

## SiteMonitor Base II Firmware Release Notes

Note: We do not expect to update this firmware further, as this product has been obsoleted by the SiteMonitor Base 3.

IMPORTANT: When upgrading, be sure to read release notes for all versions after the version you are currently running to be aware of any changes which will occur when upgrading.

### 10-Dec-2017 Release

*Resolved issues:*

- A bug which prevented the proper operation of SNMPBULKGET was fixed.

### 24-Feb-2016 Release

*Resolved issues:*

- A bug which would cause ethernet lockup in the presence of ethernet errors was fixed.
- Various potential but unconfirmed bugs were fixed as a result of a general code audit.

### 13-Jan-2015 Release

*Resolved issues:*

- A bug where the SNMP stack would add an extraneous .0 at the end of the OID in response packets to SNMP SET and GET requests for certain OID's was fixed.
- The above SNMP bug was preventing the upgrade tool from upgrading expansion units. This problem was fixed as a side effect the fixing of the SNMP bug.

### 07-Dec-2014 Release

**IMPORTANT: Downgrading to a previous version of the firmware after upgrading to this version will cause the unit to reset to factory defaults, losing all IP address and community string settings. This may cause loss of connectivity. Ensure you do not downgrade a remote unit after upgrading to this release.**

*Resolved issues:*

- TCP/IP Stack Version Change: We have updated the underlying TCP/IP stack in this version of the firmware to the latest available from our TCP/IP Stack Vendor. We believe this will add to the long-term stability of our products as several bugs similar to those (rarely) encountered by certain customers seem to be fixed in the stack itself.
- jQuery Version Update: We utilize jQuery in the web interface to ensure robust cross-browser compatibility. We have updated jQuery to the latest version to help ensure that modern browsers continue to be supported well.
- Web Passwords and SNMP Community strings are now separate: The web passwords can now be set to a different value than the SNMP Community strings. This should improve security at some sites. When upgrading to this version, the passwords will continue to operate as before, but changes will only apply to a specific access method.

- Additional Values on Base Tab: We have added some additional system information to the 'Base Unit' tab in the web interface, including reason for the last reboot, and the hardware revision which has been detected.
- Enhanced Watchdog Options: We have added a new 'Watchdog' tab where you can configure the Base unit to reboot when certain conditions are met, including no SNMP queries for a specific time, no network traffic at all, and an extended ping failure (based on the IP address configured in the 'Autocycle' tab).
- A long-standing bug where cancelling changing the SNMP or Web passwords from the Web Interface could result in loss of connectivity to the device due to certain browsers handling the cancel request incorrectly has been fixed.
- A bug that caused the base unit relay to become uncontrollable in some circumstances has been fixed.
- Several other potential sources of bugs have been fixed. These were primarily related to improperly handling longer strings in certain portions of the web interface, and would either cause the strings to be truncated, or in rare cases cause a system lockup followed by a hardware watchdog reset.

### **12-March-2013 Release**

This version only adds support for the H1 version of the SiteMonitor Base II. It can be used on all versions of the Base II, but not the original Base unit.

### **29-July-2012 Release**

**IMPORTANT: Downgrading to a previous version of the firmware after upgrading to this version will cause the unit to reset to factory defaults, losing all IP address and community string settings. This may cause loss of connectivity. Ensure you do not downgrade a remote unit after upgrading to this release.**

#### *Resolved issues/changes:*

- **OID changes:** We have added two new parameters to the 'analog' tab on the base unit. This will result in the oids for any additional analog values found on expansion units to change by two. Be aware that after this upgrade, settings of software which polls analog values of expansion units will need to be modified accordingly.
- **Shunt Reading Change:** The polarity of the shunt reading has changed. Please read below if you are using the shunt input on your base unit.
- **New Feature:** We have added rudimentary thermostatic control of the onboard relay. This will permit use of the relay to control a heater or fan, subject to the current capacity of the onboard relay. To implement this feature, two values on the analog tab have been added - Relay on Above, and Relay on Below. By setting either or both of these values the relay will become thermostatically controlled, and the relay will be energized based on these settings. A summary of options is as follows:
  - To control a fan, set "Relay on above" to a value as appropriate. Note that the value is in 10ths of degrees centigrade. For instance, to turn on the relay when the temperature exceeds 25.0°C (77°F), set the value to 250. To disable this functionality set this value to 1000. Please be aware that disabling this functionality does not automatically return the relay to an off status - please verify the status of the relay on the binary tab after disabling.
  - To control a heater, set "Relay on below" to a value as appropriate. For instance, to turn on the relay when the temperature gets below 10.0°C (50.0°F), set the value to 100. To disable this functionality, set this value to -1000. Please be aware that disabling this functionality does not automatically return the relay to an off status - please verify the status of the relay on the binary tab after disabling.

- If both values are set, they will both operate the relay. This could be used as a high/low temperature alarm output or similar. Where Relay on Above is set to a higher value than Relay on Below, the relay will energize as described above. For instance if Relay on Above is set to 25.0C and Relay on Below is set to 10.0C, the relay will energize if the temperature is either above 25.0C or below 10.0C. If the Relay on Above setting is lower than the Relay on Below setting, then the relay will only energize between the settings. For instance if Relay on Above is set to 10C and Relay on Below is set to 25C, the relay will energize between 10C and 25C.
- All settings include a 1 degree dead zone. This eliminates relay chattering as the relay is turned on and off. However, this also means that the relay will turn on and off at a slightly different temperature. For instance if you set the unit to turn on a fan at 25C, the unit will not turn the fan off until the temperature drops below 24C.
- Please note that the internal relay has a limited current capacity - 1 or 2 Amps, depending on the revision of the base unit. For larger loads, a secondary relay will need to be added, with the base unit relay controlling the coil on the secondary relay which then switches the actual load.
- In addition to the above notes, a reminder is in order that because the temperature sensor is inside the base unit enclosure, it generally runs a few degrees hotter than the outside temperature. This should be taken into account when choosing setpoints.
- New Feature: Hovering over most items in the web interface will show the SNMP OID of that value in the lower right hand corner of the screen. This should help with identifying the OID of a specific value you are interested in monitoring via SNMP.
- The web interface has been reworked to use the jquery library to improve cross-browser compatibility. Many issues which customers have been seeing with browser compatibility have been resolved as a result. If you are using a modern (aka current) browser and are having compatibility problems, please let us know.
- A bug where the uptime counter would roll over every 29 hours 19 minutes has been fixed. The unit now reports correct uptime both via SNMP and the web interface.
- A common issue where not all devices attached to the expansion bus were detected upon initial power up has been fixed. The firmware now is much more aggressive about detecting all devices on the bus. In the rare case a device is not detected (usually where numerous devices are on the bus), we recommend the use of the 'rescan expansion' option in the web interface to find additional devices. Once a device has been found the base unit remembers it and should find it automatically in the future.
- The amount of time an expansion unit is allowed to respond to a query has been increased. This will resolve a few issues where expansion units were not responding quickly enough in certain cases. Where a unit does become disconnected due to an extremely slow response, the auto-reconnection change described elsewhere will now reconnect the device automatically.
- Expansion units which reboot or become disconnected for any reason during operation are now periodically polled and reconnected automatically upon verification of their connectivity.
- A bug where community strings over 8 characters do not work via SNMP has been fixed. The new limit is 31 characters, which corresponds to our original design criteria.
- The shunt input was reading the polarity incorrectly. Positive voltages were showing a negative reading, and negative voltages were showing a positive reading. This has been fixed to reflect the labeling on the device to avoid confusion. If you have been using the shunt input on a device currently in the field, values which were positive will now show negative and vice versa. This may necessitate either a configuration change in any snmp polls which you are currently doing, or require a swap of the leads on the shunt input in order to retain the same polarity in your readings.