

CYBER POWER SYSTEMS, INC.

INTELLIGENT PDU FIRMWARE RELEASE NOTES

Applicable Products:

PDU31XXX, PDU41XXX, PDU71XXX, PDU81XXX, PDU34XXX, PDU44XXX, PDU74XXX, PDU84XXX

Version 1.2.6 (Release Date: Nov. 25, 2022)

New Feature

- Support SNEV001 (upgrade version of ENVIROSENSOR).
- Support user ability to enable/disable cipher suites for SSL Server.
- Support configuration file download via File Transfer Protocol (FTP).
- Add SNMP OID **ePDU2SourceStatusRedundancyState** in MIB file v2.10.
- Support daisy-chain on PowerPanel Business (PPB).

Feature Improved

- Remove Gmail OAuth from SMTP Server Authentication.
- Expand Name/Location/Contact length up to 63 characters for [System->Identification].
- Expand account/password length up to 31 characters for Viewer and Outlet User.
- Expand the compatibility of USB Flash Drive for firmware update function.
- Display TCP/IPv4 Subnet Mask and Gateway on LCD for local management.
- Change TCP/IPv4 Subnet Mask from 255.255.255.0 to 255.255.0.0.

Bug Fixed

- PDU Type Value from SNMPv3 trap is incorrect.
- LDAP authentication fails when the length of password is more than 15 characters.
- Special characters '-' are not allowed when setting NTP Server.
- System time is not updated when the NTP setting is enabled via Command Line Interface (CLI).
- Setting range of schedule time is incorrect on Command Line Interface (CLI).
- Time information of syslog test is missing on Command Line Interface (CLI).
- Incorrect value is responded from SNMP OID as follows:
 - ePDU2SourceStatusSourceAFrequency
 - ePDU2SourceStatusSourceBFrequency
 - ePDU2SourceStatusPowerSupplySourceAStatus
 - ePDU2SourceStatusPowerSupplySourceBStatus

- Failed to quit event log on Command Line Interface via serial port.
- Failed to restore Outlet Power Off Delay with the function of Restore Configuration.
- Prompt message indicating invalid input fails to pop up when the setting of Radius/LDAP server is incorrect.

Version 1.2.4 (Release Date: Mar. 3, 2022)

Feature Improved

- Production process optimization.

Version 1.2.3 (Release Date: Dec. 16, 2021)

New Feature

- Support multiple languages on the Web Interface, German/French/Spanish/Russian/Traditional Chinese/Simplified Chinese
- Support RADIUS Server login timeout setting.
- Add Trap Test command on Command Line Interface (CLI).

Feature Improved

- Remove 3DES encryption suite and SHA1 algorithm from SSH Server for security vulnerability consideration.
- Present outlet name in notifications with only one outlet.

Bug Fixed

- Save and Restore Configuration function for AutoPing setting is not complete.
- PDU would crash when users upload 4096-bit SSH Hostkey.
- Failed to send email to specific servers with severe standard.
- The outlet user name is incorrectly displayed in the field of Outlet User Login/Logout event logs when the outlet user name has special characters.
- The changed values aren't displayed in the field accordingly after setting new Subnet Mask and Gateway on the Web Interface.
- SMS Service Provider option could not switch after the newline character is set in the field of Content on SMS Service webpage.
- Prompt message indicating reboot fails to present after users upload certificate on Web Service webpage.
- ColdStart Delay setting may lead to outlet on delay failure.
- Correct the contents on Help webpage.
- LCD temporarily turns green after the device boots up.

Version 1.2.2 (Release Date: Aug. 11, 2021)

New Feature

- Support Auto Transfer Switch (ATS) series,
PDU34XXX/PDU44XXX/PDU74XXX/PDU84XXX

Bug Fixed

- The LDAP/RADIUS Server Configuration may fail when settings are saved as “Skip Test” on the Web Interface.
- Special characters are not allowed when setting Schedule Name, Outlet Name, Outlet User Name and AutoPing Name on the Web Interface.
- Information of daisy-chained PDUs fails to load on Daisy Chain webpage.
- Prompt message indicating logout fails to pop up after changing the IP information (Subnet Mask, Gateway) on TCP/IPv4 webpage.

Version 1.2.1 (Release Date: Mar. 25, 2021)

New Feature

- Support SSH Algorithms as follow:
Kex exchange:
 - diffie-hellman-group-exchange-sha256
 - diffie-hellman-group14-sha256
 - diffie-hellman-group14-sha1
 - diffie-hellman-group1-sha1

Ciphers:

- aes256-cbc

MAC:

- hmac-sha2-512
- hmac-sha2-256

- Add Challenge-Handshake Authentication Protocol (CHAP) to the RADIUS authentication type.

Feature Improved

- Support using HTTP Post Request to submit account/password information on the Web interface.
- Support logging PDU via Rebex SSH Client.
- Support setting Gmail authentication on SMTP Sever for new verification method of Google mail Server.
- Support SMS Service Provider function for Clickatell accounts created after 2016.
- Remove 3DES encryption suite from SSL ciphers for security vulnerability consideration.
- Remove TLS V1.0 Protocol from SSL Server for security vulnerability

consideration.

- Display the error message when Viewer account/password length is more than 15 characters on Command Line Interface (CLI).
- Display the prompt to log out message when changing the IP information (IP address, Subnet Mask and Gateway) on Command Line Interface (CLI).

Bug Fixed

- Failed to follow the setting of Admin Manager IP when using FTP.
- Failed to set Clickatell as SMS Service Provider.
- Failed to send email to specific servers with severe standard.
- Email reception time does not match the event time in the Daylight Saving Time (DST) zone.
- Failed to set Viewer Manager IP with subnet mask on Command Line Interface (CLI).
- Outlet user fails to login when using LDAP Server.
- Login with outlet user could not control the first outlet number which is defined in description when using LDAP Server.
- The outlet user name of last logged-in user is incorrectly displayed in the field of outlet user name in all related event logs.
- Executing specific commands on Command Line Interface (CLI) would lead to unexpected reboot.

Version 1.2.0 (Release Date: Apr. 24, 2020)

New Feature

- Support TLS 1.2.
- AutoPing.

Feature Improved

- Force user to change different username/password upon login with default.
- Expand the compatibility to support Gmail notification function.
- Add X-Frame-Options to the http header for enhanced security.
- Adjust the function "Admin/ Viewer Manager IP" to be on the [System->Management] webpage as it is valid for Radius/LDAP as well.

Bug Fixed

- Failed to login SSH console via Putty version 0.71 or above.
- PDU would crash when the software "The Dude" detects and scans the PDU with SSH enabled.
- Rarely fail to login and keep redirecting to the login page after login procedure on the Web.

Version 1.1.2 (Release Date: Nov. 19, 2019)

New Feature

- Support Command Line Interface (CLI).

Bug Fixed

- Special characters are not allowed when setting SMTP server account/password on the Web Interface.
- Special characters are not allowed when setting SNMPv3 authentication password and privacy password on the Web Interface.
- Time not in Daylight Saving Time (DST) period is incorrectly turned forward one hour in the Start and End Month (only in the Southern Hemisphere).
- The format of Syslog message is incorrect with displaying information of year.
- E-mail notification is unavailable when SMTP server address length is more than 32 characters.
- Administrator fails to login when using Windows AD Server with specific attribute setting.
- Incorrect date of action time is mistakenly allowed when setting Schedule Once on the Web interface.
- Arrow keys are mistakenly allowed on the Serial Interface and Console service.

Version 1.1.1 (Release Date: Jun. 25, 2019)

New Feature

- Add SNMP OID as follows:
 - envircTemperatureCelsius
 - envircTempCelsiusHighThreshold
 - envircTempCelsiusLowThreshold
 - envircTempCelsiusRateOfChange
 - envircTempCelsiusHysteresis

Feature Improved

- Support Outlet User feature and Outlet Name setting among Monitored PDU Series
- Expand account/password up to 63 characters for the Administrator on the Local Account and the SMTP Server.
- Display passwords with five asterisks "*****" instead of originally blank once the password field of SMTP server, SNMPv3 authentication and privacy is set.

- Support load threshold hysteresis.
- Add temperature or humidity value in selected Environment Sensor events.
- Add Firmware update events in the list of System Information.

Bug Fixed

- PDU would crash after the software "NESSUS" detects and scans the PDU.
- Using Windows NPS RADIUS Server could not login with Administrator.
- Setting the Schedule Once on the Web Interface, the same action might unexpectedly do again after 11 days.
- The E-mail Recipients webpage would not display correctly once the test message is sent to more than one email recipient and DNS server is not functional.
- Setting Gmail authentication on SMTP server would not succeed due to the change of verification method in Google mail Server.
- Webpage is no longer accessible through HTTPS once the handshake between PDU and LDAPS server fails.
- Error message "Key Exchange Fail" appears on the console when users attempt to log in through SSH by PUTTY.
- SMS service is not functional in specific servers with severe standard.
- Special characters are not allowed when setting account/password through console service.
- Using TLS/SSL to verify user's identity on the SMTP server would get authentication failure when the character length of account is shorter than the character length of password.
- Logging in with wrong level of access if the description attribute of the account is not set in LDAP Server.
- Setting outlet load threshold cannot work through console service.
- Outlet load threshold events are not triggered among Metered-by-Outlet PDU Series.

Version 1.10 (Release Date: Jun. 25, 2018)

New Feature

- Support Firmware Update function via Secure Copy Protocol (SCP) and PuTTY Secure Copy client (PSCP).
- Support SSH Hostkey export function.

Feature Improved

- Display outlet user name in the Event Logs when outlet user logs in/out.
- Expand the compatibility of USB Flash Drive for firmware update function.

Bug Fixed

- Inputting incorrect Manager IP format in the Local Account page would be accepted and be configured an unpredictable setting value.
- Status load (Amps) responded from SNMP OID was 10 times to correct value, e.g. ePDU2DeviceStatusLoad, ePDU2DeviceStatusPeakLoad, ePDU2BankStatusLoad, ePDU2OutletMeteredStatusLoad, etc.
- Unexpected reboot when LCD screen off time is set to 'Never'.

Version 1.09 (Release Date: May 8, 2018)

Feature Improved

- Support the following models: PDU31106, PDU31406.

Version 1.08 (Release Date: Feb. 8, 2018)

New Feature

- Support Firmware Upgrade via Daisy-Chain function. Once the Host PDU completes the firmware upgrade, it will trigger its Guest PDUs in the series to upgrade the firmware automatically.

Bug Fixed

- Scheduling outlet actions at the same action time cannot work.
- Webpage is no longer accessible in case of HTTPS handshake failure.
- Notification through Gmail cannot work if HTTP/HTTPS port changed.
- System time becomes incorrect when it is updated from NTP server in the period of DST.
- DNS cannot work normally as long as it fails once.
- Device/Outlet load (Watts) displayed on PowerPanel® Business Edition is 10 times to correct value.
- Under certain conditions the PDU will enter a mode of operation in which power measurements are not updated and outlet control is unresponsive until the unit is rebooted.

Version 1.06 (Release Date: Aug. 16, 2017)

New Feature

- Daisy Chain: Users are able to access up to four PDUs using only one network connection.
- Security Enhancement: Users forced to change default username/password upon first login.

Feature Improved

- SYSLOG description added on Event Action Help page.
- Upon Manual Setup for system time configuration, year option can only be

chosen after 2000.

- Unit displayed for power adjusted to 1W/VA in the replacement of 0.01kW/kVA.

Bug Fixed

- Fixed the issue where users cannot login through Safari browser.
- Fixed mis-sending Login Event bug when testing LDAP/RADIUS.
- Fixed bugs where revision of OAuth verification algorithm leads to users being unable to authorize Gmail account as SMTP serVersion
- Unexpected reboot when e-mail was sent via Office365 SMTP serVersion
- Users cannot login through SSH via PUTTY.
- Fixed bugs where outlet peak power/energy is not reset after PDU reset action is executed.
- Fixed the issue where Wake-on-LAN may not function properly after users connect with PPBE.

Version 1.04 (Release Date: Nov. 22, 2016)

Bug Fixed

- Fixed table heading bugs in the file which users save status records.

Version 1.03 (Release Date: Nov. 10, 2016)

Feature Improved

- Improved USB firmware upgrade process.

Version 1.02 (Release Date: Oct. 28, 2016)

Bug Fixed

- Fixed content errors on several interface (Web/Telnet/LCD/MIB).

Version 1.01 (Release Date: Oct. 24, 2016)

Bug Fixed

- Fixed table heading bugs on status records webpage.

Version 1.00 (Release Date: Oct. 6, 2016)

- First Release.

CYBER POWER SYSTEMS, INC.

www.cyberpowersystems.com

Contact in USA and Canada:

4241 12th Ave East, Suite 400

Shakopee, MN 55379

Toll-free: (877) 297-6937

Contact for all other regions:

Please visit our website for local contact information.