728-R-48, PT-7728-R-48-48, PT-7728-R-48-HV, PT-7728-R-HV, PT-7728-R-HV-HV, PT-7728-R-HV-HV/KC

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

- Inaccurate system local time.
- Time floating in NTP mechanism.

Changes

N/A

Notes

N/A



Version: v3.4	Build: Build_15081113
Release Date: N/A	

Applicable Products

PT-7728-F-24, PT-7728-F-24-24, PT-7728-F-24-48, PT-7728-F-24-HV, PT-7728-F-48, PT-7728-F-48-48, PT-7728-F-48-HV, PT-7728-F-HV, PT-7728-F-HV-HV, PT-7728-F-HV-HV/KC, PT-7728-R-24, PT-7728-R-24-24, PT-7728-R-24-48, PT-7728-R-24-HV, PT-7728-R-48, PT-7728-R-48-48, PT-7728-R-48-HV, PT-7728-R-HV, PT-7728-R-HV-HV, PT-7728-R-HV-HV/KC

Supported Operating Systems

N/A

New Features

- Supports IEC 61850 QoS.
- Build-in MMS server based on IEC 61850-90-4 switch data modeling for power SCADA.

Enhancements

- 12 digit product series number.

Bugs Fixed

- Fixed bugs on firmware v3.3.

Changes

N/A

Notes

N/A

Version: v3.3	Build: N/A
Release Date: N/A	

Applicable Products

PT-7728-F-24, PT-7728-F-24-24, PT-7728-F-24-48, PT-7728-F-24-HV, PT-7728-F-48, PT-7728-F-48-48, PT-7728-F-48-HV, PT-7728-F-HV, PT-7728-F-HV-HV, PT-7728-F-HV-HV/KC, PT-7728-R-24, PT-7728-R-24-24, PT-7728-R-24-48, PT-7728-R-24-HV, PT-7728-R-48, PT-7728-R-48-48, PT-7728-R-48-HV, PT-7728-R-HV, PT-7728-R-HV-HV, PT-7728-R-HV-HV/KC

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Added web interface for loop-protection enable/disable.
- Added web interface for SSH/SSL key generation.
- Added SNMP MIB for SFP DDM.

Bugs Fixed

- Login failed in CLI mode when password contained a special character.
- Hybrid VLAN lacked SNMP MIB object.
- SFP DDM displayed inaccurate values.
- IEEE 1588 PTP did not function correctly.
- IPv6 did not function correctly.

Changes

N/A

Notes

N/A



Version: v3.1	Build: N/A
Release Date: N/A	

Applicable Products

PT-7728-F-24, PT-7728-F-24-24, PT-7728-F-24-48, PT-7728-F-24-HV, PT-7728-F-48, PT-7728-F-48-48, PT-7728-F-48-HV, PT-7728-F-HV, PT-7728-F-HV-HV, PT-7728-F-HV-HV/KC, PT-7728-R-24, PT-7728-R-24-24, PT-7728-R-24-48, PT-7728-R-24-HV, PT-7728-R-48, PT-7728-R-48-48, PT-7728-R-48-HV, PT-7728-R-HV, PT-7728-R-HV-HV, PT-7728-R-HV-HV/KC

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Passed ODVA EtherNet/IP certificate.
- Added some minor SNMP OIDs.
- Enhanced multicast performance.
- Added version number in MIB file.

Bugs Fixed

- NTP did not synchronize time in default setting.
- NTP client function did not work with Windows XP NTP server.
- Firmware Upgrade Failed when IEEE 802.1x was enabled.
- Switch rebooted when receiving IGMP v3 packets (commonly used in Windows 7).

Changes

N/A

Notes

N/A



Version: v3.0	Build: N/A
Release Date: N/A	

Applicable Products

PT-7728-F-24, PT-7728-F-24-24, PT-7728-F-24-48, PT-7728-F-24-HV, PT-7728-F-48, PT-7728-F-48-48, PT-7728-F-48-HV, PT-7728-F-HV, PT-7728-F-HV-HV, PT-7728-F-HV-HV/KC, PT-7728-R-24, PT-7728-R-24-24, PT-7728-R-24-48, PT-7728-R-24-HV, PT-7728-R-48, PT-7728-R-48-48, PT-7728-R-48-HV, PT-7728-R-HV, PT-7728-R-HV-HV, PT-7728-R-HV-HV/KC

Supported Operating Systems

N/A

New Features

- RSTP-2004.
- MSTP.
- NTP Server/Client.
- SW 1588 PTPv2.
- CLI.
- Ethernet/IP.
- Hybrid VLAN.
- Radius/TACACS+ for both login access and port authentication.
- Egress rate limit.
- Unknown unicast filtering.
- CPU loading.
- Changed IP address without rebooting.
- DHCP Discover retries forever, or retries for a period of time.
- GARP timer adjustment.
- Loop-protection.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A



Version: v2.6	Build: N/A
Release Date: N/A	

Applicable Products

PT-7728-F-24, PT-7728-F-24-24, PT-7728-F-24-48, PT-7728-F-24-HV, PT-7728-F-48, PT-7728-F-48-48, PT-7728-F-48-HV, PT-7728-F-HV, PT-7728-F-HV-HV, PT-7728-F-HV-HV/KC, PT-7728-R-24, PT-7728-R-24-24, PT-7728-R-24-48, PT-7728-R-24-HV, PT-7728-R-48, PT-7728-R-48-48, PT-7728-R-48-HV, PT-7728-R-HV, PT-7728-R-HV-HV, PT-7728-R-HV-HV/KC

Supported Operating Systems

N/A

New Features

- Supports TurboPack™ 2009 (add new functions for Turbo Chain, IPv6, Modbus/TCP, IEEE 1588PTP, SNMP Inform, LLDP, DHCP Option 82, Firefox, and SSH).
- Push Ring Port button when running Turbo Chain, the Chain ports' LED will activate.
- Link Healthy Check on Giga ports for redundant protocols changed from Alarm mode to Polling mode.
- Added "VLAN_UNAWARE", "RSTP_2004", "CHANGEIP_NOREBOOT".
- Added 10FL and MTRJ module.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A



Version: v1.3	Build: N/A
Release Date: N/A	

Applicable Products

PT-7728-F-24, PT-7728-F-24-24, PT-7728-F-24-48, PT-7728-F-24-HV, PT-7728-F-48, PT-7728-F-48-48, PT-7728-F-48-HV, PT-7728-F-HV, PT-7728-F-HV-HV, PT-7728-F-HV-HV/KC, PT-7728-R-24, PT-7728-R-24-24, PT-7728-R-24-48, PT-7728-R-24-HV, PT-7728-R-48, PT-7728-R-48-48, PT-7728-R-48-HV, PT-7728-R-HV, PT-7728-R-HV-HV, PT-7728-R-HV-HV/KC

Supported Operating Systems

N/A

New Features

- Add PM-7200-8SFP compatibility function.
- If you want to upgrade the up-to-date firmware, please refer to User's Manual page 3-10 "System File Update" section for detailed instructions.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A



Version: v1.2	Build: N/A
Release Date: N/A	

Applicable Products

PT-7728-F-24, PT-7728-F-24-24, PT-7728-F-24-48, PT-7728-F-24-HV, PT-7728-F-48, PT-7728-F-48-48, PT-7728-F-48-HV, PT-7728-F-HV, PT-7728-F-HV-HV, PT-7728-F-HV-HV/KC, PT-7728-R-24, PT-7728-R-24-24, PT-7728-R-24-48, PT-7728-R-24-HV, PT-7728-R-48, PT-7728-R-48-48, PT-7728-R-48-HV, PT-7728-R-HV, PT-7728-R-HV-HV, PT-7728-R-HV-HV/KC

Supported Operating Systems

N/A

New Features

- New release for the PT-7728 Series.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A