

IPT ACU software versions:

0.18.07

- Added slave status clear to Modbus search request routine to clear out old slaves previously found
- Corrected Modbus receive exception handler when in SLAVE mode as was disabling listening

0.18.06

- Added socket unplugged counter to socket alarms to prevent floating socket amps from triggering random alarms
- Removed leading spaces for Nextion TFT panel for better TFT2.0 compatibility

0.18.05

- Added SNMP identical read/write community setup

0.18.04

- Corrected exception error in temperature sensor alarm query as was pointing to non-existent SNMP trap
- Corrected SNMP SET of enviro location, contact name and door name as was not converting to string or requesting config save
- Added additional first register checking to Modbus input register responses and overall exception handler
- Increased moving average on temperature sensors for less average fluctuation
- Removed 0 input value check on webserver metering.html and socket.html threshold entry to allow effective alarm disable using 0 value
- Added Master PDU Name setup on webserver setup.html page for use in unplugged alarms

0.18.03

- Added moving average for temperature sensor measurements to prevent corrupt readings

0.18.02

- Added socket unplugged and plugged back in alarm functionality with threshold on advanced configuration page (config.html) and added SNMP trap SET (unplugged) and CLEAR (plugged in)(MIB PDUSNMP+_V1.10.00)
- Corrected contact 1-3 CLEAR trap OIDs as was pointing to meter 3 OIDs
- Corrected CLEAR trap OIDs for contact 1~3 as was indexing meter 3 OIDs
- Corrected contact 1~3 clear through SNMP SET as was not being actioned
- Prepended PDU name variable to the pdu_Information.pdu_TrapName OID variable for slave socket reporting (pdu_name + equipment name)

0.18.01

- Corrected webserver enviro page contact configuration as was not saving changes

0.18.00

- Added Particle sensor (x4) support to temperature sensor bus
- Added Particle sensors to webserver enviro.html and SNMP (MIB PDUSNMP+_V1.09.00)
- Added Particle sensor support to alarm checking routine
- Updated webserver socket reboot (OFF-ON) functionality so that it does not rely on javascript, its an internal function

0.17.06

- Corrected slave alarm check as was not processing all slaves connected

0.17.05

- Added slave zero measurements timer so that all offline slave values are zeroed after 60 seconds

0.17.04

- Corrected DC meter values as were inverted
- Added Slave PDU name configuration to system (config.ini/bak updated also)
- Added SNMP slave naming register to MIB (MIB PDUSNMP+_V1.08.00)
- Added PDU name dialog to Slave PDUs page on webserver

0.17.03

- Added SNMP MODBUS search (MIB PDUSNMP+_V1.07.00)

0.17.02

- Added PDU-SNMP and IP Lite Modbus support to allow these products to be used as slaves
- Added privilege protection to config/config.ini download so only admin and factory users can download

0.17.01

- Added 80A shunt capability to metering
- Added 80A shunt configuration for each meter to config.html and config.ini/bak
- Added individual Modbus retry counters to prevent OFFLINE/ONLINE events taking place during normal operation

0.17.00

- Added Slave naming configuration to system for phases, sockets, sensors, contacts and door
- Added SNMP registers to support Slave naming configuration (MIB PDUSNMP+_V1.06.00)
- Added webpage dialogs to slave.html to support Slave naming configuration
- Modified Alarm system to include Slave naming configuration so that traps include naming rather than 'Slave N'
- Added alarm for slave PDU offline and online support
- Added support for original SHT11 humidity/temperature sensor and added configuration option to config.html page
- Corrected MODBUS holding register return in Slave mode as was incorrectly returning input register IDs
- Added support for Slave SEARCH on configuration page when system configured for MASTER mode
- Added configuration option for Slave Master threshold override so that all Slaves use master threshold levels when searched in
- Corrected humidity sensor CRC process as bad CRC measurements were being passed through
- Added additional temperature range validation to TMP75/175 temperature sensor bus

0.16.01

- Corrected slave_Global-Environmental-Contact1~3 status return as was using the slave_slaveSelected pointer
- Added no socket switch ON during sequence startup when delay value is set to zero
- Changed SNMP slave_pduName to accept a SET with a Cabinet ID string
- Added MODBUS holding register flags to reset contacts 1~3 on a slave
- Changed SNMP slave_Environmental-Contact1~3 to accept SET to produce MODBUS contact reset request
- Changed SNMP slave_Global-Environmental-Contact1~3 to accept SET to produce MODBUS contact reset request
- Added full hardware meter reset when meter voltage out of range
- Removed humidity value test on TFT display after meter L3 display as was not displaying enviro screen
- Corrected NTP setup in timesyncd.conf and added auto time/date setup when NTP turned off

0.16.00

- Updated for CM3+ module detection, including separate kernel modules for soft_uart

0.15.10

- Updated 200A shunt current conversation factor as was reporting low

0.15.09

- Added 200A shunt capability to metering
- Added shunt configuration for each meter to config.html page and config.ini/bak

0.15.08

- Corrected slave address setup on setup.html page

0.15.07

- Added meter enables to config page and config.ini/bak

0.15.06

- Changed IPv4 and IPv6 address types to CIDR inclusive, for example 192.168.1.5 becomes 192.168.1.5/24
- Modified IP address and IPv6 address configuration to add CIDR in setup.html
- Changed SNMP pdu_IPAddress format to display sting to allow IP + CIDR to be entered (MIB PDUSNMP+_V1.03.00)
- Changed SNMP pdu_SubNetMask ro pdu_Gateway as NetMask is redundant (MIB PDUSNMP+_V1.03.00)

0.15.05

- Corrected master door and lock SNMP trap descriptions as they were pointing to incorrect trap OIDs
- Added MODBUS reboot and kWh reset incoming processing to support PDU Agent 'RESET' and 'Reset all PDU Energy' buttons
- Added SNMP reboot and kWh reset for currently selected slave, slave 1 = master
- Changed SNMP trap format to swap pdu_TrapName and slave_pduAddress and place pdu_TrapDescription on the end (MIB PDUSNMP+_V1.02.00)
- Added Environmental humidity sensor location OID (MIB PDUSNMP+_V1.02.00)
- Changed pdu_TrapName variable to Phase names for meter1~3 and location names for environmental sensors for master unit traps
- Corrected IP address SNMP SET on trap destinations and ip/netmask OIDs as was not converting to individual string values
- Removed automatic reboot when changing network, NTP or SNMP settings

0.15.04

- Added socket sequential start only when all sockets are off at startup
- Changed timesyncd.conf #NTP to just NTP and associated sed command as customer reported this worked
- Corrected socket configuration (image, name etc.) after socket 20 as check for socket delay was too low at 10000, changed to 100000

0.15.03

- Added SNMPv3 auth and priv key length check with defaulting to 'defaultauthkey' or 'defaultprivkey' if they don't meet

8 character length requirements

- Changed snmpv3authkey to 'defaultauthkey' and snmpv3privkey to 'defaultprivkey' in config.ini and config.bak

0.15.02

- Removed copy of config.new to config.bak on config.new upload as was preventing config default operation.
- Added timesynd.conf NTP server update on change through setup.html

0.15.01

- Corrected config.new copy over on upload as was copying to correct location.

0.15.00

- Added specific CGI User configuration and user delete functions to webserver.
- Added User delete function to config.html page.
- Added System Configuration config.new upload and download functions and default configuration to config.html page.
- Modified logout.html page to re-direct to index.html but with incorrect authentication.

0.14.06

- Corrected user socket rights switching as was selecting the next bank up from the one selected in all switching routines.

0.14.05

- Added DNS server 8.8.8.8 (ipv4) and 2001:4860:4860::8888 (ipv6) to static IP configuration of dhcpd.conf domain_name_servers.

0.14.04

- Corrected password save for user creation/change on config.html page.

0.14.03

- Corrected phase read on sockets module as was not calculating energy from correct phase.

0.14.02

- Corrected phase reporting on sockets.html page as was not displaying phase identification or VA correctly.
- Corrected phase reporting on setup.html page as was not displaying socket phase identification correctly.
- Corrected socket energy calculation in relation to phase as was not bit shifting phase value to get 0~2 phase index.

0.14.01

- Corrected slave read of PDU with < 24 sockets as was skipping next run process and stalling.
- Corrected slave.html page as was not updating socket status when switching.
- Corrected socket kWh clockup as watt_seconds per kWh was x10 what it should have been.

0.14.00

- Added Radius local username and password to allow login even if the Radius server is unavailable.
- Corrected Meter kWh clockup as was slow due to meter reading delay.
- Corrected Slave status read of contacts and door/lock status as was reading the incorrect value.

0.13.00

- Corrected alarm log display on Overview page (index.html) as was indexed by count.
- Removed Radius secret from login page and used Configuration page value for authentication.

0.12.00

- Added USB camera CCTV support on security.html page.
- Added USB camera snapshot on cabinet unlock and embedded into HTML email and CCTV snapshot config option to config.html page.
- Added alarm display and log to touch LCD panel with confirm button and LCD alarm config option to config.html page.

- Added alarm display and log to index.html page with confirm button.
- Corrected SNMP registers for PDU Agent global access and PDU-ACU type so agent can identify ACU.
- Added pause function to touch LCD panel and display of pause icon.
- Added reset function to touch LCD panel by touching iPower logo.
- Added security features enable option to config.html page to allow "NA" to be displayed on security.html page and touch LCD panel.

0.11.00

- Added RADIUS Client functionality (added login.html page with radius authentication process).
- Added RADIUS configuration to setup.html to allow Radius server and secret to be configured.
- Added NTP server or date/time setup to setup.html page and configuration in config.ini (reboots).
- Added USB flash drive update of config.ini by plugging into front USB port with update message on LCD panel (manual reboot needed).
- Added USB flash drive update of static IP address from config.ini when dhcpenabled = 0 and ipaddress has changed from current IP (reboots).
- Added kVA OIDs to SNMP meter branches, MIB V1.01.00

0.10.02

- Corrected RGB LCD panel colour setup as had blue and green reversed.
- Corrected setup.html param setup for currency symbol setting and display as was preventing LCD colour setup.

0.10.01

- Added additional command to standard RGB LCD first output to clear buffer so that backlight configuration is not missed on power-up.

0.10.00

- Corrected MODBUS slave operation and master socket on/off control of slave sockets
- Corrected touch display crash when client, location and phase configuration set on setup.html page

- Added config_print.html page display button to config.html page
- Added status.xml page with human readable field names

0.09.01

- Interim version for MODBUS slave corrections (only work up to 23 sockets)

0.09.00

- Added warning to socket.html page about non meter grade measurements.
- Corrected socket sequential start disable when 'Socket Read' is configured on config page (was sequencing).

0.08.00

- Corrected global alarm flag as was not clearing at the start of the alarm check routine.
- Changed Meter: designation in alarms from 1,2, & 3 to that configured for phase 1,2, & 3 eg. Phase L1
- Added support for multiple email addresses in email To field.
- Adjusted LCD panel byte pacing period as backlight colour not sometimes being set.

0.07.00

- Corrected setup.html page as email exchange server checkbox was not being updated and password field was causing password overwrite with stars.
- Added secure email option to system to allow Gmail and outlook type email accounts to be used, including
 - new secure email checkbox on setup.html page, 'emailsecureenabled' parameter to logging CGI script and
 - new option within config.ini

0.06.00

- Corrected global alarm indication on overview page as was not reflecting alarm status.
- Corrected alarm values shown in emails and Syslogs for Meter voltage as showing 2.30V rather than 230.0V

0.05.00

- Updated SNMPv3 configuration as was missing write sub-tree branch.
- Corrected socket amps multiplier error on SNMP registers as was x100 rather than x10.
- Added reboot button to configuration page.

0.04.00

- Corrected non-boot without Ethernet attached bug which was locking system up.
- Added default gateway return of 0.0.0.0 when no gateway information available from system.

0.03.00

- Added missing meter energy reset function on metering.html page.
- Corrected socket amps decimal place.
- Corrected socket amps alarm setup on setup.html page and underlying processing as was not working.
- Added software version to setup.html page.

0.02.00

- Improved threading as was getting re-entry when long intensive processes were happening
- Added correct https key and security certificate
- Corrected SNMPv3 options and added auto-reboot for SNMP changes
- Changed socket sequencing to use time rather than incremental timer to improve switching period
- Corrected meter threshold changes on metering.html pages and comparison in alarm check
- Corrected software update process.

0.01.00

- First test version