

June 2012 AcquiSuite/AcquiLite Firmware changes.

Firmware updates for the A7810, A8810 and A8812 have a number of substantial changes. Users should be aware of these changes and how these may impact any custom applications that may have been developed. Although great care has been taken to maintain the previous feature set, users should test the firmware update prior to deploying this firmware on production equipment.

The firmware update will be provided at no cost.

Firmware release for A7810, A8810, A8812: v02.12.0613

Overview of changes:

This firmware update includes a number of minor changes as well as several new drivers.

New Drivers

- Added driver for the A90DC-12 solar current monitor
- Added driver for Refusol inverters (requires additional module)

Major features

- Updated the firmware upgrade page with new layout. Upgrade page now supports AcquiSuite Modules.
- Added support for Multitech MTSMC-G2 GSM modem modules.
- Added "have disk" feature to allow modbus templates to be uploaded to the AcquiSuite using a browser.

Security Updates

- Telnet and FTP login are disabled by default.
- Telnet and FTP may be enabled Temporarily.
- To enable Telnet and FTP, the admin password must be changed first.
- Execute permissions have been removed from the /tmp directory
- Sendedata process now monitors the /tmp directory being full.
- Wget is now disabled in telnet sessions.
- Updated the library filter functions to strip invalid characters from web forms.

Other Firmware Changes:

- Replaced some angle brackets with square brackets in uploader log files to prevent html confusion.
- Updated tidyconf to convert time.obvius.com → time.buildingmanageronline.com in advance of splitting obvius.com domain to leviton data center.
- Updated default DNS1 address to use the Obvius IP 50.45.128.10. Obvius IP address 67.51.237.194 was depreciated.
- When telnet and FTP are disabled, print a warning and close the connection explaining that they are disabled.
- Added the new Schneider E30A/B/C and E31A/B/C id string that reports 'Meter' instead of 'Monitor'
- Added 'usbcp' tool for future expansion to use a USB Flash Drive.
- Fix spurious Javascript alert (popup) in Chrome browser when navigating away from pages w/ XML handlers, Show numeric status code as well as text in the error "There was a problem retrieving the XML data, status=%d text=...".
- Fixed time configuration page when using a blank for the time server setting.
- Fixed a spelling typo in the dialin helpfile.



- Fixed a 60 second timeout problem with "have disk" encountered with uploads over slow "pots" modem lines. It takes approximately 5 min. to upload asarm.cramfs (1.2 mbytes) at 33 kbps. Now it waits as long as new data is being uploaded.
- Work on creating an enumerated type set for all units of measure. This will provide support for protocol translation modules.
- Cosmetic change to the modem manager to identify the dialout process in the log file(s).
- Dialin fix: If dialin is enabled, allow the user to turn it off even if no modem is present, or the modem doesn't support dialin.
- Minor updates for AcquiSuite module support.
- Parameter testing for blank parameters in program execution.
- Added notes about Leviton IMS device types/ID strings from Leviton support emails.
- Added additional Leviton IMS series 2000 meter ID strings. Old string was supposed to match all meters, however the model number only matched the 2N208 version. This fix corrects this to match the IMS series 2000 meter 2N208 and 2N480.
- ScanGatewayForNewDevices – adjusted alarm - probe alarm timeout - call so that it will be called for all devices that have not responded to a modbus ping.
- CGI applications now monitor sigchild signals when a process ends.
- Added conversion procedures for string to long-long.
- Updated new Obvius logo on web pages.
- Updated feature that checks for required firmware versions to be installed to support requirements of an AcquiSuite Module.
- AcquiSuite Module Manager - updated how modmgr detects & gives errors in a CGI for compatibility with existing CGI apps. Tool now prefixes error messages with http content types.
- Uploader modules may now specify default vaules for their channel parameters when selecting a new upload protocol.
- Added unified status message feature for warning the user of reboots or errors. This feature can display a variety of messages in the footer of all configuration pages.
- Fix missing installed version for modules
- Fixed problem with http proxy support for firmware upgrades.
- Updated TCP keepalive feature on the modbustcpd and a7810d.
- If upload channels are changed or enabled, remind the user to run Connection Test.
- Updated build process to remove some unused files and debug symbols.
- Updated SMA gateway version to remove "b" from the string in the SMA modbus driver.
- Fixed a bug that could possibly disable dhcp if ip setup for telnet/ftp is changed when firmware is mismatched with versions <= v02.11.1116.
- Redesigned some of the networking/setup page for usability.
- Uploader process will reboot the system after 4 days if system wide out-of-memory/resource condition exists. This will resolve the error "CopyAndGrant: Error failed to copy file... error 28 no space left on device" when temporary ramdisk space is completely full due to files being FTPd into the AcquiSuite.
- Added feature to display warning if user enables telnet/ftp but admin password is not changed. Disallow access from non-lan ip addresses when this is the case.
- Some source code consolidation between the AcquiSuite project and the Module DevKit project. No functional changes.
- Added updates to the module manager to display list of modules in csv format, cache module version numbers for disabled modules.
- Added several id string values for new PVP inverters. The new id string is "PVP Inverter ID" and the old version was "PVP Inverter – ID" (not the dash)
- Updated the uploader process to use native transfers and not use wget for config file downloads. Fixed a bug with servers using chunked transfers.
- Removed debugging messages from veris twlp, hwlp, and cwlp drivers.
- Added diagnostic and error messages when shared memory request fails. (should never happen)



- Added units of measure for a couple of fields in the Acuvim L driver: Apparent power demand, Power demand P_Dmd, Reactive power demand, Phase A current demand, Phase B current demand, and Phase C current demand.
- Added feature to use floating point web form field to fix rounding error when setting the Acuvim L ct primary size.
- Updated code to accurately reflect min max table formulas found on pg. 96 of the Acuvim L v1.42 specification by modifying ProcessData.
- Updated Acuvim II to provide more debugging messages and correct remote modbus tcp connections hang ups. ProcessData now checks for a ptSecondary and ctSecondary that are non-zero prior to calculating the pt and ct ratios.. Added the load characteristic to the advanced config page. Fixed the Real Time Energy Measurement for 32 bit unsigned values, and fixed a bug regarding basic mode, energy calc mode, and min/max use modes.
- Minor cosmetic wording and punctuation update to the firmware have-disk and install page.
- Using the have-disk feature to upload firmware will now place a reboot request warning in the footer notification section of the configuration pages.
- Fixed a bug in the firmware have-disk feature where a pair of dashes which not part of mime partition was only written to the fw image file. This condition may also occur in a manifest file. (this could prevent a firmware image from being installed, but would not allow a corrupt firmware image to be installed.)

