

Software Name: PT-7728 Series Firmware

| Version No. | Build Date No./ Release Date | Supported OS | Apply to Models | New Features/Enhancements | Bugs Fixed/Changes | Note |
|-------------|------------------------------|--------------|-----------------|--|---|------|
| 3.8 | Build_17041116 | N/A | PT-7728 | New Features: N/A Enhancements: 1. Add warning message when default password was not changed 2. Encrypt security keys in user interface 3. Enhance RSTP compatibility | Bugs Fixed: 1. Cross-site scripting vulnerability 2. Denial of service attack vulnerability 3. Privilege escalation vulnerability 4. SSL v2/v3 vulnerability in https 5. Web console cannot be accessed due to SNMP get bulk 6. Specific CLI command cause switch reboot with default settings 7. Add a new VLAN will change IGMP querier state from disable to enable 8. Saving configuration to ABC-01 cannot be performed via IE browser 9. Correct RSTP auto-edge behavior 10. Rate limit cannot be set in web UI 11. PTP timestamp error in announce message 12. Remove 1588v2 PTP message of IEC 61850 QoS 13. Ports on slot 4 back to default setting after system reboot 14. Correct RSTP edge definition in exported configuration file 15. Correct authorization of Radius/TACACS+ login Changes: | N/A |
| 3.5 | Build_16052014 | N/A | PT-7728 | New Features: N/A Enhancements: N/A | Bugs Fixed: 1. Inaccurate system local time 2. Time floating in NTP mechanism Changes: N/A | N/A |

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| 3.4 | Build_15081113 | N/A | PT-7728 | New Features: 1. Support IEC 61850 QoS 2. Build-in MMS server based on IEC 61850-90-4 switch data modeling for power SCADA Enhancements: 1. 12 digital product series number | Bugs Fixed: 1. Fixed bugs on firmware V 3.3 Changes: N/A | N/A |
| 3.3 | N/A | N/A | PT-7728 | New Features: N/A Enhancements: 1. Add web interface for loop-protection enable/disable 2. Add web interface for SSH/SSL key generation 3. Add SNMP MIB for SFP DDM | Bugs Fixed: 1. Login fail in CLI mode when password is with special character 2. Hybrid VLAN lacks of SNMP MIB object 3. SFP DDM display inaccurate values 4. IEEE 1588 PTP cannot function correctly 5. IPv6 cannot function correctly Changes: N/A | N/A |
| 3.1 | N/A | N/A | PT-7728 | New Features: N/A Enhancements: 1. Pass ODVA EtherNet/IP certificate 2. Add some minor SNMP OIDs 3. Enhance multicast performance 4. Add version number in MIB file | Bugs Fixed: 1. NTP cannot synchronize time in default setting 2. NTP client function cannot work with Windows XP NTP server 3. Firmware Upgrade Failed when IEEE 802.1x is enabled 4. Switch reboots when receiving IGMP v3 packets (commonly used in Windows 7) Changes: N/A | N/A |

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| 3.0 | N/A | N/A | PT-7728 | New Features: 1. RSTP-2004 2. MSTP 3. NTP Server/Client 4. SW 1588 PTPv2 5. CLI 6. Ethernet/IP 7. Hybrid VLAN 8. Radius/Tacacs+ for both login access and port authentication 9. Egress rate limit 10. Unknown unicast filtering 11. CPU loading 12. Change IP without reboot 13. DHCP Discover retries forever, or retries for a period of time 14. GARP timer adjustment 15. Loop-protection Enhancements: N/A | Bugs Fixed: N/A Changes: N/A | N/A |
| 2.6 | N/A | N/A | PT-7728 | 1. Support TurboPack™ 2009 (add new managed functions of Turbo Chain, IPv6, Modbus/TCP, IEEE 1588PTP, SNMP Inform, LLDP, DHCP Option 82, Firefox, and SSH) 2. Push Ring Port button when running Turbo Chain , the Chain ports' LED will be bright. 3. Link Healthy Check on Giga ports for redundant protocols changes from Alarm mode to Polling mode. 4. Add "VLAN_UNAWARE", "RSTP_2004", "CHANGEIP_NOREBOOT" 5. Add 10FL and MTRJ module Enhancements: N/A | Bugs Fixed: N/A Changes: N/A | N/A |

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| 1.3 | N/A | N/A | PT-7728 | <p>New Features:</p> <ol style="list-style-type: none"> 1. Add PM-7200-8SFP compatibility function. 2. If you want to upgrade the up-to-date firmware, please refer to User's Manual page 3-10 "System File 3. Update" section for detailed instruction. <p>Enhancements: N/A</p> | <p>Bugs Fixed: N/A</p> <p>Changes: N/A</p> | N/A |
| 1.2 | N/A | N/A | PT-7728 | <p>New Features:</p> <ol style="list-style-type: none"> 1. New firmware release for PT-7728 Series <p>Enhancements: N/A</p> | <p>Bugs Fixed: N/A</p> <p>Changes: N/A</p> | N/A |