

May 2008 AcquiSuite Firmware changes.

Firmware updates for the 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 with changes

A8812: v02.08.0512

Overview of changes:

This firmware update includes the new Sensor Logging feature which allows the AcquiSuite to communicate with a number of wireless sensor device. The firmware also includes several new device drivers and a number of enhancements and bugfixes.

New Sensor Logging Feature:

The AcquiSuite A8812 and ModHopper R9120 now have the ability to log data from wireless sensor transmitters such as Badger Orion water meters and Point Six temperature, humidity, pulse, analog and thermistor sensors.

- Sensor data is received and stored in R9120 ModHoppers.
- Sensors are listed by serial number, name, and type on the AcquiSuite Sensor List menu.
- Sensor data can be scaled depending on the sensor type.
- Sensor data may be read via XML interface, sensor log data is stored in standard CSV files.
- Modhopper configuration menu for Modbus, Point Six, or Badger Orion on ModHopper RS232 port.
- Modhopper firmware v2.02 or later required.

New Drivers:

- Added device id strings for the PM850. (same driver as PM810)
- Updated driver to report difference between PM820 and PM850
- Added ION 8600 meter id string (same driver as ion 7500)
- Added Advantec ADAM 4069 relay output device (same driver as Adam 4068)
- Added curve scale feature, allows non-linear sensors to be used on resistive mode inputs. Built in support for GE_RL0503-5820-97-MS and Murata_NCP18WB473J03RB thermistors. Users may add additional sensor conversion tables. (Conversion table developer guide available soon.)
- New Veris BCM device ID support. Driver now uses first part of ID string to detect the device, and uses the presence of "Meter 100A" to determine the proper scaling factor.

Other Firmware Changes:

- Updated copyright date for 2008.
- Updated sensor data logger process to not use up all spare cpu time.
- Updated data upload, log export, and log management tools to deal with new sensor log data files.
- Fixed a bug in the ADAM 4068 driver that prevented the cgi web interface from changing relay state.



- Updated ipc library files to be included in lib directory Updated makefiles to match. saves about 4k in the cramfs file.
- Added report on advanced page for a89DC-08 internal power supply voltages and boot codes.
- R9120 driver updates for new v2.xx firmware features including sensor data logging, serial port protocol options and multiple pulse rate counting options.
- R9120 driver updates for pcb rev C including power input monitor and pcb temperature sensor.
- An XML link added to the bottom of all interactive configuration pages that use XML data to update display information.
- Added feature to strip &, < and > characters from text fields that are used in XML data (such as a meter or data point name). These characters are not allowed in raw XML data. The presence of these characters would prevent web pages such as the device list or ModHopper map from updating in the background.
- Added additional error reporting messages on the ModHopper map display in Javascript.
- Added more detailed descriptions for Modbus Exception packets received by the modbustcpd process. These are displayed when Modbus debug logging is enabled.
- Upload data process optimization: when a log file upload fails with a 401 (authorization denied) or a 404 (url not found) the upload process will skip all remaining log file uploads for the session. This will cut down on traffic when the URL configured is bad or the AcquiSuite does not have permission to upload data to that site.
- Updated modbus device detect function to monitor multiple types of responses to queries, and report specific type of failure to the calling application. This should clear up an issue with excessive Error 192 messages (device mismatch) when used in ModHopper networks that was introduced in the 07.1127 firmware.
- Fixed lcd console advanced menu feature to clear all log/config files. Config files were not always restored, requiring manual intervention on reboot.
- Added feature to monitor for CRC errors on device probe to register 40001, and re-query for register 30088 to detect Satcon inverters.
- Added wireless branch to the menu tree for ModHopper map and Sensor List.

