

(Solar-Log[™] 3.6.0 Build 99, 15.10.2019)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverter/SCBs/Meter/Battery Systems/other devices

Adjustments

sonnen Eco 8:

• The Solar-Log[™] can communicate with devices using sonnen Firmware 1.11.

Bugfixes

• Improved the HTTP-export with huge amounts of data.

Elkor MKII:

• The function to change the metering direction in bi-directional mode now works as expected.

S0 Input:

• Corrected the processing of persistant impulses.



(Solar-Log[™] 3.6.0 Build 99, 20.08.2019)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverter/SCBs/Meter/Battery Systems/other devices

Bugfixes

- Janitza via Ethernet:
 From now on in all cases of communication errors the connection will be closed.
- Yield Data / Finance: Fixed an overflow in the calculation

Extensions

• New certificates for smtp servers of gmx and web.de.



(Solar-Log[™] 3.6.0 Build 98, 12.02.2019)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverter/SCBs/Meter/Battery Systems/other devices

Adjustments

(Addendum for 3.6.0 Build 96):

• Optimization of write accesses to reduce wear of the SD-card.

Bugfixes

• Very big data backups could not be restored. Fixed.



(Solar-Log[™] 3.6.0 Build 97, December 18, 2018)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverter/SCBs/Meter/Battery Systems/other devices

Bugfixes

• With Firmware 3.6.0 Build 96 - 11.12.2018 the configuration was not inherited when updating from versions smaller than 3.6.0. Fixed.



(Solar-Log[™] 3.6.0 Build 96, December 11, 2018)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverter/SCBs/Meter/Battery Systems/other devices

Bugfixes

KACO:

• The DC voltage of the inverters ("KACO Standard protocol") is reported correctly again.

Solar-Log PRO380:

• The consumption is determined correctly again in mode "Consumption meter (bi-directional)".

Keba:

- In mode ,Surplus Charge' it could happen that the charging process was repeatedly stopped and started. Fixed.
- If the available surplus vanishes, the charging process will continue until the configured power-off delay using the current that was used up to that moment instead of the minimal charging current.
- The configured maximum charging current is now used correctly in mode ,Surplus Charge'

Mikro:

• The consumption in Bi-Directional mode is now being calculated correctly.

Delta Sunspec:

 Reactive power control did not work correctly if the first configured device was not a delta inverter. Fixed.

Growatt (Modbus):

• The serial number is now being read correctly during detection.

Benning:

• Faults reported by the inverter will now show the device status "Fault" instead of "Undetermined".

Adaptions

Ingeteam: Ingecon Sun Smart TL (3-phase)

• Adapted the detection to the inverter architecture (3* Ingecon Sun Lite TL 1-phase).

Keba:

• Charging with 2 phases is now supported (e.g. bneeded for VW e-Golf).



(Solar-Log[™] 3.6.0 Build 95, August 28, 2018)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverter/SCBs/Meter/Battery Systems/other devices

Bugfixes

Sonnenbatterie Eco 8:

• During an automatic redetection due to communication problems it could happen that a wrong ip addres was saved. Fixed.

Delta-Sunspec:

• Reactive power control now works with all inverter firmware versions.

SolarEdge:

- The Error codes of the inverters is now correctly read by Solar-Log 50 devices.
- The power values of the inverter is now correctly read by Solar-Log 50 devices.

Adaptions

• Changed interface assignment selection from ABB:PVS to ABB:PVS Central.

Keba

- When changing the charging mode to "no control" the charging is only enabled once.
- The configured maximum charging current (via DIP switches) is now considered when calculating the target current.



(Solar-Log[™] 3.6.0 Build 94, July 10, 2018)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverter/SCBs/Meter/Battery Systems/other devices

Bugfixes

• During device detection it could happen that the process went on for over 30 minutes and thus the Solar-Log was restarted. Fixed.

Keba

For certain kinds of vehicles a low power factor caused the charging process to be too slow. The power factor is now considered when determining the charging current.

Bugfixes

The changes for the LCD progress during firmware updates mentioned in firmware 3.6.0 Build
 93 - 03.07.2018 were not active. Fixed.



(Solar-Log[™] 3.6.0 Build 93, July 3, 2018)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverters/SCBs/Meter/Battery systems/other Devices

Bugfixes

Keba

Added support for Keba Firmware version "3.9.10". This is now the recommended Firmware version for the charger.

Bugfixes

• The progress of a firmware update via USB was not shown on the display. Fixed.



(Solar-Log[™] 3.6.0 Build 92, 15.May.2018)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverters/SCBs/Meter/Battery systems/other Devices

Adaptions

• The values from a manual data correction will now be transmitted to the portal with the next transmission.

Bugfixes

• When using the "Dynamic control for different module orientations", no dynamic control was applied if the Maximum AC Power of the inverters was not configured. Fixed.



(Solar-Log[™] 3.6.0 Build 91, 02.May.2018)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverters/SCBs/Meter/Battery systems/other Devices

Extensions

Ginlong:

• Suport for new series: Solis-US Three Phase Inverters.

Schneider:

• Conext CL60 via Sunspec Protocol with power management.

Bugfixes

• When meters of the same type were connected on differen buses it could lead to communication errors. Fixed.

SMA (Data1 Protocol):

• If a SMA-MeterBox was used the consumption value was sometimes reset to 0. Fixed.

Keba: Webinterface / Device Configuration:

• The switch "Forced charge via Switch (X1)" was not correctly initialized when loading the page (It was always activated initially, independant of the actual configuration). Fixed.

Delta Sunspec:

• The values for the 2nd MPP-Tracker were missing. Fixed.

Samil:

• Improved detection of faulty data.

Elkor:

• Fixed a bug that could lead to unplausible power value.

PvPowered:

• Fixed a bug that could lead to unplausible power value.

Ginlong, Evoco, Sonnen Eco 8:

• The yield was not correctly accumulated. Fixed.

Sonnen:

• High values could lead to corrupted data. Fixed.

Janitza & Solar-Log[™] Pro380:

• The daily yield/consumption total was sometimes reset during reboot. Fixed.

Solarmax:

• When the connected dc-value was changed in the configuration, the power and yield value was miscalculated until the next reboot. Fixed.

ABB SCB:

• With a newer firmware version, the StringComb Manager was not selectable via the webinterface (Configuration / Devices / Definition / SCB). Fixed.

SMA RS485:

• On some plants with reactive power control but without active power control, the inverters were reduced to 0% production. Fixed.

Platinum (Diehl AKO):

• Improvements in the detection routine.

SCBs (Samil, Sungrow and Weidmüller):

• SCBs of Samil, Sungrow and Weidmüller were not recorded. Fixed.

Sonnen Eco 8:

- If no device could be detected it led to a crash of the Solar-Log[™] software. Fixed.
- Due to an update of the Sonnen Eco 8 the detection did not work anymore. Fixed.
- The limitation for meters was not adjusted for Solar-Log 250. Fixed.

Extensions

- Extended the useable range for the financial overview.
- Improvement of the option "Dynamic control for different module orientations" when mixing Inverters with more and less connected DC power that the nominal DC power of the inverter.

New country:

Simbabwe

Webinterface:

• Diagnostics / CSV-Export: Added the option to export the units to the csv header.

Bugfixes

Webinterface:

- Some special characters were not allowed when entering a password. Fixed.
- Some special characters were not stored correctly when entering a password. Fixed.
- Configuration / Internet / Export:
 - The switch for the option "Show events on homepage" could not be changed. Fixed.
- Diagnostics / Smart Energy / History:
 - For smart consumers, the charging power was shown on the temperature axis instead of the power axis, (only with an active battery system and deactivated smart energy option "Prevent battery charge"). Fixed.
- Graphics:
 - The mouseover tooltip of a curve is now held on the left side inside the chart.
 - When using the zoom function some webbrowsers showed an error message, if the mouse cursor left the chart during the click event. Fixed.
- Yield Data / Production / Total:
 - In the graph view, the target value inside the mouseover tooltip was faulty. Fixed.
- Yield Data / Current values / Table:
 - When using both, an S0-meter and the Solar-Log Meter (integrated), since Firmware 3.6.0 the value for the S0-meter always showed 0 W instead of the current value. Fixed.
- The left navigation was not being rebuilt after login/logout which led to some elements only being shown after an additional click in the title bar. Fixed.
- Assistant / Device Detection:
 - A subsequent change of the interface assignments was not always applied and the Solar-Log[™] thus searched on the old interface. Fixed.
- Diagnostics / Inverter diagnostic / Modulefield comparison:
 - With negative module temperatures too high sensor values were shown. Fixed.

- The configuration was exported to the portal after each reboot. Fixed.
- In some constellations the configuration could not be loaded after a firmware update. Fixed.
- New email certificates for T-Online und Gmail.



(Solar-Log[™] 3.6.0 Build 90, 01 September 2017)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverters/SCBs/Meter/Battery systems/other Devices

Bugfixes

Solar-Log Meter (integrated):

• The consumption was not determined correctly in mode "Consumption Meter". Fixed.

SMA RS485:

• Status- and Error codes were not displayed correctly in the Webinterface and Notification eMail. Fixed.

Solarmax Ethernet:

• Pac and yield were not determined correctly. Fixed.

SMA Speedwire:

- The device temperaturewas not determined correctly if insufficient DC power was available. Fixed.
- The inverter password when using login mode ,User-Login' did not work when certain characters were used. Fixed.

Adjustments

SMA RS485:

• Improved communication with the inverters.

Extensions

Webinterface:

 Configuration | Plant | Tariff + Electricity Costs: The feed-in tariff, Self- consumption refund and the electricity costs can now be configured with up to 5 digits.

Adjustments

Webinterface:

- The Homepage settings (For ,selfmade' portals with Solar-Log 200/500/1000) were moved from ,Configuration | Internet | Portal' to ,Configuration | Internet | Export'.
- Configuration | Internet | Backup:
 - As soon as the backup functionality is deactivated, non-relevant fields are hidden.
 - An additional hint for the FTP directory has been added.
- Configuration | Internet | Export:
 - As soon as the export functionality is deactivated, non-relevant fields are hidden.
 - An additional hint for the FTP directory has been added.

Bugfixes

- During the update to firmware version "3.6.0 Build 89 08.08.2017" the portal settings "Classic 2nd Edition" and "Commercial Edition (Full Service)" were changed to "Solar-Log WEB Enerest™". For plants that exclusively transmit data via FTP this caused the FTP directory setting to be changed to the devices serial number. This is a problem for plants that do not transmit to Solar-Log WEB Enerest™ portals but still had the setting configured accordingly. As the portal type has no effect on the HTTP transmission, this setting has been removed and the FTP directory will not be set to the serial number automatically.
- In certain cases a redetection or reordering of devices could lead to incorrect yields on that day.
 Fixed.

Webinterface:

- Under certain circumstances the page loading progress was shown indefinitely when accessing the webinterface. Fixed.
- Configuration | Internet | Portal:
 If the HTTP transmission was deactivated, the button to cancel a runnning ,Easy Installation
 Web' was not shown. Fixed.
- When changing the language, the loading screen was not shown reliably. Fixed.



(Solar-Log[™] 3.6.0 Build 89, 08 August 2017)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Components

New:

Heating rod / smart appliances:

- MyPv:
 - AC Elwa-E

Inverters:

- INVT iMars:
 - MG series and BG series
- Surpass SSE:
 - SPS series
- Solectria (new model):
 - PVI50TL and PVI60TL
- Delta:
 - M80U via Delta Sunspec protocol
- Schneider:
 - Conext CL60 via Sunspec protocol

Meter:

- Janitza:
 - UMG 604

Battery system:

- sonnen:
 - Eco 8.0

New features:

Ginlong

• Reactive power control for all models other than the models with 1 to 15 KW from the first and second generations.

Solar-Log Pro380

 Added support for communication via Ethernet in connection with Modbus TCP/RTU Converter (DZG ETHMOD-R4).

Chint Power Modbus/Solectria V4/CanadianSolar

• The order and names of the error texts have made changed. As a result, it can happen that the incorrect error text is displayed with the previously recorded errors.

Bug Fixes:

Chintpower Modbus

• Updated missing entry in the error text list. As a result, it can happen that another (now correct) error text is displayed for the error codes saved in the past. Fixed.

Varta

• The serial number was always saved with a leading zero. Fixed.

Keba

 If a (quick) detection of the charging station does not work, the IP addresses are queried individually.

EGO

• The box for the heat output (part of the minimal temperature configuration) was not displayed in the device configuration of the web-interface. Fixed.

Changes:

Sungrow

All Sungrow inverters now receive a 110% command instead of 100% for active power reductions. For the models that do not support the 110% command, the command is automatically adjusted to 100%. So their current behavior does not change. Caution: The setting is still defined between 0-100% in the web-interface. The 100% command is automatically adjusted to 110%.

Meters

 The meters listed below update the consumption value in the mode "Consumption Meter" with a faster polling interval. Due to this, there is a quicker reaction to the changes in the consumption value. In turn, this allows for more precise control of the active power reductions in the "Fixed regulation with calculation of self-consumption" mode.

Affected meters:

- Elkor
- Iskra
- Janitza
- L&T
- Mikro
- Schneider Electric
- Solar-Log Pro380
- Solar-Log 10 Meter (external)
- Solar-Log Meter (integrated)
- Varta:
 - Option to deactivate the data query removed.

Software

New:

Configuration Assistant:

The Configuration Assistant has been introduced to simplify the Solar-Log[™] configuration. With the help of the assistant, it is possible to have step-by-step instructions for the basic Solar-Log[™] configuration. (Details in the Solar-Log[™] Manual on our website: https://www. solar-log.com)

Obtaining the portal server:

It is now possible to automatically obtain the portal server in the portal configuration. (Details in the Solar-Log™ Manual on our website: https://www.solar-log.com)

New features:

- Firmware update function redesigned:
 - When installing a new firmware version via the update server or the web-interface, the firmware will be updated in the background. The interruption time of the data recording will be kept to a minimum during the update.
 - The time to complete the update has been reduced.
 - Improved visualization of the update process via the web-interface.
 - Improved error processing.

• Solar-Log250:

• Maximum number of inverters increased to 2.

• Smart Energy:

 There are now two buttons in the web-interface under Configuration / Smart Energy / Surplus Management to prevent battery charging and discharging with Smart Energy Logics.

• Configuration / Network / Ethernet:

• The Internet connection test can be performed a the push of a button.

• Yield data / System:

• An additional column with the current Performance and Failure Monitoring configuration is now displayed in the table.

Changes:

- The term "MPP tracker" is now used instead of "string" in several places in the web-interface and in e-mails.
- Optimization of the data recording behavior after device detections with missing user input. It
 is important to note that if changes with a new detection are not applied within two hours, they
 are discarded.

• Feed-in management:

• The shift factor cos(Phi) for fixed values, remote control and P/Pn characteristic curves can be entered with three decimal places.

• Web interface:

- If a new pop up dialog appears when another one is already being displayed, the following pop up is displayed once the previous one has been closed.
- When there a complete reloading of the web-interface during a firmware update or a device detection, the pop up dialog is generated again and displayed.
- Configuration / Internet / Portal: the section Status & Test (Solar-Log WEB) has been split into two separate sections to avoid misunderstandings.
- The web-interface has a more agile response (click on navigation and load times when changing dialogs).
- Optimized usage of the browser cache to improve loading times and to avoid incorrect states after a firmware update.
- Configuration / Devices / Configuration / Order: Interface definitions in which only one device was detected are now displayed.

- The Configuration / Devices / Configuration / Battery page has been removed. The settings are now located directly in the Device Configuration (Configuration / Devices / Configuration / Configuration).
- Configuration / System / Access Control:
 After changing a password, you are automatically logged on with this new password.
- Solar-Log WEB Commercial and Solar-Log WEB Classic 2nd have been replaced by Solar-Log WEB Enerest[™].

• Smart Energy:

• Adjustments to the surplus calculations in connection with battery systems: When controlling generators (e.g. CHPs), the current battery charge output is no longer considered as consumption. Now it can no longer happen that the battery is charged by the controlled generator.

Bug Fixes:

- When the HTTP transfer was deactivated, the Solar-Log[™] continued to transfer data to the portal until it was rebooted. Fixed.
- The switch to daily light savings time was not performed until a reboot at 3 am. Fixed.

Web interface:

- After updating the Solar-Log[™] firmware, some browsers (e.g. Google Chrome) did not load the current files, but used old versions from the cache. Fixed.
- Firefox when use the browser's zoom function, some elements were incorrectly indented. Fixed.
- Configuration / Network / Ethernet:

When changing the IP address, access was not directly redirected to the new IP address when using http://solar-log and http://solar-log-XXXX. Fixed.

• Under certain circumstances, the Solar-Log[™] lost the setting not to display the security information pop up (password not configured). Fixed.

LCD display:

• If the temperature and/or wind sensor of a Sensor Box was activated and then deactivated, the symbols would still remain in the LCD display. Fixed.

SmartEnergy:

• The current output from controlled generators (e.g. CHP) was not correctly recorded when there was a production regulation via a production meter. Fixed.



(Solar-Log[™] 3.5.3 Build 87, 23.03.2017)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Bug Fixes

• With Firmware 3.5.3 Build 86 as of 21.03.2017 no internet connection could be established via GPRS or modem. Fixed.



(Solar-Log[™] 3.5.3 Build 86, 21.03.2017)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverters/SCBs/Meters/Battery Systems/Other Devices

New features:

Ginlong

- Support for the models: Solis-Mini-700-4G, Solis-Mini-1000-4G, Solis-Mini-1500-4G, Solis-Mini-2000-4G, Solis-2.5K-4G(-ST), Solis-3K-4G(-ST), Solis-3.6K-4G(-ST) Solis-4K-4G, Solis-4.6K-4G, Solis-5K-4G, Solis-6K-4G
- Power reduction for all models

Kaco

New model: blueplanet 15.0 TL3

Sungrow

• Addition recording of the following values: Uac1, Uac2, Uac3, Iac1, Iac2, Iac3

Solutronic

Support for the models:
 SOLENERGY 40S1, 40S2, 50S2, 60S2
 Solplus 80

Huawei

Support for the models: SUN2000 50KTL-C1/50KTL/42KTL/36KTL/33KTL-JP/40KTL-JP/43KTL-IN-C1/24.7KTL-JP.

All of these models are equipped with four MPP trackers.

They all are recorded as tracker 1.

Q3

• Support for Models: QY3000/1, QY3000, QY4000, QY5000

Bug Fixes

Solar Log Meter 10

- The meter can now also be operated in the subconsumer mode
- Rotating the current direction did not work. Fixed.

Sungrow

• After updating to firmware version 3.5.2, Sungrow inverters no longer recorded data with the old protocol version. Fixed.

Ginlong

• 2G model series had a limit of 32700 WH for the yield. Fixed.

Zeversolar

• Communication problems with the model Zeverlution Pro 33K lead to spikes in the PDC values. Fixed.

ABB via Ethernet

• Active power reductions with the calculation of self-consumption was not possible. Fixed.

Steca

• The UDC value was recorded incorrectly. Fixed.

Huawei

• Inverters from the KLT_8_28 series did not respond reliably and were labeled as offline. Fixed.

Mastervolt

• For inverters that were detected as two devices, the second device was deleted after rebooting with the Solar-Log 200 and Solar-Log 250 with firmware version 3.5.2 build 85. Fixed.

Keba

- The recording function could fail when too much invalid data was received per UDP. Fixed.
- The nominal power could not be edited in the web interface under the Configuration | Devices
 | Configuration menu. Fixed.

Fronius

Model Primo 3.8-1 was detected with one instead of two MPP-trackers (RS422 Driver). Fixed.

IDM

The nominal power could not be edited in the web interface under the Configuration | Devices
 | Configuration menu. Fixed.

Changes

Steca

• Communication speed improved.

IDM

- Instead of displaying the heat pump's serial number which currently cannot be correctly read, the current IP address in the device configuration is displayed.
- The surplus value that is transmitted to the heat pump has been adjusted (target value specification instead of surplus specification).

Note



For the change to take effect, the firmware of the heat pump must also be updated.

New features

Web interface

• During the first start and after resetting the device to factory settings a form for setting the passwords will be shown after the language selection.

New country

Pakistan

Solar-Log 250

• The limitation for the language and country selection has been removed.

Open JSON interface

- The interface can be activated and deactivated in the Configuration | System | Access control web interface.
- The data can now also be accessed with user password protection.

Changes

E-mail Notifications

 The format of the device names has been revised for error messages, performance monitoring messages and fault messages.

=> Example: 1: INV1 (SN:1234) 1=position in the device list, INV1 = name, (SN:1234) = optional (not available with all manufacturers).

Language adjustments

• The Turkish translation has been revised.

Security adjustments

• There were numerous adjustments made to increase security regarding attacks.

Web interface

 If no user password protection has been activated, a pop up dialog warns about possible security vulnerabilities.

Bug Fixes

Web interface

- Configuration | Devices | Configuration:
 If invalid values were entered for the generator power for the MPP trackers, the error message graphics were displayed incorrectly Fixed.
- Configuration | Smart Energy | Switching groups:
 If the requirements for a particular control type (e.g. surplus management) were missing (e.g. minimum number of assigned switch contracts) the fields for the consumption regulation and consumption meter were not removed in the pop up dialog automatic configuration. Fixed.
- For the "control types surplus management and runtime control" and "power purchased from the grid and runtime control," there is a check to see if the desired runtime can be filled between the defined time and midnight; and that a warning is displayed if it cannot. This is also displayed when accessing the pop up dialog in case the settings were previously entered.
- Even if the installer password protection was activated, some settings could still be modified without logging in. Fixed.
- With active user password protection and without authentication, the Solar-Log was overwhelmed with requests until there was a successful log on. Fixed.

Diagnosis | Event Log

• After sorting the devices, the results were incorrectly assigned. Fixed.

Configuration | Devices | Configuration | Order

• After sorting the devices, the recorded average values were no longer correct. Fixed.

Removal of interface assignments | Detection of devices with involvement of a utility meter:

• Only after a reboot the utility meter was correctly initialized. Fixed.

Diagnostics | Smart Energy | Status (current)

• The current status from the switch contacts was incorrectly visualized. Fixed.

Diagnostics | Smart Energy | Simulation

• The Smart Energy simulation for EGO could exceed the maximum temperature for the heating rod. Fixed.

Configuration | Network | GPRS

Selection box of the APN shortcut settings was filled several times with the cancel button.
 Fixed.

Text message (SMS)

 With direct sending, the text was converted twice. Due to this, it could happen that special characters are no longer displayed correctly. Fixed.

LCD display

- For the active power reduction "percentage of consumption," there are no the following
- Options: only errors, percentage of consumption and control value output (% AC.

Feed-in management

- The parameter for the gradient limit for Q(U) control was not applied correctly. Fixed.
- When using the option measurement at the feeding point sometimes a wrong cos(phi) target value was used. Fixed.

Smart Energy

• Automatic type performance visualization: the current surplus was used instead of the current production for the current value control. Fixed.

Solar-Log[™] Meter

• when an internal communication error occurred, null values were recorded for the meters until there was a restart. Fixed with advanced error processing.

Solar-Log⁵⁰⁰

• An incorrect specific yield was displayed on the display with some configurations. Fixed.

TFT

• Settings | Basic Settings | Network:

GPRS modem selection could not be saved! Fixed.



(Solar-Log[™] 3.5.2 Build 85, 13.12.2016)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Notes:

Due to switching the Lithuanian currency to € tarrifs might have to be reconfigured (for plants with country setting Lithuania).

Inverters/SCBs/Meters/Battery Systems/Other Devices

New

Meters:

• Mikro Digital Power Meter 680 (Utility Meter)

Extensions:

ABB

• Support of new models: UNO-2.0/3.0/3.6/4.2-TL-OUTD und TRIO-50.0-TL-OUTD

Sungrow

Support of new models (For Models with 4 mppt these will be recorded as one):

SG20KU, SG30KU, SG36KTL, SG36KU, SG40KTL, SG16K6J, SG30KJ, SG30KTL-V31,
 SG30KTL-V21,SG34KJ, LP-P34KSG, SG5KTL-M, SG2KTL, SG3KTL-M, SG4KTL-M, SG12KTL-EC,
 SG5KTL-EC, SG6KTL-EC, SG8KTL-EC, SG10KTL-EC, SG15KTL-EC, SG3KTL-EC, SG4KTL-EC, SG 55KTL, SG60KTL, SG2K5TL-S, SG3KTL-S, SG3K6TL-S, SG4KTL-S, SG4K6TL-D, SG5KTL-D, SG50KTL,
 SG56KTL, SG3KTL-ECV21, SG4KTL-ECV21, SG50KTL-M, SG3KTL-D, SG3K6TL-D, SG2KTL-S, SG 56KU, SG60KTL-M, SG60KU-M, SG4K4J, SG33KTL-M, SG40KTL-M, SG60KU, SG49K5J, SG80KTL,
 SG80KTL-M, SG24MX, SG100KC, SG100KU, SG250KC, SG250KU, SG125K, SG100KLV, SG500LV,
 SG500MX, SG630MX,

SG100J-V21, SG100J, SG500J-V11, SG1000MX, SG1250HV, SG1500HV, SG1000TL, SG500MX-M,
 SG100KC-O, SG100KU-O, SG750MX, SG800MX, SG630MX-M, SG1000HV, SG1000HV-V12,
 SG1250, SG2000, SG1250-MV, SG2000-MV.

Q3

 Support of new models: QX³4000/QX³5000/QX³6000/QX³7000/QX³8000/QX³10000/QX³13000/ QX³15000/QX³18000

Fronius

• Support of new models: IG Plus 30V-1, Primo 10.0-1, 11.4-1, 12.5-1, 15.0-1

Ginglong

- Support of new series: Solis-2G Single Phase Inverter, Solis Mini Series Inverter, Solis Three Phase Inverter. For Models with 4 mppt these will be recorded as one.
- Extended Channels for existing models: UAC is now recorded.

Evoco

• Extended Channels: UAC is now recorded.

EKO Energy

• Extended Channels: UAC is now recorded.

Keba P20/P30 Serie

- New mode for surplus charge added.
- New configuration option "Off delay [Min.]" in the WEB interface.
- Smart energy Simulation added.

Zeversolar

- Support of new models:
 - Zeverlution 1000S, 1500S, 2000S, 3000S, 3680, 4000, 5000, Pro 33K
 - Eversol TL1000, TLC10K
 - Evershine TL3680, TL5000, TLC10000
- Support of protocol version "Inverter-PMU-PROTOCOL-V2.0.2"

Bugfixes

SMA

• PDC was not recorded correctly for some models since FW 3.5.1 Build 84.

Mastervolt

• Fixed sporadic recording errors.

IDM

• The Values (Surplus, PV-Production as well as Consumption), that are sent to the heatpump, were preprocessed in a wrong way since FW 3.5.0. Fixed.

Fronius (Sunspec/ModBus)

- With Battery: If many Battery modules are connected to the system the values could not be read. Fixed.
- Fronius-Datamanager since version 3.7.3-2 or Fronius Hybridmanager since Version 1.3.2-2:
 - Power reduction commands were sent with a wrong facto. Fixed.
 - Pac was calculated in a wrong way when the battery was dis-/charging. Fixed.
 - The detection of hybrid systmes detected 2 mppt although those system only support 1 mppt. Fixed.
- Battery/Meter-Values: Although the devices could be detected, on some installations they gave 0-values. Fixed.
- When switching between on- and offline the configuration date was updated. This caused frequent configuration imports in the web-portal. Fixed.

Fronius (Solarnet)

- Changed to 2 mppt: Primo 8.2-1, 7.6-1, 6.0-1, 5.0-1, 4.6-1, 4.0-1, 3.6-1, 3.5-1, 3.0-1
- Sometimes the status changed to offline without reason. Fixed.

Elkor MKII

• When communication errors occured wrong values could be recorden. Fixed.

Gude Expert Power Control 1002

• Since Firmware 3.5.0 individual switching contact were not controlled correctly. Fixed.

Solar-Log Meter 10

Data aquisition could fail depending on the type of other devices also installed on plant. Fixed.

Sungrow

• Some Error Messages for string inverters were not yet known in the system. Fixed.

EGO

- The limiting temperature was not always saved to the data channel for maximum temperature.
 Fixed.
- The Heatrod was supllied with the configured heating power, independant of the surplus if the minimum temperature was undershot, to heat the water to 7°C. Fixed.

L&T

• Wrong status/error codes were shown. Fixed.

Adjustments

Mastervolt

• The delay between power reduction command was reduced.

Fronius (Sunspec/ModBus)

• Extended the error/status codes.

Schneider Conext CL Serie

• Extended the error/status codes.

Extensions

• In the remote configuration (Solar-Log Web Commercial Edition) the tab "Configuration / Network / Ethernet" is now shown (Read-Only).

Web interface:

- Configuration / Notifications / Device Notifications:
 - New Buttons: "Save mutliple..." and "Save all..."
- Configuration / Feed-In Management / Active power:
 - New power reduction mode: "Reduction to percentage of consumption"
- When validating input fields for valid number ranges (min-max) the mouseover of an error message will now show the valid range.

Meter Configuration:

• New mode of operation: Utility Meter(U+I) + Consumption (bid-dir).

Adjustments

Web interface:

- Configuration / Notifications / Power & Failure:
 - For "Save multiple..." the list will only show sensors and pv-inverters that can be changed.
- Configuration / Network / Ethernet:
 - Optimized the brwoser redirect when the ip-address was changed.
- Configuration / System / Access Control:
 - The option "Display advanced configuration" was removed. The Web interface will always show all fields/tabs concerned.

Internationalization:

• The currency for country selection Lithuania was changed to ¤.

Bugfixes:

- HTTP-Connection did dot detect a failed transmission of the system configuration. Fixed.
- Importing a configuration that was manually downloaded from the portal lead to display and perhas even stability problems. Fixed.
- When adding, removing or resorting devices due to a device detection, the data curves of the current day could be associtated with the wrong device. Fixed.
- During the update to Firmware 3.5.0 the baudrate of external display connected to the serial bus was not correctly converted. Fixed.

Web interface:

- Yield data / Current values / Table:
 - Power and Status of the 100th device were printed incorrect. Fixed.
 - When navigating from "Yield data / Current values / Cockpit" it could happen that, devices were listed several times in the table. Fixed.
- Smart Energy History:
 - epending on past device setups or if devices had been resorted values were assigned to the wrong devices. Fixed.
- Smart Energy Status:
 - If the devices had been resorted after detection sometime the wrong values were shown for intelligect consumers (e.G. Temperature for a EGO Heater).
 Fixed.
- Sometimes it could happen that after resorting the devices locally no new configuration was sent to the portal. Fixed.
- Configuration / Smart Energy / Switch groups:
 - With Firmware 3.5.1 it was no longer possible to change the operating mode of a switch group to producer. Fixed.

- With Firmware 3.5.1 the dialog for current measurement values (Magnifying Glass) of switches that do not give any data continuously showd "Please wait…". Fixed.
- Configuration / Devices / Configuration / Order:
 - Since Firmware 3.5.0 no more serial number were shown in this dialog. Fixed.
- Configuration / Devices / Definition / SCB:
 - When switching between different SCB-Types theinput field for bus address was sometimes falsely validated. Fixed.
- Yield data / Balances / Day:
 - For plants with battery where the consumption was higher than the production and discharcge, the self consumption was not correctly visualized. Fixed.

Solar-Log¹⁰⁰⁰:

- If 100 devices were detected, the Display did not show the correct values for summed up power in the Overview and daily graph. Fixed.
- If 100 devices were detected, the status of the 100th device was not shown correctly. Fixed.
- DIn the Balance view the surplus or purchased power was not shown correctly when values exceeded 32767W. Fixed.

FTP-Export:

• If 100 devices were detected, the total power and status code of the last device were anaccurately written to min_cur.js. Fixed.

Data Correction (Web-Interface as well as via Web-Portal):

• Depending on the past device setups it could happen that a wrong correction factor was when changing historical data. Fixed.

Solar-Log 1200/2000:

• Display: In the energy balance view, the surplus or purchased power was not shown correctly when values exceeded 32767W. Fixed.

Feed-in Management:

- Control Values from an IO-Box were net kept valid when the remote control connection malfunctioned. Fixed.
- Since Firmware 3.5.0 Build 80 some errors were not shown in the LCD display. Fixed.

Smart Energy:

• The surplus calculation could be blocked (the available surplus was not updated for hours). Fixed.



(Solar-Log[™] 3.5.1 Build 84, 06.09.2016)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverters/SCBs/Meters/Battery Systems/Other Devices

New

Inverters:

SMA CP Central Inverter

- including power reductions and reactive power control.
- Inverter series:
 CP-XT, CP-US, CP-JP
- Inverter type:
 500, 630 720, 750, 760, 800, 850, 900, 1000

SCBs:

SMA Sunny String Monitor

Weidmüller Transclinic 4i+/7i+/8i+/14i+/16i+

E-Mobility charging station:

Keba P20/P30 series

• Logging and management of the charging power via Smart Energy logics.

Meter:

Larsen & Toubro (L&T) utility meter

Heat pumps:

Stiebel-Eltron

• Control of the SG-ready signals via the Modbus tab. A virtual switching contact can be configured in the Smart Energy Logic for the heat pump.

Bug Fixes

SMA Speedwire

• Communication with the inverters via SMA Speedwire now works when the Solar-Log[™] is connected via Wi-Fi to the network.

SMA RS485

• PDC not available for some single-phase inverters – is now calculated and recorded..

Refusol/Native

• The yield value has not been recorded correctly since firmware version 3.5.0 Build 80. Fixed.

Switch with power measurement

• The nominal power was used as connected power output as well as maximum output. Since the recorded output values were above this limit, both of these functions are now separate.

Fronius via Ethernet

When low amounts of irradiation, invalid values (e.g. PC) were not processed correctly. Fixed.

Sunways

 Status notifications for the NT10000 and NT 850V were transmitted incorrectly with firmware 3.5.0. Fixed.
New features

 Delta RP inverter with additional error messages (SPD Broken, Heat Sink ov. temp., DC Injection total, Insulation).

New features

Web interface

 New features for Configuration / Network / GPRS and Analog. When a maximum number of dial-in attempts has been set, the number of attempts can be viewed and reset.

Note!



After the update, the parameters "Restrict dialing attempts" and "Max. dialing attempts" must be checked in order to ensure the correct transfer of data and/or email notifications.

Graphics

It is now possible to hide all of the curves other than the desired one with just a single click.
 Just select the curve desired and right click to display only this curve. Two options are additionally displayed to show or to hide all of the curves with a mouse click.

Diagnostic / Inverter Diagnostic / Inverter Details

• : The previously hidden curves remain hidden with a day change or device change.

Diagnostic / Smart Energy / History

• The previously hidden curves remain hidden with a day change.

Changes

Kostal

• List of inverter error messages refined. As a result, the past assignments of errors that were recorded with the previous firmware are no longer possible. It is absolutely necessary to reconfigure the device notifications.

TFT Display

- Depending on the configuration, the text "Yield History" was replaced with "Production/ Consumption/Balance."
- Relay acknowledgment triggered by a notification is done via the alert symbol.

Web interface

- Relay acknowledgment triggered by a notification is done via Diagnostic/Notifications.
- Deactivated switches are now clearly displayed in the graphics.
- If the banner was hidden, it remains hidden when the page is reloaded (cookie).
- Configuration / Devices / Definition / Interfaces: If the number of desired switches differs from the number of detected switches, a warning is displayed.
- Configuration / Devices / Definition / Interfaces: If the mode of the Solar-Log Meter (integrated) does not match that of the detected devices, a warning is displayed.
- Yield Data / System Information: Switches, heat rods, heat pumps and hybrid systems are now grouped separately in the device overview.
- Diagnostic / Event Log: Switches that indicate the switching state or output are now always displayed, even when the mode is deactivated.
- Device Detection: when a device has been successfully detected, a restart is no longer required (also when devices were previously detected).

Bug Fixes

Solar-Log[™] GPRS

- The maximum number of dial in attempts (optional configuration) was ignored for the internal GPRS modem. Fixed.
- When the PIN code was incorrect, additional dial-in attempts were not prevented and the SIM cards was deactivated after three attempts. Fixed.

Web interface

- In the case that not all of the modifications were saved (e.g. because of incorrect user rights), the message "Please wait" could not be removed. Fixed.
- Balance / Annual overview: Fixed rounding error for self-consumption.
- When resorting or deleting devices, the device assignments in the Smart Energy section (meter for consumption/production calculation, temperature sensor, priority list entries, contact assignments) were not always updated correctly.
- Configuration / Plant / Tariff: The table headings were not translated into the respective language when accessing the site. Fixed.
- Diagnostic / Event Log: Depending on the browser used, the events were not sorted correctly.
 Fixed.

Smart Energy

• In certain situations, the current power input of the EGO heating rod was not processed correctly and, as a result, components with a lower priority were not managed properly.

Yield e-mail

• When using 10 plant groups, only 9 of them were listed in the yield e-mail. Fixed.



(Solar-Log[™] 3.5.0 Build 82, July 26, 2016)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverters/SCBs/Meters/Battery Systems/other Devices

Bug Fixes

S₀ meter

 When no more impulses were recorded for a significant time, the energy meter would reset to 0. Fixed.

Elkor

- When the output value fell below 20W, the energy meter would reset to 0. Fixed.
- If a device was offline once, it would remain flagged as offline unless there was a reboot. Fixed.

SMA STP60

• Power reductions for several inverter managers were incorrect. Fixed.

Samil

• When several inverters were connected on a bus, it could happen that the communication did not function until after a reboot. Fixed.

Solectria V4

- The number of MPP trackers was not always properly detected. Fixed.
- For incorrectly detected tracker numbers, unrealistic values were recorded for the unavailable trackers. Fixed.

Fronius Symo Hybrid 5.0

No values were recorded from battery system devices with multiple battery modules. Fixed.

Enhancements

Adjustments

Web Interface

- Diagnostic / Smart Energy: the info icon with configuration tips now also displays the configured type of production / consumption regulations.
- Diagnostic / Smart Energy / History: if an additional meter was selected for the type of production / consumption regulations, its curve was displayed instead of the measured values for the contacts.
- Diagnostic / Smart Energy / History: if the type of production / consumption regulation "Measured values for the contacts" was selected, now an additional total curve is displayed with the total output (provided that more than one contact is assigned).

Bug Fixes

Smart Energy

- The intelligent appliances (EGO + IDM) were only applied to the priority list with the detection function with the versions prior to 3.5.0 and that is why they no longer received surplus notifications after an update to 3.5.0. They are automatically added with this update.
- Profile "Surplus management and Runtime Control:" the contacts in the minimal runtime mode were briefly activated when the configured time was reached (Fill up at) if the runtime was reached exactly at this time. Now this is only activated when the previous runtime is less than the configured runtime.

Web Interface

Diagnostics / Smart Energy / History

- Switching to the previous day on which no device existed for visualization was not handled correctly.
- The recorded output was not displayed for some switches. Fixed.
- Configuration / Devices / Configuration: not all of the configuration boxes were displayed for Varta battery storage systems. Fixed.
- Large External Displays (S0): When the yield meter of the devices was reset, it could occur that the S0 pulse output was faulty until the next system start. Fixed.
- It was no longer possible to set up switches for the Solar-Log200. This was noted during detection, but then removed from the system after that. Now up to 10 switches are detected and applied.
- The translations into Polish have been adjusted. The text was sometimes too long.



(Solar-Log[™] 3.5.0 Build 81, July 7, 2016)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverters/SCBs/Meters/Battery Systems/other Devices

Bugfixes

Connergy

• Querying the device data did not work with firmware 3.5.0 Build 80. Fixed.

Voltwerk

• Querying the device data did not work with firmware 3.5.0 Build 80. Fixed.

Solutronic/Protokoll 9

• Querying the device data did not work with firmware 3.5.0 Build 80. Fixed.

Rudolf Fritz

• Querying the device data did not work with firmware 3.5.0 Build 80. Fixed.

Siemens/Generic

• Querying the device data did not work with firmware 3.5.0 Build 80. Fixed.

Refusol/Generic

• Querying the device data did not work with firmware 3.5.0 Build 80. Fixed.

Kostal

• The option "Radiokit" was not considered properly. Fixed.

Enhancements

• The releasenotes of firmware 3.5.0 Build 80 as of 27.06.2016 were missing the note to an additional language: polish.

Adjustments

Web Interface

 Configuration / Plant / Tariff: When changing the plant group unsaved changes will now be detected

Bugfixes

Web Interface

• Lines in the charts were not always shown/hidden when zooming in/out. Fixed.

As of firmware 3.5.0 Build 80 failures during a firmware update were not correctly shown in the popup dialogue. Fixed.

FTP-Export

• The minute data of meters in the javascript files were not exported correctly with firmware 3.5.0 Build 80. Fixed.



(Solar-Log[™] 3.5.0 Build 80, 28 June 2016)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverters/SCBs/Meters/Battery Systems/other Devices

Bugfixes

Meter

 Solar-Log[™] Meter: From now on Solar-Log[™] Meter Devices will record the AC currents per phase.

Enhancements

Meter

• Solar-Log[™] Meter: Due to a bug in the expansion of the recorded channels the devices did not record data properly with firmware 3.5.0 Build 80 as of June 27, 2016.



Release Notes (Solar-Log™ 3.5.0 Build 80, 28 June 2016)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000



General Reference!

Important: with this version on, it is no longer possible to downgrade below version 3.5.0. Due to the expanded Smart Energy function, this has to be completely reconfigured!

New components

Inverters

- SMA: STP 60 including power reduction and reactive power control
- Canadian Solar: CSI-23KTL-CT, CSI-28KTL-CT, CSI-36KTL-CT
- Kostal: Kostal Piko 1.5 MP, Kostal Piko 2.0 MP, Kostal Piko 2.5 MP, Kostal Piko 3.0 MP, Kostal Piko 3.6 MP, Kostal Piko 4.2 MP

Meter

- Schneider Electric EM6400S (uni- and bi-directional meter)
- Solar-Log[™] PRO-380-CT (uni- and bi-directional meter, Utility Modus)

Switch

- Gude 2110 without sensor support
- Gude 2104

Modifications for the components

Inverters

Fronius

• Revised system behavior to minimize the delays with many of the inverters

Samil

- Revised logic for the re-addressing of inverters when there are communication problems. When
 one or several devices were not reachable, there were considerable delays in the program execution. When there many devices were connected, the delays were especially profound.
- Power reductions and reactive power control revised. Quicker device adjustments.

ChintPower

 Powermanagement via Modbus requires that the "Enabled" and "Reactive Mode" are activated (active and reactive power reductions).

Enhancements for Components

Inverters

Huawei

 Support for additional models: SUN2000-33KTL, SUN2000-40KTL, SUN2000-22KTL-US, SUN2000-25KTL-US, SUN2000-30KTL-US (including power reduction and reactive power control)

Delta

- New model RPI H3
- Logging from Idc1, Idc2, Idc3 and Iac

SIEL

• Support for IBLE 3-Row and IBLE-4-Row Displays

Goodwe

Support for RS485 version

SCE

SIEL

Support for the SIEL SCB (license required)

Heating rod

EGO

- New device version EGO Smart Heater Ethernet Up to 6 units per configuration can be connected to a Solar-Log[™].
- In additional to the maximum temperature, a minimum temperature can also now be set via the Device Configuration of the Web interface. When the temperature falls below the minimum, the heating rod is activate regardless of the amount of surplus, with the configurable output and the temperature is increased to a fixed hysteresis of 7%.

Meter

Elkor

• Support for the new model Elkor MKII. Usable as: Consumption meter, Generator, Consumption meter (bi-directional), Utility Mode

Solar-Log[™] Meter

• From now on the Solar-Log[™] Meter devices record the AC currents per phase.

Bug Fixes

Huawei

Incorrect transfer of configuration data for existing plants with firmware version 3.4.2 build 78.
 Fixed.

Solectria V4

• Incorrect daily yield values for the morning hours have been corrected.

Vectron

• Inverter temperature was recorded incorrectly. Fixed.

Lufft Pyranometer

• Wind speed was saved by a factor of 10 too small. Fixed.

Additional functions

TFT

- Energy flows can now be presented in the TFT display
- The start screen can be selected in the settings
- In the Firmware Update menu, the serial number of the Solar-Log™ is now displayed

License

The maximum plant size can be increased with a license:

- The Solar-Log 300 can be increased to 30 kWp with a license.
- The Solar-Log 1200 can be increased to 250 kWp.

New country selection

- Kazakhstan
- Iran

Web Interface

 The self-consumption values for batteries can now be modified in the Configuration / Data / Data Correction section.

Yield Data Daily View

• The corrected values are displayed additional in the key when consumption or yield values were modified with Data Correction.

Feed-In Management

• Self-consumption from a battery system is now taken into account by feed-in management.

New Internet Access Types

• Mobile router (GPRS, UMTS, LTE)

CSV file enhanced

• IDC2 and IDC3 values are now include in the CSV file

Meter

- The meter mode "Inverter mode" has been replaced with the mode "Generator". The energy type can also now be selected for this mode. Currently, Photovoltaic and Combined Heat and Power Generators are available.
- The Status 255: Offline now appears in the Configuration / Notifications / Device notifications section under Status Codes. The fault notification is generated when the corresponding entry is entered for the device notification.

Active and Reactive Power Reductions

- Now it is possible to activate and deactivate active and reactive power management per interface assignment.
- New Reduction Modes: Fixed Regulation in watts and Fixed Regulation in watts with the Calculation of Self-consumption.

Function adjustments

Web Interface

- R S T was renamed to L1 L2 L3 in the Diagnostics / Feed-in Management / Utility Meter section.
- The notifications for relays can now also be configured in the Configuration / Notifications / Device notifications section.
- An explanation for the individual meter values has been added to the Diagnostics / Components / S0 Meter section.
- The pop-up dialog has been revised.
- The complete dialog has been revised in the Configuration / Devices / Definition / Interfaces section.
 - Division of devices according to manufacturer and type (note the new names)
 - Grouping of devices according to device classes (e.g. inverter, sensor and meter)

- It is now possible to have multiple assignments for a single interface, which in turn, for example, allows for multiple uses of the Ethernet interface.
- For devices that support various baud rates, this only has to be adjusted in the interface definition.
- Devices can now be removed by deleting the corresponding interface definition.
- Now clicking on the calender symbol next to the data field displays a calendar date picker.
- If no devices are recognized, the corresponding dialog is now immediately displayed
- After the IP address for the Solar-Log[™] has been modified, the Solar-Log[™] automatically reboots with the new IP address.
- The HTTP Transfer settings and Test Transfer are also now visible in the Configuration / Internet / Portal section without activating the advanced configuration display.
- There are now two configuration fields for e-mail recipients in the Configuration / Internet / E-mail.
- Previously, the charge status for meters in battery mode was diplayed with 0% in the Energy Flow graphic. Now n/a is displayed.

Smart Energy

Warning:

The existing configuration cannot be applied. Due to this, a new configuration is required in the Smart Energy section.



ng devices are now defined in the Configuration / Devices / Interfaces menu and created tection. After that, they can be adjusted in the Configuration / Devices / Configuration ion section.

- Contracts from the previously detected devices can be grouped together in the Switching groups and controlled with various modes and control profiles. The contracts from different switching devices can also be combined.
- The current configuration can be simulated and checked with different day curves in the Diagnostics / Smart Energy / Simulation section.
- The recorded switching status of the individual switching groups can be viewed from the Diagnostics / Smart Energy / History section. This allows the switch control to be checked retroactively and, if needed, to be adjusted.
- The various switching groups and intelligent applicances can now be prioritized.
- The surplus management can now be optionally filled with current values.
- A percentage value for what is to be fed into the grid can now be configured for the surplus management before the control consumes energy.
- Several control profiles have been revised and expanded.
- In addition to appliances, generators such as combined heat and power generators can be managed.

PM Profiles

 When using the ADAM4022 analog inputs, the last valid value is use when there are invalid values from the remote control technology. This is now only performed for profiles where it has been explicitly defined.

Modbus PM V1 (Version 1)

 Power is tab110505 is the sum of the power for the present Utility Meter of the master and all of the slave devices. (Refer to the documentation for details)

HTTP Export

 When data from more than 10 days is to be transferred, the configured transfer interval is deactivated until all of the data has been transferred. Instead, additional historical data is transferred every 5 minutes.

Device Detection

 After a re-detection, the user-configured properties are better preserved. All of the modified devices now have to always be reconfigured.

Factory Reset

 The Solar-Log[™] models without a display (200, 300 and 250) have the default network settings/ IP address after a factory reset. This is now only performed with a factory reset triggered by pushing the reset button. When resetting via the web interface, the reset does not affect the network settings/IP address.

Display

- Power and energy balance with the distinction between purchased and surplus.
- The Solar-Log¹⁰⁰⁰ now displays the current values and no longer the five-minute average values.
- The environmental contributions for the Solar-Log 1200 and 2000 displays liters instead of barrels for Germany, Switzerland, Italy and Austria.

FTP Export

Longer wait times are possible for the Analog / GSM / GSM router Internet access type.

Bug Fixes

- The configuration of batteries and meters that are not configured in Inverter, Meter for the entire plant or Consumption meter mode are no longer shown in the display of the Solar-Log¹⁰⁰⁰.
- The battery charge is not included in the surplus calculation. Fixed.
- No Varta battery system and an additional inverter could be detected on a Solar-Log²⁰⁰. Fixed.
- The error LED on the Solar-Log¹⁰⁰⁰ was sometimes not activated in case of alarm. Fixed.
- If only inverters below their minimum output and at least one inverter with 0 W DC were detect-

ed during the months without snow, all of the inverters were reported with existing output. In this case, the P current value was reported instead of the P target value. Fixed.

• Previously, inverters without an active snow cover function was also used as a reference for failure monitoring when there was an inverter outage during the defined snow months. Fixed.

Web interface

• The plant installation data was only loaded once when generating the page. If the user's access rights were too low (user log in required), the date was incorrect. Fixed with a reload when logging in.

Fronius Hybrid

• Consumption meters could not be configured as bidirectional meters. Fixed.

FTP Export

• In rare cases, it could happen that a file was considered successfully transfered despite that the transfer was aborted. Fixed.



(Solar-Log[™] 3.4.2 Build 79, 28 January 2016)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverter/SCBs/Meters/Battery Systems/other Devices:

Bug Fixes

Huawei

• With Firmware 3.4.2 Build 78 the inverter configuration was not adopted correctly from old setups. Fixed.

Kostal

• The detection of some models with old firmwares did not work anymore. Fixed.

Fronius Hybrid

• The consumption meter could not be configured in bi-directional mode. Fixed.

TFT-Display

• When the notifications view was open when the "Please-Wait" dialog popped up, the notifications view was overwritten afterwards. Fixed.



(Solar-Log[™] 3.4.2 Build 78, 08 December 2015)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverter/SCBs/Meters/Battery Systems/other Devices:

New

Fronius Symo via Ethernet

• The detection routine automatically selects if it is a inverter or hybrid system (with smart meter).

Sonnenbatterie

• Detection of the battery, the consumption meter and an optional production meter.

Adjustments

ChintPower

• Powermanagement via Modbus requires setting the ,enable' and ,reactive mode' register.

Enhancements

Inverters

SIEL

• Added support for additional models:

SOLEIL1F (1.5, 2, 3, 4, 4.6, 6), SOLEIL3F (10, 15, 20), SOLEIL 10 TL, SOLEIL DSP (nur in Verbindung mit SIEL-SCB), SOLEIL M (1.5, 2, 4, 4, 4.6, 6), SOLEIL T (10, 15, 20)

Huawei

Added support for additional models:
 SUN2000-33KTL, SUN2000-40KTL
 Including power reduction and reactive power control

Bugfixes

Q3

• A Baudrate of 9600 Baud was used instead of 19200. Fixed.

Kostal via Ethernet

• The detection did not work anymore. Fixed.

Delta

- Improved communication with RPI-models.
- Uac-calculation is now dependant of the used phases.
- Uac-calculation corrected for models RPI H3A, H4A, H5A, M6A, M8A, M10A, M50A, M30A, M15A, M20.

Bonfiglioli

• Reactive power management via modbus lead to the inverters powering down. Fixed.

Enhancements

- Consumption meters in bi-directional mode can now be used on installations with battery systems.
- The installation/counting direction of consumption meters in bi-directional mode can now be configured.
- New licence ranges for direct marketing with 250 kWP and 350 kWP

Adjustments

GPRS

• The error-handling during ppp-dialin was reworked and is now more reliably.

Country Poland

• The currency sign was defective.

Bugfixes

Webinterface

- "Yield data/production/consumption" and "Yield data/production/balance": When changing from day to month view or back the graphic switched to the current month. Fixed.
- "Yield data/production/Year" and "Yield data/balance/Year": For years before 2010 no values were shown. Fixed.
- "Yield data/production/Month": In months with a leap day (29.02.) the target value was wrong. Fixed.
- "Yield data/Current values/Energy flow": When a battery was charged and discharged within an interval a wrong value was displayed. Fixed.
- "Diagnosis/Feed-in management/Utility Meter" did not show any values with internet explorer. Fixed.

Display Solar-Log¹⁰⁰⁰

- The values in the view "Puplic Display" were not correct when using the tariff mode "Feed-in tariff". Fixed.
- Sometimes the finance calculation temporarily gave wrong results. Fixed.



(Solar-Log[™] 3.4.1 Build 77, 16 September 2015)

for Solar-Log^{200/500/1000} and Solar-Log 250, 300, 1200 and 2000

Inverter/SCBs/Meters/Battery Systems/other Devices:

New

• SILIKEN SE 85i Central Inverter

Solar-Log[™] Pro 380 Mod three-phase A.C. current meter

Electricity Meter Pro380

Adjustments

• Improved system behaviour using SMA-Inverters when the are not responding (offline).

Enhancements

Power-One/ABB PVI+TRIO+Ultra+UNO

• Recording of UAC also for string inverters.

Bug Fixes

SMA Ethernet

• Changed IP-Addresses will be correctly saved after a redetection.

EGO Smart Heater

• The maximum configurable storage temperature was changed from 85°C to 80°C, as the heatrod only accepts up to 80°C.

Fronius

- With newer models (e.g. Symo) some faults were reported as "State undefined". Fixed.
 Additionally with these models "State undefined" (actually "522"+"523" "DC low String 1" + "DC low String 2") was reported during nigh which now must persist for 15 minutes before being reported.
- If Fronius-Inverters were connected to interface RS485/422 C, the power reduction did not work correctly for those inverters. Fixed.

Power-One/ABB PVI+TRIO+Ultra+UNO

There were communication problems with some models (Inverter often or continuously offline).
 Fixed.

SolarMax

- With the model 32HT2 the second MPP-tracker was not correctly recorded (always 0). Fixed.
- With bigger models that are divided into more than 2 virtual devices, Pac and Yield was not correctly distributed amongst the devices. Fixed.
- Additionally the first tracker sometimes was not recorded correctly (always 0). Fixed.

Kostal

• The detection was not working with some models. Fixed.

Solar-Log[™] Meter

• The energy counter only worked until approximately 1.1 MWh. Fixed (Up to 11MWh).

Huawei

• Only the first 10 characters of the serial number were saved. Fixed (No redetection neccessary).

Adjustments

Smart Energy

• Improved surplus-calculation for smart energy logic in combination with E.G.O. and IDM

Web-Interface

- The date entry fields under "Configuration/Plant/Tariff" and "Configuration/Plant/Electricity Costs" are now validated.
- Password entry fields ("Configuration/System/Access Control" & "Configuration/Feed-In Management/Plant Paramrters") are now validated for correct length.

Powermanagement

• Optimizations for Dynamic control for different module orientations were made.

Bug Fixes

Web-Interface

- Device configuration: The IDM heatpump couold be configured as inverter, total meter and deactivated. Fixed.
- For plants that were installed this year, the installation date was sometimes not determined correctly. This resulted in wrong target values in the production graphs. Fixed.
- Energy Flow:
 - For systems with a battery a wrong production value was calculated if the battery was discharging. Fixed.
 - In the Safari-webbrowser Lines were drawn instead of moving dots. Fixed
- The year and total balance and consumption graphs were shown slowly or not at all in some webbrowsers. Additionally it could happen that "An error occurred while loading the data." was shown. This issue mainly concerned Safari Webbrowsers. Fixed.
- Cockpit:
 - SmartConsumer were not shown when configured as consumption meters. Fixed.
- The daily balance graphwas not correctly shown if only sub-consumers were configured. Fixed.
- Changing the order of inverters was not working for Solutronic, Schüco, Vaillant, Q3, Winaico and Powercom. Fixed.

TFT-Display

• When choosing French, Italian, Dutch or Japanese in the Language selection the corresponding country was not immediately selected. Fixed.

Solar-Log¹⁰⁰⁰ Display:

- The views "Big Display" and "Overview" showed the amount power fed to the grid instead of the production value. Fixed.
- Residual text fragments were visible in the daily yield of the "Big Display" view. Fixed.
- Wrong values were shown in "Overview" and "Total" until the values were initialized correctly. Fixed.

Email Notifications

• If email notifications for power reduction were activated a misleading mail about a changed reduction was sent after resetting the yield data. Fixed.

Automatic backup

In combination with a concurrent http-export gaps in the data aquisition could occur. Fixed.

• Some USB-sticks caused a timeout in the USB-driver which prevented the backup generation. Fixed.



(Solar-Log[™] 3.4.0 Build 76, 23 June 2015)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

Inverters/SCBs/Meters/Battery Systems/other Devices:

New

Inverters

- Solectria 403X: PVI 14TL, PVI 20TL, PVI 23TL, PVI 28TL, PVI 36TL
- Solectria PVI 1800-2500

Battery Systems

• Varta Engion family, Engion home and Engion element

Adjustments

Kostal

• Reworked detection routine: Reliable detection of number of dc-trackers (Up to now was dependant on the dc-voltage of the devices) as well as the device name and nominal power.

EGO Smart Heater

• Optimized state detection to prevent unnecessary state changesv (Keep "Temperature reached" over the duration of shutdown hysteresis of 7°C to prevent "Standby" in that case).

Bugfixes

Aros

- The communication with central inverters stopped working after midnight. Fixed.
- For central inverters with a nominal power greater that 100kW the Pac was recorded with a factor of 0.1. Fixed.

Samil

• The communication sometimes did not work after a redetection. Fixed.

Kostal

- The RS485-Detection did not work with 3.3.1-Beta-versions. Fixed.
- The ethernet-detection did not find all devices under certain circumstances. Fixed.
- The BA-series was detected with 3 mpp-trackers instead of 2. Fixed.

Janitza

• Meter value was not recorded after overflow. Fixed.

Platinum (Diehl AKO)

• When reading the string data an error could occur if an unexpected answer was sent by the inverter. This could lead to a system crash. Fixed.

Fronius

• With certain models the Pdc was miscalculated (Too low DC power). Fixed.

M&T-Sensorbox Full

• When no temperature sensor is attached a value of 0°C will be recorded.

SMA BT

- Some inverters lost the authentication of the Solar-Log[™] during runtime. This caused 0 values to be recorded (until one of the devices was rebooted). From now on the Solar-Log[™] will reauthenticate with the inverters in this case.
- Stabilized communication prevent unnecessary reconnects.

SMA 485

• Misleading "derating" message was given despite a deactivated interface. Fixed.

Phonocube

Detection/Recording with additional consumption meter was not possible using a Solar-Log²⁰⁰.
 Fixed.

SCBs

• With certain plant setups it could occur that calculating the mean values yielded false (too low) values. Fixed.

Growatt_mod

• On large installations problems with powermanagement could occur. Fixed by adjusting communication timing. Fixed.

Belkin WeMo Insight Switch

- Problem registering WeMos with different sizes of the Location URLs. Fixed.
- WeMo#1 registration was lost in case of high energy values. Fixed.

Solar-Log™ Meter

• With small CTs (e.g. 16A) a small amount of Power (<5W) was measured even without connected consumers. Fixed.

Enhancements

Master/Slave

• Solar-Log 1200 can be used for Master-Slave setups.

New Models

• Solar-Log 250 Models for Germany, Austria and Switzerland.

New Country

Sri Lanka

Consumption Monitoring

 Disabled Production, Balance and Finance views if no generator is configured. Live values will show only the consumption gauge.

Webinterface

• The daily consumption view can now be switched to a line-mode (Can be configured when the extended configuration is activated), with the option to (de-)activate the lines for individual consumers.

Adjustments

Maximum plant size Solar-Log¹⁰⁰⁰ and 2000

Solar-Log¹⁰⁰⁰ and Solar-Log 2000 are now limited to 2MW. The mechanism is identical to the one with Solar-Log 300 (maximum plant size: 15 kWp) and Solar-Log 1200 (maximum plant size: 100 kWp).

PM-Control

• When reducing via ripple-control-receiver in master/slave setups, slaves assumed an undriven pm-signal input if the master device failed or was not reachable. Depending on the configured

reduction matrix the configured value was used for power management. As it is not a valid pm-control signal, from now on it will be considered to be a faulty signal and the reduction matrix will not be evaluated further. A failure of communication/the master Solar-Log[™] will be assumed if there was no signal from the master Solar-Log[™] withing 5 minutes.

- The PM-History is now being recorded even for non PM devices.
- In master/slave setups with pm-profile via IO-box the IO-box values were kept in slave devices if the master device failed or was not reachable. From now on these values will be reset after 5 minutes of communication failure.

Webinterface

- Changed to new design
- New energy flow visualization
- Split the "Live Values" page into three separate pages: Cockpit (Gauges), Energy Flow and Table Dagnosis / Battery-Diagnosis / Charge-History (1 Day as well as 7 days): Missing data points will now interrupt the lines instead of showing 0 values.
- Configuration / Devices: When saving changes on plants with many devices it could sometimes take very long until the changes could be applied. By cancelling the current measurement this process is now much faster.
- The entry "Special Functions" was removed from the menu. The contained entries "Smart Energy", "Feed-In Management" as well as "Direct Marketing" have been moved to the main navigation.
- Proxy-errors with http and ftp connection are now shown with textual description.

Device Notifications

 A continuously present error/state will now be reported as configured under "Configuration/ Notifications/Device Notifications/Activate after X readings" repeatedly after x measurements, under circumstances until "Maximum per day" has been reached.

Smart Home

• The Function "Smart-Home" was renamed to "Smart Energy".

Bugfixes

PM-Control

- The options "Close relay at level 4" and "Close relay during power reduction" were not functional with FW 3.3.0 Build 74 as of 07.04.2015. Fixed.
- In combination with certain Powermanagement controls and several slaves the master/slave communication was very slow. Fixed.
- ModbusPM V1: Since Firmware 3.3.0 Register values were not restored after a reboot. Fixed.

FTP-Export

• If the data export via HTTP was configured for a commercial portal and an additional export to a different server via ftp was configured, a user-defined ftp-export directory was overwritten with the serial number Fixed.

Webinterface

- Diagnosis / Feed-In Management / Feed-Balance: Only the last configured device was being considered(For production as well consumption). Fixed.
- The filled curves in the diagrams caused graphical glitches when the curve was interrupted. Fixed.
- If the Solar-Log[™] and the PC, which is accessing the webinterface, had different timezones, some graphics did not show the correct values. Fixed.
- Diagnosis / Inverter-Diagnosis / Inverter-Details: Under certain circumstances it could occur that there were no devices to choose from. Fixed.
- With large numbers of devices the Live-Values view (Yield Data / Live Values) could block the measurement for as long as being opened. Fixed.
- Diagnosis / Components / SCB Monitor: The values "Internal temperature" und "Internal temperature (sensorbox)" were mixed up when using the "Solar-Log™ SCB-K". Fixed.
- Device Configuration: The entry field for maximum AC-power was not shown when switching from a battery to an inverter. Fixed.

TFT-Touch-Display

• The translation for the language selection "Turkish" was faulty. Fixed.

HTTP-Export

• Due to an error in the data compression it was possible that a configuration could not be sent to the portal and had to be sent again. Fixed.



(Solar-Log[™] 3.3.0 Build 74, 7 April 2015)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

Inverters / Other devices

New Inverters

EEI

 Supported Models: 8YF250Q3AF01 [trunk/r6662]

Astronergy

 Supported Models: CHPI 1.5KTL, CHPI 2KTL, CHPI 3KTL, CHPI 4KTL, CHPI 4.4KTL, CHPI 5KTL, CHPI 3.6KTL-M2, CHPI 4.2KTL-M2, CHPI 5KTL-M2, CHPI 1.5KTL-AS, CHPI 2KTL-AS, CHPI 3KTL-AS, CHPI 5KTL-AS, CHPI 10KTL, CHPI 12KTL, CHPI 18KTL, CHPI 20KTL including power reduction and reactive power control

ABB

Supported Models:
 PRO-33.0-TL

Battery systems

Kyocera

Supported Models:
 KD260AH-4PG

Extentions

Yaskawa

 New models: CEPT-L1AA4P5, CEPT-L1AA5P8, CEPT-S1AA4P5, CEPT-S1AA5P8

Fronius

New models:

IG Plus 120 V-1, Agilo TL 360.0-3, Agilo TL 460.0-3, Galvo 3.0-1, Galvo 2.5-1, Galvo 2.0-1, Galvo 1.5-1, Galvo 3.1-1

• Improved detecion of additional models (correct model name as well as nominal power)

Adjustments

Meters

Janitza

- Data channels UAC1, UAC2, UAC3: The phase-to-neutral voltage is recorded instead of the line-to-line voltage.
- This only affects the CSV export. It has no effect on utility measurements.
- The voltage is only included in the calculation of battery voltage if it is above a threshold.

Inverter

ABB PVS800

New status message "Q-Power"

Bugfixes

Yaskawa

• Some error codes were misinterpreted. Fixed.

EGO

• Surplus calculation corrected to prevent unneccessary switching cycles.

Kostal

- When an inverter detection via RS485 was performed with Firmware 3.2.1 no data could be queried from the inverter because the bus address was saved incorrectly. Fixed.
- If this error is present on an installation, the device configuration has to be reset and a redetection has to be performed using this firmware (or later).

Fronius

• For inverters with 1 MPP tracker it could happed that the pdc was 0. Fixed.

Conergy/Voltwerk

• At times very high dc-values could occur. Fixed.

SolarEdge

• The modification of communication in FW 3.2.1-73 leads to freeze the Solar-Log under certain circumstances. Fixed.

Extensions

LCD-Display

- The battery status is now shown on the LCD.
- It can now be adjusted how the current power reduction is to be shown on the LCD display. There are 3 modes:
 - Errors only: Only errors are shown on the display
 - Target value % DC: The target value in percentage of dc-power is shown.
 - Control value % AC: The current control value in percentage of the ac-power is shown.

SL 1200/2000 TFT-Display

• It is now possible to start a test transmission via the display (HTTP).

Web interface

- Date and time of the Solar-Log[™] is now shown below the VLCD.
- The VLCD is now also shown for older devices without an LCD.
- The mouseover information in the consumption graphic has been enhanced.
- Improved loading speed
- If a new firmware is available a notification will be shown
- Configuration/Plant/Tariff: Market integration 90/10. A new option "Percentage calculation" has been added which allows for two feed-in tariffs, which are applied using a given percentage.
- Inverter Diagnosis
 - The inverter diagnosis also shows Uac if present.
 - The fixed scaling has been removed
 - Historical data is now shown correctly (compatible with epochs)
- Diagnosis/Support
 - Reboot of device. The Solar-Log[™] can now be rebooted using the web-interface.
- Yield data/balances/day
 - The mousover function will now show all values (consumption, yield, self-consumption...)
- For better orientation the complete navigation path is now shown on all pages instead of just the page

title.

• The power reduction carried out at the respective points in time are now displayed under Diagnosis / Feed-In Management / Feed-Balance

PM-control/-diagnosis

- Improved communication speed for Master/Slave setups
- Email for Master/Slave communication problems. Up to 5 eMails will be sent per day and slave if communication problems occur.
- New reduction mode "Adjustable reduction" implemented.
- A dynamic reduction mode can now be activated for plants with differing module orientations (e.g. eastwest).
- The PM-Diagnosis will now show in detail which control source is active at the moment and how the control value is determined
- The PM-History now also shows the control source.
- The Feed-In-Balance now shows the reduction used at the time in watt and percent as additional information.
- Notification eMails for power reduction now also contain the control source
- Starting with this firmware version the input state of the PM(+)-connector is always shown and processed unmodified. Up to now the input for reactive control was used in parallel with the input for power reduction if it was not used otherwise. This made the exchange of older devices possible that did not have the new PM+ interface and were wired via PIN D0 and/or D5. This will not be possible anymore without changing the wiring. Please make sure the wiring of the PM(+) interface is correct before updating to this version.
- New Modbus interface for pm-control added:
 - Watchdog with fallback value for power reduction
 - Characteristic curves can now be activated via ModBus
 - Utility Meter values can now be provided via Modbus
 - The amount of installed and online inverters can now be queried

Adjustments

- Renamed "Automatic FW-Updates" to "Check Firmware version automatically" and removed the option "Automatic update via Modem".
- Adjusted the calculation of maximum values for diagrams, as these were often too low.

Web-Interface

- Device configuration
 - Saving the device configuration can under circumstances take a while. From now on a pop-up will be shown if this is the case
- Graphics will not show future time periods.
- The day can now be switched while the data is being loaded.

- Visual feedback for the NTP-Synchronisation added.
- Consumption data: When changing the day or between day/month/year/total the sub-tab that was opened last will be opened again.

PM-Profiles

• The interface selection for IO-boxes now offers an option "Via Master/Slave", which has to be selected if the IO-boxes are not connected directly to the Solar-Log[™].

PM-Configuration

• The interfaces for power reduction or reactive power control can now always be configured, even if the control is deactivated

Bugfixes

Web interface

- The configuration dialog for large external displays was shown for SL250. Fixed.
- The battery diagnosis pages "loading history 1 day" and "loading history 7 days" have been revised:
 - The view of the data was wrong with a recording interval greater than 5 minutes. Fixed.
 - If not all seven days can be loaded in the 7 days view, the availabale data will be shown now.
- It is not possible to navigate into the future anymore.
- If the web-browser had a different time zone than the Solar-Log[™] the data was shown in the worng time zone. Fixed.
- The option "SMS directly via GSM-Modem" was shown even if no modem could be connected to the Solar-Log[™]. Fixed.
- If a test-transmission was ordered while a regular transmission was in progress and data was recorded at that moment, data recording and export were blocked. Fixed.
- In the configuration page for reactive power management, the values for characteristic curves could not be saved with the "Controlled cos (Phi) shift factor" mode selected Fixed.
- In the configuration page for reactive power management, the values for characteristic curves could not be saved with the "Controlled cos (Phi) shift factor" mode selected Fixed.

Solar-Log 250

- If the system time was missing it was not possible to cancel the Easy Installation. Fixed.
- Some input fields were not automatically rechecked on validity after changing their value. Fixed.

TFT-Display

- Fixed a grafical issue in the waiting screen.
- When a popup window or keyboard were shown, some actions via the web interface (e.g. test-transmission) were blocked. Fixed.
- Sensor boxes V3 were falsely detected. (Basic instead of full and vice versa). Fixed.
- After loading a PM-profile the communication with the inverters sometimes did not work until the next

reboot. Fixed.

- The automatic time snychronisation (NTP) during system start did not work reliably. Fixed.
- A loss of the system time (RTC) caused by long periods without power supply was not detected as resolved until after a reboot was done even after a successful time synchronisation. Fixed.
- Smart Home: The profile "Freezer w/o temp.sensor" was faulty. Fixed.
- After a redetection not all parameters of devices that were previously detected were applied (e.g. Number of MPP trackers). Fixed.
- The initial yield was sometimes not imported completely. Fixed.



Release Notes (Solar-Log™ 3.2.1 Build 73, 10 February 2015)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

Please be aware that this firmware is a "beta" version. Although extensive testing has been done we cannot guarantee for the full functionality of the product. For this reason the firmware should only be in the hands of experienced installers who are well acquainted with the installation problems and the solutions described in the Release Notes of our firmware.

When using Smart Home profiles, it is absolutely necessary that they be checked after the update and eventually modified accordingly (please observe the notices in sector Smart Home).

Inverters/SCBs/meters:

New

Sungrow SunBox PVS

Supported Models:
 PVS-8M, PVS-12M, PVS-16M

Extensions

Kostal Ethernet

Additional to the RS485-Bus address 255 now address 1 is supported.

Fronius

• Models with 2 MPP-trackers are now recorded and monitored with both trackers. To apply the change and record data from both trackers an inverter detection has to be started.

Schneider Conext

• Support for 2 trackers with the TL-series. To apply the change and record data from both track-

ers an inverter detection has to be started.

• Support for series CL and RL (for all models consult the inverter database).

Bugfixes

Sunways

• The daily yield was reset to 0 after a reboot, if the inverter did not feed in at that moment. Fixed.

Sungrow

• Overhauled the status and error codes (For certain error states status "sleeping and error "unknown" were shown)

Bonfiglioli / Vectron

• Fixed an error in the scb configuration dialog. Fixed.

Steca

• The missing Pdc is now being calculated from Udc and Idc for the XX03 models.

ABB PVS800

• The device status was intepreted falsely (In most cases "unexpected" was shown). Fixed.

Socomec

- The serial number was not detected correctly during an inverter detection. Fixed.
- Improved the communication with the inverters.

SolarEdge

• Improved the communication with the inverters.

Kostal

Sometimes extremely high Pac values were recorded, due to misinterpreted measurements.
 Fixed.

Extensions

WEB-interface

- When a data conversion being performed in the background, this will be signaled with a popup window and red icon.
- Several input fields are now checked for validity in the smart-home configuration.

Bug fixes

- If internet access type "GSM-Modem" was chosen on devices without a gsm modem the data recording was interrupted. Fixed.
- The data for month december was not shown correctly in the current year. This affected the web-interface (Production and balance), the CSV-export as well as the FTP-export. Fixed.
- The setting "Activate text messages (SMS)" was coupled with the setting "Activate yield-SMS". Fixed.

WEB-interface

- Missing/faulty translations were replaced e.g. the turkish translation for the welcome page was missing.
- In the daily balance the yield was calculated incorrectly. Fixed.
- Fixed an issue with the page chooser in the event log.
- Live values of battery systems: With the setting "Consumption meters includes battery charge" activated the value of the consumption meter was shown incorrectly. Fixed.
- Configuration/Large external display: Interface RS485-A was shown for devices without an RS485-A interface. Fixed.

TFT-Display

- Translations for gauges for battery systems were missing. Fixed.
- When the keyboard for entering PIN number was shown on the TFT display with activated PIN protection, the data recording was interrupted. Fixed.

Solar-Log⁵⁰⁰

• The display was distorted when the the device was booted for the first time after a factory reset. Fixed.

Solar-Log¹⁰⁰⁰

• When the end of the day was configured as 24:00 in the prognosis tab, the daily graphics was nat shown on the touch display. Fixed.

Smart Home

• The profile "Heatpumps with a grid company blocking signal" as well as "Vaillant heatpumps with a grid company blocking signal" were not working correctly. Fixed.


Release Notes

(Solar-Log[™] 3.2.0 Build 72, 25 November 2014)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

Inverters / Other devices:

Adjustments

Kipp & Zonen

• Extended Errorcodes for SMP3/SMP11 pyranometer.

Enhancements

Phonosolar

• Evaluation of additional error registers and modification of former error registers.

Bug Fixes

IDM

• An open UDP socket was not closed if a new one was opened. Fixed.

SolarMax

- After a re-detection of inverters that are split into severak virtual devices (e.g. 4 MPPT-models) some measurement values, for example pac and yield, were not correctly distributed amongst the virtual devices (both virtual devices were assigned the full pac and yield). Fixed.
- Information: An already faulty configuration will not be fixed automatically. In such a case the inverter configuration needs to be reset and the inverters need to be detected. A backup that was created before can then be restored. (A re-detection alone will not solve the problem!)

SMA (Bluetooth)

• A faulty status message "unknown" was shown. Fixed.

Reverberi

• Changed serial numbers will now be stored during a re-detection.

Enhancements

Web-interface

- A new Diognosis tab "Smart-Home / Status (current)", now shows the current switching state of profiles as well as production, consumption and surplus.
- Smart consumers are now shown in a separate category in the live values.
- The diagnosis tab for the EGO SmartHeater was enhanced and renamed to smart consumers. Now the IDM Heatpump is also visualized in this tab.
- The maximum number of digits that can be entered as device- or string-power was increased.

Bug Fixes

WEB-Interface

- The tooltip for electricity costs saved through usage of a battery system was also shown on plants without a battery system. Fixed.
- The Tracker comparison did not work with firmware 3.2.0-71. Fixed.
- With FW-Version 3.2.0 Build 71 parts of the configuration interface (Smart-Home, Export, Backup, Reactive Power Management) was not shown for Solar-Log 200. Fixed.
- Device Detection: the amount of detected devices was sometimes not updated when switching to the next interface but only after completing the detection process. Fixed.
- Diagnosis / Smart-Home / Status (current): Consumption meters were not detected (Rows "Consumption" as well as "Theretical Surplus" in the category "Plant-Wide" were not shown although a consumption meter was present. Fixed.

General

- If the internet connection via GPRS did not work for the first time the LCD-Status-Display showed an error even if following connections were successfully established. Fixed.
- The Status of the M&T Sensorbox was reported as "Offline" if the irrradiation was below 5 W/ m². This status will now only be shown if the sensorbox does not answer data requests.

TFT-Touch-Display

• Some configuration dialogs were not shown, e.g. extended configuration page 3 the checkbox "Settings as well as some GPRS settings Fixed.

CSV-EXPORT

• The channel E_TOTAL was validated falsely in the CSV-Export and thus the meter total reading

was not exported correctly. Fixed.

Release Notes (Solar-Log™ 3.2.0 Build 70, 3 November 2014)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

Please be aware that this firmware is a "beta" version. Although extensive testing has been done we cannot guarantee for the full functionality of the product. For this reason the firmware should only be in the hands of experienced installers who are well acquainted with the installation problems and the solutions described in the Release Notes of our firmware.

When using Smart Home profiles, it is absolutely necessary that they be checked after the update and eventually modified accordingly (please observe the notices in sector Smart Home).

Inverters / Other devices

ABB

Support for the SCB PVI-Stringcomb (licence needed)

IDM

 Heat pump integrated. Connection via ethernet. Exchange of excess production and weather prognosis. Requires a firmware update from IDM!

Solar-Log™

- Solar-Log[™] Smart Relais Station 1 x 3,5 kW
- Solar-Log[™] Smart Relais Station 3 x 3,5kW
- Smart Home integration of Belkin Switches WeMo Insight and WeMo Socket
- EGO Smart Heater integrated. Connection via RS485. Only one Smart Heater per Solar-Log[™] useable.

Phonosolar

PhonoCube 7.2 (Batterie-Hybrid-System)

Allnet

• Network power socket 3075V3 is now supported.

Kipp & Zonen

• Pyranometer SMP3 / SMP11 is now supported.

Enhancements

Delta

New australian inverter types:
 RPI H3A, H4A, H5A, M6A, M8A, M10A, M15A, M20A, M50A, M30A

Bug Fixes

Delta

• For some models the daily yield calculation used a wrong counter and thus stayed 0. Fixed.

SolarMax

 For the models 660TS-SV MT and 720TS-SV MT, which are detected as two devices by the Solar-Log[™], the yield and Pac were miscalculated. Fixed.

SolarEdge

- If a SolarEdge gateway is used between the Solar-Log[™] and the inverters, it was detected as an additional inverter. Fixed.
- On large installations problems with the communication could occur. Fixed.
- The communciation using a SolarEdge gateway was unstable. Now it is possible to define if a SolarEdge gateway is present under configuration | definition | interfaces via the radio-kit option (radio-kit active -> gateway is present in the bus).
- Improved handling of status- & error codes.

Enhancements

Smart Home

- The calculation of excess power was redone. Each profile is now assigned the excess power (active profiles with higher priority are already considered) the order of the profiles defines the priority in the calculation. This makes it neccessary to verify and adjust the Smart Home configuration.
- New Smart Home profile: "Heat rod 3-step digital" (3 relais in one device are needed; for example, the Smart Home Relais Box or Gude 2301)

• Switches: Each switch can now be assigned an individual name (maximum 16 chars).

Monitoring of battery storage systems

- Battery hybrid systems (till now PhonoCube 7.2 Phonosolar)
- Energy meters in battery-mode (requires a bi-directional meter, till now Janitza Type UMG 104)

Web-interface

- The current access-level is now displayed next to the login/logout button.
- Fixed several small issues
- Added plausibility checks for several input fields
- To avoid confusion, the status and error codes in the event log are displayed without the internal Solar-Log[™] error number but only using text or the internal inverter error number
- A new diagnosis tab now shows all configured smart-home profiles as well as the active switches in relation to each other. This makes it possible to detect configuration errors in an easy manner.
- The target/actual yield values are displayed under the production graphs again.
- Deactivated switches (for example caused by missing permissions) give a warning message if used.
- For GPRS models there is a new option to unlock the sim-card respectively, set a new pin using a PUK/SuperPin.

New Countries

- Curacao
- Bonaire St. Eustatius and Saba
- Sint Maarten
- Jordan
- Marocco
- Egypt
- Tunisia
- Namibia
- Botswana
- Mozambique

New languages

- Japanese
- Turkish
- Chinese

Currency sign

• On the TFT-Display an in the web-interface ¥ is used for chinese and japanese currencies.

Feed-in management

• cos(phi) via P/Pn now uses the measurement values of the Utility Meter, if present. (For Master-Slave setups the same firmware version must be installed on all Solar-Logs)

Adjustments

Web-Interface

• Configuration | System | Licences: the feedback if the entered licence code was valid was modified.

Bug Fixes

LCD-Status-Display

• After detection of CTs the sensor symbol was shown as offline. Fixed.

SMA/Bluetooth

• Faulty Event-Log status "Unknown". Fixed.

Web-Interface

- Diagnosis / Inverter diagnosis / Inverter / details: Under certain circumstances the autoscale function did not work. Fixed.
- After logging in as user or installer the current tab was not reloaded correctly. Fixed.
- Yield data / balance / day: the sum of self-consumption was calculated falsely under certain circumstances. Fixed.
- FW-Updates via usb using a filename starting with "firmware_1200" did not work. Fixed.
- Configuration / Plant / Tariff: When the tariff mode "Consumption of Self-produced power" was selected the table for feed-in tariff was shown. **Fixed**.
- Email: Special character in the subject were not shown correctly with some smtp servers. Fixed.
- Yield Data / Finances / Electricity costs were not shown correctly using the tariff mode "Feed-in tariff and Self-consumption refund". Fixed.



Release Notes

(Solar-Log[™] 3.1.3 Build 70, 22 September 2014)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

Inverters / SCBs / Meters Modifications

ABB

 As of now, "ABB PVS" has to be selected for the respective interface for the PVS models. Now only "ABB" has to be selected for the respective interface for the Power-One models (PVI, Aurora, TRIO and UNO) that ABB has acquired.

Diehl / Platinum

• Only Platinum instead of Diehl is now detected with Easy-Installation.

Bug Fixes

SolarMax

• With some models not all of the status and error codes were correctly assigned. Fixed.

Steca

• Communication with the inverter has been improved.

Elkor

• The bidirectional consumption meter mode received the wrong flow direction. Fixed.

Web interface

• The module field comparison displays a smaller number of devices. Fixed.

Solar-Log¹⁰⁰⁰

• The check boxes for the display protection USB and configuration were interchanged. Fixed.

Diagnosis | Event Log

• Problems may occur in the display for certain countries with a particular date format (e.g. China, Thailand and the United States). Fixed.

TFT Display

• The maximum value for the feed-in power decreased slightly. Fixed.

• When there was no data available for the first day of the month, the monthly balance displayed the self-consumption for the wrong days. Fixed.

New features

M&T Sensor

 Now it always records, even when there are no additional sensors connected or inverters or meters online.

SolarMax

New types:

75TS A, 360TS-SV ST, 360TS-SV MT, 720TS-SV ST, 1080TS-SV ST. 1440TS-SV ST

 It now sometimes includes power reductions and reactive power control (see the Inverter Database).

• Automatic Google DNS look up can be disabled when the supplied DNS server that has been entered is not available.

Release Notes (Solar-Log[™] 3.1.3 Build 69, 21 August 2014)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

Please be aware that this firmware is a "beta" version. Although extensive testing has been done we cannot guarantee for the full functionality of the product. For this reason the firmware should only be in the hands of experienced installers who are well acquainted with the installation problems and the solutions described in the Release Notes of our firmware.

New inverter / Modifications:

TBEA

- supported models: TS10KTL, TS12KTL, TS15KTL, TS17KTL, TS20KTL
- including power reduction and reactive power control

Bonfiglioli / Vectron

• "Vectron" has been renamed to "Bonfiglioli."

Huawei

new models:
 SUN2000-23KTL, SUN2000-25KTL, SUN2000-28KTL

Solarmax

• new module types:

7TP2, 6MT2, 32HT2, 30HT4, 32HT4

- it is now possible to connect inverters via the Ethernet interface
- reactive power control supported

Fronius String Control

 supported models: 100/12, 250/25, 250/25 DCD DF, 250/30

Santerno

New module types: Sunway TG NA

Bug fixes

Fronius

- Unknown error codes from the inverter were not correctly displayed. Now the Solar-Log[™] displays "State undefined."
- Communication with the inverters has been improved.

SolarMax-SCB

• The number of strings could not be configured via the web interface. Fixed.

SMA Ethernet

• Problem detecting single tracker devices fixed.

Janitza

• Interruption while recording data. Fixed by improving the timing characteristics of communication with the meter.

Inepro

• DMM PRO75D/1250D. The current output values were very imprecise. Fixed.

Generally

- The yield was not correctly recorded with some inverter manufacturers (for example Effekta KS-Serie, Kstar, Vision). Fixed.
- Some of the column labels in CSV files were in German and now they are completely in English.
- Solar-Log¹⁰⁰⁰ Display: The avoided CO₂ emissions were displayed by a factor of 100 too much in the "Overview" tab.. Fixed.
- Power meter mode "bi-directional meter" (net meter) was still incorrect. Fixed.
- Delimitation of columns in the HTML yield e-mail corrected.

Web interface

- Fixed some small errors.
- Feed-in diagnostics were sometimes not displayed when a PM profile was active. Fixed.
- PM Profile Configuration: The interface selection for the IO Box was lost when a restart was performed directly after the adjustment. Fixed.
- Verification of the tariff configuration: only one plant group with the mode with the calculation of self-consumption can be configured.
- The configuration of plant groups was falsely displayed with Solar-Log²⁰⁰ and Solar-Log⁵⁰⁰. Fixed.

• Sometimes, the WEB interface did not work correctly for plants with pyranometers (sensor graphics, device configuration, system info and live data). Fixed.

WLAN

• Directly after the WLAN had been started, some routers did not send the correct ID for the security settings. This could lead to connection errors. Fixed.

HTTP Transfer

- In certain combinations, the current configuration was not sent to the portal after a re-detection. Fixed.
- Incorrect recording of inverter events. Fixed.

FTP Export

• The value for the current day was already included in the months.js and years.js files. Fixed.

E-mail

• Subject line was sometimes not correct. Fixed.

TFT Display

- The environmental contributions for the month were incorrect. Fixed.
- When meters were connected, the display did not turn off when all of the inverters were offline. Fixed.

Solar-Log⁵⁰⁰ Easyinstallation

- No inverters could be detected, the device had to be restarted. Fixed.
- When assigning a user password, the selected language was not used if the user was not logged in. Fixed.

Enhancements

Performance Monitoring

- The option to set the performance monitoring per inverter (also with several MPP trackers) only via the inverter's total output.
- The current power reductions are taken into account for performance monitoring with sensors.
- Meters in inverter mode are also now monitored.

Allnet 3073

• Smart plugs are also now supported with firmware version 3.20.x.



Release Notes

(Solar-Log[™] 3.1.2 Build 68, 23 May 2014)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

Bug fixes

• SMA BT:

If the Solar-Log[™] did not find any devices during a BT-Scan an internal error occured. Fixed.

• Web-Interface:

Fixed some minor issues.

• FTP-Export:

The files months.js and years.js were not created correctly. Fixed.

• NTP-Time synchronisation:

Under circumstances a time from unsynchronized servers was used. Fixed.



Release Notes

(Solar-Log[™] 3.1.2 Build 67, 21 May 2014)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

New inverter / Modifications:

Kstar

- supported models:
 KSG1500SM, KSG2000SM, KSG3000SM, KSG3600SM, KSG3000DM, KSG3600DM, KSG4200DM,
 - KSG5000DM, KSG-10K, KSG-12.5K, KSG-15K, KSG-17K, KSG-20K
- including power reduction and reactive power control

Vision

• supported models:

VIS-1.5K-SM, VIS-2K-SM, VIS-3K-SM, VIS-3.6K-SM, VIS-3K-DM, VIS-3.6K-DM, VIS-4.2K-DM, VIS-5K-DM, VIS-10K, VIS-12.5K, VIS-15K, VIS-17K, VIS-20K

• including power reduction and reactive power control

Shindengen

supported models:

PVS010T200 (indoor model), PVS9R9T200 (indoor model), PVS005T200 (indoor model), PVS010S200 (indoor model), PVS100T200A-DN-SA-S (outdoor model)

Diehl

• "Diehl AKO" and "Diehl H Series" are now found under "Platinum" and "Platinum H" in the manufacturer selection list.

Fronius

new models:

Symo 3.0-3-S, Symo 12.5-3-M, Symo 10.0-3-M, Symo 3.7-3-S, Symo 4.5-3-S, Symo 8.2-3-M, Symo 5.0-3-M, Symo 20.0-3-M, Symo 15.0-3-M, Symo 17.5-3-M, Symo 3.0-3-M, Symo 3.7-3-M, Symo 4.5-3-M, Symo 6.0-3-M

Effekta

new models:

KS-1500ST, KS-2000ST, KS-3000ST, KS-3600ST, KS-3000DT, KS-3600DT, KS-4200DT, KS-5000DT, KS-10000, KS-12500, KS-15000, KS-17000, KS-20000

including power reduction and reactive power control

Bug fixes

• SMA BT:

Under certain conditions, the Solar-Log losses the connection to some inverters when the NET- $ID \ge 2$ and the connection is reestablished the following day at the earliest. This is now taken care of with an exception rule.

- Sensors, pyranometers and/or meters do not work on the same bus with some inverters. Fixed.
- Empty minute data records are generated when there are very long request times (in offline) with some inverters. This can lead to errors in the yield curve. Fixed.
- Diehl AKO / Platinum:

With some inverter types, three instead of two MPP trackers are detected. Fixed. The third MPP tracker was not recorded correctly. Fixed.

- The values for the self-consumption were not always applied to the monthly or yearly statistics. Fixed.
- When plants had changes to their connected devices in the last month/year, the monthly /yearly statistics were not correct. Fixed.
- The following values are incorrectly returned for requests via the JSON / ModBus interface: current values consumption meter, current values total plant meter, yearly total consumption and production, total consumption and production
- Data correction:

Values with a zeros after the comma were not imported correctly. Fixed.

- The plausibility check of the data formate in the web interface was performed incorrectly in some country settings. That made it, for example, impossible to set the time. Fixed.
- The Total consumption view had the values in Wh instead of kWh. Fixed.
- Web interface:

some input fields in the Configuration/Special Functions/Feed-in Management/Plant Parameter section were not displayed. Fixed.

• Sometimes not all of the detected devices were displayed correctly in the Yield Data/Sysinfo dialog. Fixed.

Enhancements:

- It is also now possible to use a proxy server with HTTP transfers.
- Solar-Log 300 and 1200 Meter:

The Meter inputs can now also be configured in the "Inverter" and "Total Plant" mode. Note that there is no automatic voltage measurements when there is no inverter. That is why it is necessary to properly configure the "Reference Voltage" in the "Device/Definition/Meter" menu.

• Web Interface:

With slaves in the Diagnostic/Feed-in Management/Utility Meter tab, the Utility Meter data is displayed.



Release Notes

(Solar-Log[™] 3.1.1 Build 66, 14 April 2014)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

New inverter / Modifications:

Gefran

• supported models:

10k-AE-TL-1, 10k-AE-TL-2, 12k-AE-TL-1, 12k-AE-TL-2, 15k-AE-TL-2, 18k-AE-TL-2, 20k-AE-TL-2, 20k-AE-TL-3, 10k-EE-TL-1, 15k-EE-TL-1, 20k-EE-TL-1

Danfoss

new models:

DLX und FLX

• Power reduction and reactive power control improved

Delta

new models:

SOLIVIA 3.0 NAG4TL, SOLIVIA 3.8 NAG4TL, SOLIVIA 5.0 NAG4TL, SOLIVIA 7.6 NAG4TL, SOLIVIA 5.2 NAG4TL, SOLIVIA 6.6 NAG4TL

Fronius

new models:

Galvo 1.5-1, Galvo 2.0-1, Galvo 2.5-1, Galvo 3.1-1, Primo 8.2-1, Primo 8.2-1, IG Plus V/A 10.0-3 Delta, Symo 7.0-3-M

Sunpower

new models:

SPR-11401f-1 UNI

Bug fixes

Pyranometer from Lufft

• It was not displayed correctly when a device was detected. Fixed.

S₀-Meter

• When the configured performance was superseded the last plausible value was calculated. Because of this the excess value could not be correctly diagnosed. This was changed so that now the configured maximal value is calculated.

Web-interface

- Diagnosis/Feed-in management/Feed-balance: The Zoom function only worked on the Y axis. Fixed.
- When special characters were used in the password for browser access protection the application stopped working. Fixed.
- A script-error would occur under Configuration/Devices/Configuration when plant groups were defined without inverters. Fixed.
- When converting the inventory data during the update from FW 2.X to FW 3.1.0 data was wrongly converted for certain devices. Fixed.
- After the update from FW 2.X to FW 3.1.0 the new configuration was not communicated to the portal immediately with the next FTP transfer. Thus problems arose with the remote configuration or with the switch over to HTTP. Fixed.

Solar-Log¹⁰⁰⁰ Touch-Display

• After detection was made via the display, "Ready" was displayed even though nothing was configured. Fixed.

Transfers via FTP or HTTP

• Data transfers via FTP or HTTP partially showed gaps in the logging. Fixed.

Solutronic SP

Inverter was not found. Fixed.

Enhancements:

- Web-interface: Diagnostics/Feed-In Management/ Feed in balance: Notice text added to show that the maximum permissible feed-in performance has been reached.
- Web-interface: Configuration/Internet/Portal: Notice text added to indicate that HTTP transmission has been enabled without a server address entered.

- When updating from FW 2.x to 3.1.1 the self-consumption data is now calculated for the existing data (minute files) at conversion and incorporated into the Daily/Monthly/Yearly statistics.
- Manual data corrections can now also be made for Consumption and Self-consumption. (As long an appliance was configured on the date in question)
 Data corrections that lie in the future are no longer admissible.
 The correction factor is now calculated during a manual correction so that the value to be displayed can be entered directly.
- The inventory data can now also include Consumption and Self-consumption data.



Release Notes (Solar-Log[™] 3.1, 25 March 2014)

for Solar-Log^{200/500/1000} and Solar-Log 300, 1200 and 2000

General Information:

Read the precautionary notes carefully before updating the Solar-Log[™] firmware.

- The Firmware 3.1 can only be installed on Solar-Log[™] devices running Firmware 2.8.3-53 or later. Otherwise the update will be refused. Before starting, please log into Solar-Log[™] and update to Firmware 2.8.3-53 or later.
- 2. Since the web interface of the Solar-Log[™] is no longer working with Java script files (js.) these scripts are not available for local queries anymore. Users who use external applications that are connected locally to the Solar-Log[™] should contact the 3rd party application publisher to check compatibility with this firmware. Users that use applications via the Solar-Log[™] WEB portals are not affected.
- 3. A USB data transfer is no longer possible with this firmware. The technical basis of the "data transfer" is no longer supported because the technology has become outdated.
- 4. Downgrading to versions <3.1 is no longer possible.
- The functions of the local graphics have been completely revised. Presenting plant groups is still only possible in the Solar-Log[™] WEB "Commercial Edition" and Solar-Log[™] WEB "Classic 2nd Edition" Portal.
- 6. The self-consumption management has new features, so it is necessary reconfigured it.
- 7. It is important to double check the powermanagement settings. SDS is not liable for loss of any settings in connection with the firmware update. The operator is responsible for entering and checking all of the parameters and settings.
- 8. The data will be partially converted and result in the data not being available for some time.
- 9. To avoid any problems, just use the current version of your browser.
- 10. The Solar-Log[™] automatically reboots itself after the firmware update has been successfully completed. After that the site needs to be reloaded. It could be that you also have to clear your browser cache. It is generally advisable to clear your browser cache on a regular basis. It can be a necessity after a firmware update to make sure the old versions of the pages are cleared from the browser.
- 11. With the update, there are various changes to the functionality of the Solar-Log¹⁰⁰⁰ touch screen

displays:

- a. The menu "Diagnosis / Self-consumption" has been removed. Due the complexity of the new functions, the configuration can only be performed via the web interface.
- b. The menu "Config / Advanced / External Switch" has been removed. Due the complexity of the new functions, the configuration can only be performed via the web interface.
- c. The menu "Config / Internet" has been removed (as with the TFT). The "Local Monitoring" settings have to be configured via the web interface.
- d. The menu "Config / Basic / Forecast", input box "Tariff" has been removed. The setting are now only available via the web interface.
- e. The menu "USB / Data transfer" has been removed. The technical basis of the "data transfer" has become outdated.
- 12. With the update for Solar-Log⁵⁰⁰ devices, there is a change that affects the Solar-Log⁵⁰⁰ display:
 - The menu "Internet" has been removed (as with the TFT). The "Local Monitoring" settings have to be configured via the web interface.

New Inverters / Modifications

Effekta

- can now be selected under "Effekta ES."
- Reactive power management is now supported.

Power-One

 New Models: Aurora Trio 5.8, 7.5, PVI 6.0

Aros

New Models:

SIRIO EASY 1500, SIRIO EASY 2000, SIRIO EASY 3000, SIRIO EVO 1500, SIRIO EVO 2000, SIRIO EVO 3000, SIRIO EVO 4000, SIRIO EVO 5000, SIRIO EVO 6000, SIRIO EVO 10000, SIRIO EVO 12500, SIRIO EASY ST 3K

- RS485 as another wiring option in addition to the RS422 wiring
- Reactive power management supported with all models.

Vectron

Benning

- supported models: TLS 5.1, TLS 8.3, TLS 10.3, TLS 13.3, TLS 15.3, TLS 17.3
- including power reduction and reactive power control.

Diehl AKO

• Type The 16000R2-M2DXB is now logged with two MPP trackers.

Delta

• New Models:

RPI M15A, RPI M20A, RPI M30, RPI H3, RPI H5, RPI H5A, RPI M6, RPI M8, RPI M10, RPI M12, RPI H3A, RPI H4A

PrimeVOLT

- supported models:
 PV-3000N-V, PV-4000W-V, PV-5000W-V, PV-5000T-U, PV-10000T-U, PV-8000T-U, PV-15000T-U
- including power reduction and reactive power control

Suntigua

- supported models:
 - ST3000, ST4000, ST5000, ST 5000T, ST 10000T, ST8000T, ST15000T
- including power reduction and reactive power control

CMS

supported model:

CMS-10000SS

• including power reduction and reactive power control

REP

- supported models:
 PV-3000N-V, PV-5000W-V, PV-5000T-U, PV-10000T-U, PV-8000T-U, PV-15000T-U
- including power reduction and reactive power control

Carlo Gavazzi

- The ISMG models can now be selected using "Gavazzi ISMG"
- New Models:
 - HINRG1G03EU, HINRG1G05EU, HINRG3G05EU, HINRG3G10EU (selectable from "Gavazzi HINRG")

Kostal

- The Kostal inverters can now also be monitored and controlled via Ethernet interface.
- Reactive power control is now supported.

Omron

New Models:

KP125L, KP150L, KP30K, KP30K2, KP40K, KP40K2, KP40K-P, KP40K2-P, KP44M-P, KP44M-J4, KP44M-PJ4, KP55K, KP55K-P, KP55K2, KP55K2-P, KP55M-J4, KP55M-PJ4, KP55M, KP55M-P

SolarEdge

• PowerManagement functions supported (power reduction and reactive power control)

Eltek

New Models:

THEIA Central 20kW TX, THEIA Central 20kW TL, THEIA Central 30kW TX, THEIA Central 30kW TL, THEIA Central 50kW TX, THEIA Central 50kW TL, THEIA Central 100kW TX, THEIA Central 100kW TL, THEIA Central 150kW TL, THEIA Central 200kW TL,THEIA Central 250kW TL, THEIA Central 350kW TL, THEIA Central 500kW TL

All of the new models can be selected using "Eltek Central"

Omnik

• supported models:

Omniksol-1k-TL, Omniksol-1.5k-TL, Omniksol-2k-TL, Omniksol-3k-TL, Omniksol-4k-TL, Omniksol-5k-TL, Omniksol-1.5k-TL2, Omniksol-2k-TL2, Omniksol-3k-TL2, Omniksol-4k-TL2, Omniksol-5k-TL2, Omniksol-6k-TL, Omniksol-8k-TL, Omniksol-10k-TL, Omniksol-12k-TL, Omniksol-13k-TL, Omniksol-15k-TL, Omniksol-17k-TL, Omniksol-20k-TL. TL2 models and devices larger than 5kW, including power reduction and reactive power control

New SCB Type

Eltek Valere Array Monitor

Bug Fixes (Inverters):

REFUSOL

• The false output values could be registered when there was no grid feed.

Kostal

• String 3 was not used correctly. It is now correctly displayed. The fault messages from the inverters were interpreted incorrectly. Changed.

Diehl H Series

• Long inverter model names could lead to visualization problems (e.g. with the local web interface). Fixed.

New features:

New internal database.

More flexible data management.

No more data reformatting for newly detected devices.

• Important!

After the update for Solar-Log^{200/500/1000}, there is a data reformatting process running in the background that could last several hours depending on the amount of data. You will notice when operating the Solar-Log[™] during this time that it is noticeably slower. Please be patient.

- TFT Display:
 - Progress display when detecting inverters
 - New process for the manual firmware update via the Internet. The latest firmware version available is displayed with the option to cancel.
- Smart Home:

When the irradiance sensor and the PM mode "Fixed Regulation with the calculation of self-consumption" are active, then a "theoretical production output" is calculated and this is activated for the control of appliances.

New switch:

Gude Expert Net Control 2301 (Relay station to optimize the self-consumption of power.)

Setting option to turn off the background light when all of the inverters are offline. With this new feature, the Test LCD button for the TFT has been moved to the second page. The So-lar-Log¹⁰⁰⁰ and Solar-Log⁵⁰⁰ settings are only available via the web interface.
 The Solar-Log⁵⁰⁰ now also has the option to set the on and off times for the display via the web

interface.

• Solar-Log 1200:

Progress display when detecting inverters added.

New countries:

Kuwait, Qatar, Saudi Arabia, United Arab Emirates, Lebanon, Russia, Norway, Iceland, Moldova, Albania, Macedonia, Bosnia-Herzegovina, Serbia-Montenegro, Ukraine, Belarus, Antigua and Barbuda, Argentina, Aruba, Barbados, Belize, Bolivia, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Falkland Islands, French Guiana, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, South Georgia and the South Sandwich Islands, Suriname, Trinidad and Tobago, Uruguay, Venezuela

• Portal connection test (HTTP Transfer):

The connection test now transfers the current configuration and the minute data from the current day (including the event log from the current day).

Web interface:

Plant / General / Environmental Performance setting option for the CO, factor

- Device/ Definition / Large External Display / display baud rate for RS482-A and RS485-B
- There is now the option to select between an automatic scaling or scaling with a fixed value for yield graphics (Yield data/ Production/ Consumption/ Balance as well as Diagnosis | Inverter Diagnosis).
- A detailed progress bar is now used for sending test e-mails.
- It is also now possible to send a test text message (SMS).
- When moving the mouse cursor in the consumption graphic, the name of the appliance is shown in addition to the time and value.

- Diagnosis / Feed-In Management / Utility Meter:
 Display of the calculated voltages RS/ST/TR
- Configuration / System / Access Control / Display access control:
 All password entries need to be entered twice to ensure that they are correct.
- Under Yield Data / Balances, self-consumption is now displayed in the Month, Year and Total view.
- Configuration | Plant | Forecast

The tab always appears with the value for the yearly target. When "Display advanced configuration" is activated, the Monthly Shares and Day Length are also displayed.

- The consumption overview (under Yield Data / Consumption) has been reworked. The sub-consumers are now displayed individually in every view (Day/Month/Year/Total).
- Yield Data / Production:

There is now a mouse-over description along the target curve.

• Financial overview:

Instead of power consumption, the electricity obtained from the grid (power consumption - self-consumption) is displayed and used as the basis for the electricity costs saved.

- Sending text messages (SMS): The error codes when sending text messages have changed:
 - Error when sending via an external modem, 1 to 13 is now 1101 to 1113.
 - Error when sending via SMTP, 1 to 3 is now 2001 to 2003.
 - Error when sending via internal modem in the range 141 to 283 remains the same
 - New error codes 1001 SMS configuration error, 1001 internal error.
 - Setting option for the connection security when sending text messages via SMTP server.
- USB Backup:
 - The backup files are saved in the directory with the date stamp, e.g. the solarlog_config_YYM-MDD.dat and solarlog_backup_YYMMDD.dat.
 - 11 backups are always saved. Older backups are deleted.
- New operating mode for two-way power meters (only RS485):

consumption meter (two-way meter / consumption meter (Bi-directional). The consumption is calculated based on the current production from the inverters and the output at the feed-in point.

Supported power meters (RS485): Elkor type: WattsOn, Janitza type: UMG104

• PM profile EWE Oldenburg

The characteristic curves switching is now activated via digital inputs. (Existing plants have to check the input assignments before the upgrade)

Bug Fixes:

Web interface

- When configuring the M&T Sensor Box, the optional sensors could not be both deactivated.
- The device sorting did not function with Bluetooth inverters combined with a Solar-Log 300.
- When the display access protection was activated, there were no data transfers or system backups.
- When searching for a USB data or system backup, the menu was displayed for about 2-3 seconds.

• Web interface:

After a factory reset, the language selection is displayed.

• Solar-Log[™] Easy Installation:

Only the available interfaces are still displayed.

- The "Linked" is not displayed for PM slaves.
- When a PM profile is active, it is no longer possible to select Smart Home Relay Box under Device / Definition / Smart Home.
- Inverter Diagnosis / Inverter Details:

The temperature is only displayed when it is recorded.

- Warning that there is no authorization for the selected function.
- Solar-Log 300 Bluetooth:

Configuration/Definition -> A selection option for RS485-A is displayed.

- Yield Data / Production:
 - The target curve for the future was not calculated correctly (it was always at zero). Fixed. Additionally, there was only one curve for the target (accumulating) for the current month/current year. Now there is an additional target curve.
- After the firmware update, the web interface is reloaded.
- Devices/Definition/SCB:

There was no warning when changing the SCB selection after changes had been made.

• TFT Display:

When the dialogue slide show was set to "activate after 0 minutes", the TFT stop responding.

- The texts on the first page of the performance overview were partially too close to the financial values.
- Solar-Log¹⁰⁰⁰: Display: Negative temperatures lead to the incorrect values in the scale.



Release Notes (Solar-Log[™] 3.0.2 Build 64 - 15.01.2014) only for SL 300, 1200 and 2000

New inverters:

- SolaX Power: single phase and three phase

Extensions of inverters:

- Solectria: PVI 3000, PVI 4000, PVI 5000, PVI 5300
- Reverberi: New types: EDI 1.3, EDI 2.0, EDI 2.7 und EDI 3.3

Expansion of function

- Effekta: power reduction

- **Email**: "SSL/STARTTLS" for secure Email communication for providers GMX, WEB.DE, GMAIL and T-ONLINE supported ("Made in Germany")

- Yield mail: Total counter and consumption counter will be listed separately, now.

Troubleshooting:

- HTTP-Export:
 - For remote controlled power reduction, the event log was not transferred. Fixed
 - The transfer could be interrupted in some cases with "Squid Proxy Servers". Fixed

- Web Interface:

- SCB Monitor:
 - Digital channels were not visualized correctly on various SCB types. Fixed
 - Established full support of all SCB-channels for Solar-Log[™] SCB-M/Phoenix Contact SCK, Solar-Log[™] SCB-K and Solar-Log[™] SCB-S.
- SCB Device definition:
 - Solar-Log SCB-M/Phoenix Contact SCK: was not able to configure the digital channels. Fixed
- Solar-Log SCB-K: The configuration of the sensors did not work correctly. Fixed

Solare Datensysteme GmbH Fuhrmannstraße 9 72351 Geislingen - Binsdorf Deutschland Tel. +49 (0) 7428 - 9418 - 200 Fax +49 (0) 7428 - 9418 - 280 info@solar-log.com www.solar-log.com USt-IdNr.: DE 253 693 602 HRB 722895 I Stuttgart GF: Jörg Karwath, Thomas Preuhs





- Web Interface:

- The sorting of the devices at the interface C was incorrect. Fixed
- The years were shown wrong in the **financial (table) overview**. Fixed
- The **current day** in the view "weeks" was only updated daily. Fixed
- On menu "Diagnosis/Feed-In Management/Control State", the control value was not updated anymore, if a reduction happened. Fixed
- Modified unit in "System/Display", "Plant/Tariff" "Plant/Graphic" values for month, year and total changed to Wh.
- Communication error on the CAN Bus interface. Fixed
- Sunways: NT10000 und NT3+10K did not show the correct number of strings (3). Fixed
- Yield mail: Counters name was sometimes not correctly loaded. Fixed

Release Notes (Solar-Log[™] 3.0.1 Build 63 - 03.12.2013) only for SL 300, 1200 and 2000

New Inverters:

- KACO: New models 6.0 TL, 7.8 TL, 9.0 TL

Extensions:

- Manual data corrections now allow you to delete individual days or set them to 0.
- **Web Interface**: Unter Diagnose/Einspeisemanagement/PM-Historie können nun die Daten der ferngesteuerten Leistungsreduzierung eingesehen werden.
- Up to now, only the combined **Smart-Home-Relay Box** could be used for the visualization profile. Now also the individual relay can be directly activated with each switch.
- Language selection extended to include Spanish, French, Italian, Dutch and Danish
- **Progression display** now implemented for the detection of GMDE, Sunville, Riello, AEG PS, Zeversolar, SE SunEzy, Salicru EQX, Europa-AROSAros, Eaton, Chint CPS<20k, Trannergy, Suntellite single-phase as well as GTec.
- **ZEVERSOLAR**: Error list extended, detection optimized, reactive power control activated

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- Web interface: When the **Radio Package** is configured, the Loopback test function is now available under Diagnosis/Components/Radio Package

Troubleshooting:

- Web Interface:
 - Individual options in IE could not be faded out correctly under **Selection lists**. Fixed.
 - A Change of Switches without saving was not detected when leaving the Tab. Fixed.
 - With the **IE in Compatibility Mode** the web interface did not function properly. Fixed by forcing an update to the latest IE version.
 - Solar-Log300 no display of SCB licenses
 - The days of the week were not correct in the **Date selection**. Fixed.
 - **Easy Installation**: selection removed for Solar-Log2000.
 - Under Automatic Firmware Updates activated/deactivated was inverted. Fixed.
 - The allocation of the RS485 interface in the **Smart-Home-Relay Box** (Adam4068) did not function. Fixed.
 - In **Module field comparison** various strings of the same inverter were not correctly visualized and strings were accepted without entered string power. Fixed
 - A wrong text was displayed during the search of **Bluetooth** inverters via Easy-Installation. Fixed.
 - It was not possible to enter a **Module field** for the **Sensors**. Fixed.
 - When selecting the **Power reduction** type "Remote controlled with the calculation of self-consumption "the configuration fields were not correctly faded out. Fixed.
 - When the installer password was given, the **View of the licenses** was defective for unregistered users. Fixed.
 - Channel type for SCB-Monitor is no longer shown as a number but in text.
 - The Update of SCB data did not always function. Fixed.
 - The **GridGuard** code could only be set when SMA inverters were configured on Port; extended to ports B and C accordingly.
 - In the device definition in the Smart-Home segment, "Gude 1002" type switches could not be given any Sub-address. Fixed.
 - It was only possible to enter whole numbers into the **Manual data correction**. Fixed. (one decimal after the decimal point is now possible)
 - The SCB configuration was sometimes not saved. Fixed.
 - The browser allowed using also letters for the **Display PIN**. Fixed.
 - It was possible to modify the **Interface allocation**, although devices were still detected on the interface. Fixed.
 - The **Correction factor** was not taken into consideration in the daily graphics. Fixed.
 - In the **Smart-Home Control Parameters** it was not possible to enter the 10th time frame for the "Automatic timer". Fixed.

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- The Web browser sometimes automatically filled in the login **Password Field**. For security reasons the password field is immediately emptied after login. The user remains logged in when a reboot of the device is triggered from the Web interface.
- At detection the **S0 meters** found were not displayed. The interface configuration of the detected S0 meters was no longer displayed correctly. Fixed.
- The deviation line in the **Tracker comparison** was drawn incorrectly when the comparator tracker was above the reference tracker. Fixed.
- Smart-Plugs and meters were not correctly displayed at detection. Fixed.
- The **Model name** below the System information was not completely displayed for the Meter version. Fixed.
- The LCD was not correctly displayed in the Browser for **Remote Power Reduction**. Fixed.
- The "Save multiple" **Performance Monitoring** configuration did not function in all Browsers. Fixed.
- Date and Time entries were not internationalized everywhere. Fixed.
- It was possible to switch on Smart-Plugs without Authorization. Fixed
- In the **Date selection** dialogue the weeks began with Sunday. Fixed.
- In the Sensor daily graphics the wind velocity was incorrect. Fixed.
- **TFT Display**: During the inverter search, sometimes the last INV was not displayed. In Monthly, Yearly and Total views, columns that could not be contained in the display area were not displayed. Fixed.
- The **Detection of Sensors and Meters** on the RS485-C port did not function correctly. Fixed.
- The import of the **Initial inventory (CSV)** only functioned with an additional semicolon. Fixed.
- Manual Data Correction could only begin on the date of the first inverter detection. Fixed.
- When an **RS422 device** was installed **on the RS485-B/C port**, no other RS485 devices could function on the other RS485-B/C port. Fixed.
- **LCD Display**: When remote power reduction reduced to 100%, 10% was displayed on the LCD. Fixed.
- **Export**: the **pm.js** file was not exported correctly. Fixed.
- **Acknowledgement and Reset of the alarms** was not possible using the TFT-Display. Now it can be acknowledged under Notifications (red triangle with exclamation mark).
- When no device was detected no **Email transmission** could be carried out. Fixed.
- The setting for the **FTP Export Interval** was wrongly set to daily after a new start, despite correct license. Fixed.

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- GPRS pin via TFT-Display: Only possible with numerical input and viewable as ****.
- The **Special characters** (e.g. äöü) of the Text Editors were not displayed correctly and could not be entered. Fixed.
- **FTP Export**: Due to a modified sequence in the Export files, Classic 1 and Homepage-Kit did not function correctly. Fixed.
- Yield offset in the financial calculation was calculated with a wrong scale. Fixed.
- **POWERONE**: Limitation of the maximal Cos-Phi to +/- 0.8
- **PHOENIXTEC**: Performance reduction and reactive power control did not function on Port C. Fixed.
- **FRONIUS**: Missing telegrams were sometime not correctly recognized. Fixed.

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