
Release Notes (Solar-Log™ 2.8.4 Build 56 - 27.01.2014) only for SL 200, 500, 800 and 1000

Extension of Inverter:

- **Effekta:** Reative power control is now supported

Troubleshooting:

- **Reverberi:** New model types EDI 1.3, EDI 2.0, EDI 2.7 and EDI 3.3 could not detected correctly. Fixed.
- **Email:** The certificates for transferring over SSL/STARTTLS was not complete. Fixed. (GMX.de, T-Online.de, WEB.de, GMAIL)

Release Notes (Solar-Log™ 2.8.4 Build 55 - 15.01.2014) only for SL 200, 500, 800 and 1000

New Inverters:

- **SolaX Power:** SL-TL1500, SL-TL2200, SL-TL2500, SL-TL2800, SL-TL3000, SL-TL3300T, SL-TL3600T, SL-TL4400T, SL-TL5000T, ZDNY-TL10000, ZDNY-TL12000, ZDNY-TL15000, ZDNY-TL17000

EHE_Mod: supported models: see the inverter data base, partially including Power Reduction and Reactive Power Control

Extensions of inverters:

- **Solectria:** PVI 3000, PVI 4000, PVI 5000, PVI 5300-
- **SolarMax:** New models 2000P, 3000P, 4000P, 4600P, 5000P
- **Kaco:** New models 6.0 TL, 7.8 TL, 9.0 TL
- **Delta:** New INV models SOLIVIA6.0EUT4TL, SOLIVIA8.0EUT4TL, SOLIVIA12EUT4TL
- **Diehl-AKO:** New models 5500/7000/8000/9000 R3-S2B

- **Socomec**-New types supported: starting now, types
Sunsys B12, Sunsys B15, Sunsys B20 and Sunsys B30 are supported
- **Sungrow**: PM via Broadcast (in case the inverter supports Broadcast)
Detection improved of the various types
- **Bonfiglioli Vectron**: Reactive Power Control now available, Power Reduction improved
- **Ever-Solar** renamed **Zeversolar**
- **Zeversolar**: Reactive power is now supported, new error list
- **Yaskawa**: Error codes extended
- **Zeversolar**: Error list extended, detection optimized, reactive power control activated
- **Effekta**: Power Reduction
- **Reverberi**: New types: EDI 1.3, EDI 2.0, EDI 2.7 and EDI 3.3

Extensions:

- **PM Q(U):** Voltage requirement U/Uc can now be entered with four digits behind the decimal point
- Error description improved for Text Messaging
- **Sensor** must show a minimum of power to be able to send out a message with a possible snow covering
 - Length of the **Proxy** user name increased to 31 characters
- **Email:** Data transfer via SSL/STARTTLS secured connections are now supported for GMX, WEB.DE, GMAIL and T-ONLINE.

Troubleshooting:

- **Sungrow:** sometimes 2 trackers were detected as 3 trackers. Fixed.
- **Chint Modbus:** Communications were sometimes disturbed when booting or shutting down the inverter. Fixed.
- **Yield email:** For plants > 100000W the daily Max value was too small by a decimal.
Fixed.
- **SMA BT:** There were sporadic breakdowns of measurement values. Fixed by improving the BT communication.

Sometimes a wrong number of MPP trackers were detected.
Fixed.
- **Diehl AKO:** On some PM control profiles the power reduction did not function correctly.
Fixed.
- **Easy Installation** did not detect Fronius properly. Fixed.
- **PowerOne:** Limitation of the maximal Cos-Phi value to +/- 0.8
- **Fronius:** Missing telegrams were sometimes not correctly detected. Fixed.

Release Notes Solar-Log 200/500/1000:

2.8.3 Build 53 - 08.07.2013

New Inverters:

- -Huawei: Supported models: SUN2000-8KTL, SUN2000-10KTL, SUN2000-12KTL, SUN2000-15KTL, SUN2000-17KTL, SUN2000-20KTL including power management and reactive power control
- SolarMax: New INV 6MT2
- Solectria: PVI13 and PVI15 are supported
- GTec: Supported models: see inverter database
- Steca ≥ 17 kW: Supported models: StecaGrid 20000 3ph, StecaGrid 23000 3ph including power reduction and reactive power control (These models need their own RS485 bus. They cannot be operated on the same port together with other STECA inverter models)
- Diehl H-Serie: Supported models: 2100 H, 3000 H, 4000 H, 4600 H including power reduction and reactive power control (These models need their own RS485 bus. They cannot be operated on the same port together with other DIEHL inverter models)
- Chint Power: Supported models: CPS SCA5KTL-DO, CPS SCA6KTL-DO, CPS SCA7KTL-DO, CPS SCA8KTL-DO, CPS SCA10KTL-DO, CPS SCA12KTL-DO, CPS SCA8KTL-DO/HE, CPS SCA10KTL-DO/HE, CPS SCA12KTL-DO/HE, including power reduction and reactive power control (These models need their own RS485 bus. They cannot be operated on the same port together with other CHINT inverter models)

Improvements:

- Input box activated also for Spain to fix power regulation with consideration of own consumption
- Power-One: New types are now detected, which were also previously recognized as "-2String": 12.5-OUTD, 10.0-OUTD, 8.0-OUTD, TRIO-8.5
- Chint CPS20k+: Weitere Modellvarianten werden unterstützt.

- Solutronic: reactive power control is supported. Inverter needs to be configured with "fix cos-Phi".

Troubleshooting:

- Hyundai HPC-250-HT-E: Yield logging corrected
- Occasionally, the Web GUI no longer reacted. Solved.
- Web GUI: After a failed FTP test transfer was carried out, the old error status was still retained even when the next transfer was successful. Solved.
- Chint CPS20k+: At detection, the device types were partially not allocated correctly. This disturbed the logging. solved. On CPS-SC20K devices both MPP trackers are now logged.
- ABB central inverters:

There were extremely high Pac spikes appearing mornings and evenings. Fixed.

Some invalid values have not been dismissed. Fixed

Yield compilation didn't work. Fixed.

2.8.2 Build 52 - 23.04.2013

Extensions:

- Samil: optimized power management - response time of inverters to power control is now faster.

Troubleshooting:

- Diehl AKO: Adaptation in naming of R3-Serie
 - With deactivated power management no power management commands are sent to inverter anymore
- ABB: error in RS-485 data recording with Firmware 2.8.2-50 and 51 fixed

- Error in yield recording with some inverter models, specifically Power-One and Conergy fixed.
- Error in operation of a SMA Meter Connection Box together with SMA inverters fixed.

2.8.2 Build 50 - 10.04.2013

New Inverter:

- GoodWe: Types are listed in the inverter database
- Eltek: String inverters from Eltek (types are listed in inverter database)
- GMDE: Supported models: GMDE SolDate 306KTL, GMDE SolDate 312KTL, GMDE SolDate 315KTL, GMDE SolDate 318KTL
Including power management and reactive power control
- CyberPower: Types are listed in the inverter database (10 Types)
- Yaskawa: Only for the Japanese market
Supported models: 10kW / 1-phase, 10kW 3phase, 100kW 3phase

Extensions:

- SMA

Bluetooth:

The Bluetooth interface has completely redesigned and has now the original SMA-Meshing connection method

(Comparable to Sunny Home Manager and WebboxBT).

->It can use the old single connect (Net-ID=1) or the Meshing-Connect (Net-ID>=2).

To use the Meshing-Method, the latest SMA-Firmware of the inverter must be installed. The Meshing method is recommended for new installation. The maximum number of BT-inverters remains at 7.

- Error messages are now identical to SMA messages

- PM-functionality is now supported (e.g. intelligent x%)

Speedwire/Webconnect:

The new network based interface "Speedwire" is now supported. Therefore, the Solar-Log and the inverter must be in the same network. The IP addresses of the inverters have to be configured with the SMA Sunny Explorer Software.

The maximum number of Speedwire inverters is 100 (Solar-Log1000).

- All known functionalities for power management are available, such as power reduction and reactive power control.

In this case, "SMA Power Control Module" or "SMA Cluster Controller" is required.

- Solar-Log and WebConnect can be used in parallel if necessary

- Delta: New inverter types: SOLIVIA5.0EUG4TL, SOLIVIA12EUG4TL, SOLIVIA10EUT4TL, SOLIVIA30EUT4TL, SOLIVIA 2.0 EU G4TR, SOLIVIA 10 EU G4TR, SOLIVIA11EUGRTR EVR
- Delta: Extended error handling for SOLIVIA 15 EU, SOLIVIA 20 EU
- Fronius: Optimized support for IG Plus 55V-1/2/3, IG Plus 60V-3, IG Plus 80V-3, Agilo 75.0-3, Agilo 100.0-3
- Trannergy: Power management and reactive power control are supported.
- ABB Central: Central-inverter over ethernet
 Supported models: PVS800-57-0100kW-A, PVS800-57-0250kW-A, PVS800-57-0315kW-B, PVS800-57-0500kW-A, PVS800-57-0630kW-B
- FTP: Support of Proxy Servers (CONNECT-Method)
- Power management: New mode power reduction "remote control with self-consumption calculated"
- Janitza meter: If configured as an inverter, the alarm input can be used as input for general error message
- New country: Ireland
- Daylight saving time for Australia

- Input limitation for cos (Phi) extended from 0.8 to 0.7
- New smart plug ALL3073 integrated

Fixed issues:

- RS485 wireless package: Test starts only if an inverter is configured.
- In some cases yield emails were not sent - fixed
- SL500: Selection of wind sensor at S0 removed.
- Internal GSM Modem: For some providers roaming did not work - fixed
- Ever-Solar: Error handling (Master-Slave-Fail) corrected
- PowerOne: Reactive power for Czech fixed
- Sinvert: Additional sensors on same bus possible
- Email transmission: Didn't work for servers with a number at the beginning of name - fixed
- Connection to some FTP servers did not work- fixed
- Refu: Communication problems with inverter 13 in bus - fixed
- Fronius: Communication problems with multiple inverters in bus fixed
- Error in yield recording with some inverter models, specifically Power-One and Conergy fixed.
- Error in operation of a SMA Meter Connection Box together with SMA inverters fixed.

2.8.1 Build 49 – 11.12.2012

This firmware will update the operating system of the Solar-Log™.
Therefore the installation will need more time than usual.

New Inverters:

- **Growatt_Mod:**
Inverter from Growatt with Modbus-Protokoll
including power management and reactive power control
Note: Other Growatt inverter can now be found under "Growatt-old"

- **zentralpower:** Supported types: 2.5 S, 3.0 S, 3.6 S, 4.2 S, 5.0 S, 10.0 T, 12.0 T, 18.0 T, 20.0 T
including power management and reactive power control
Note: "Zentral Solar"-Inverter can now be found under "ZSD-Power"
- **SolarEdge** (only inverter monitoring, NO module monitoring)

Extensions:

- Refu: Optimized power management for Refu inverter Firmware > 29-21
- Reactive power control: Switch to variable reactive power control Q(U) with configured steps
- Yield monitoring : in times with no snow, warnings are sent for inverters or strings below minimum feed-in performance while, at the same time, other inverters or strings within the same module field are above minimum feed in performance.
In the snowy time all inverters have been notified with 0 power. From now on inverters with 0 power will only be notified if at least 1 inverter is above its minimum feed power.

Troubleshooting:

- When the consumption meter was configured, the headlines of the group section were not visible - solved
- S0-Meter and RS485- meter were designated as failures - solved
- When visualizations were opened for a longer period of time and a change was made between the daily view and other views, the yields were partly not updated - solved
- In the table of the visualization, the actual value and the value of consumption and balance was partly displayed incorrectly - solved
- By using a SMA-Meter-Connection-Box as a consumption meter, the data recording was partly incorrect- solved
- Visualization: the scale for month / year and total view was incorrect when the checkbox for consumption was active. – solved
- Visualization: the balance / own consumption rate with Sunways inverters was incorrect – solved
- SL200: the automatic redetection after changing interface configuration (adding a meter or sensor) had partly problems - solved.
- The use of the checkbox for remaining always online in FTP export did partly not work - solved
- The power management via external I/O Boxes was not completely recorded – solved

2.8.1 Build 48 - 24.10.2012

New Inverter

GESOLAR: supported types:

- GES-3K3TL, GES-3K8TL, GES-4K6TL, GES-2K8, GES-3K8, GES-4K, GES-5K including power management and reactive power management

KLNE: supported types:

Single phase

- Sunteams 1500, 2000, 2500, 3000, 3600, 4000, 4600, 5000 with FW Version v5.10 and following
- Solartec 1500, 2000, 2500, 3000, 3600, 4000, 4600, 5000 with FW Version v5.10 and following

Three phase:

- Sunteams 6000, 8000, 10000, 12000, 15000, 17000, 20000 with FW Version v2.02 and following including power management and reactive power management.

Reverberi: supported types:

- Models of the EDI Series

New features:

- Sunways: Reactive power management is now supported
- Samil: Power management and reactive power management are supported with SolarLake
- SolarMax: new inverter type 8MT2
- KACO: Status messages are now grouped. 0-60: pure status codes, 61-199: handling of status codes as errors
- Reactive power management: Sunville, Eaton, Chintpower <20k
- New country: Liechtenstein
- Optimized monitoring - Inverters or MPP-trackers with power=0 are detected
- Using RS485 meters for 70% power control, taking self-consumption into account.
- FTP export has been optimized: The transmission runs in the background. It is possible to see the status during (test-) transmission by means of the browser. A new transmission option has been introduced: defined time.
- A maximum number of dial-ins per day can now be configured for GPS or analog modem connection

- A fix reduction can now be configured with any percentage, taking self-consumption into account.
- A consumption meter can now be assigned to plant groups.
- With Solar-Log 1000 it is now possible to use 70% / xy% with self-consumption only for one bus by using plant groups.

Visualization:

- Introduction of different visualization modes: production, consumption, balance, pyranometer
- Balance is not an option anymore, but a visualization mode.
- Consumption meters are no longer selected at inverter selection, but are selected in the consumption mode.
- Available visualization options are shown/hidden, depending on mode and selection
- Changed options are now directly visualized, without requiring a click on the magnifier
- The entire page no longer needs to be reloaded when an option has been changed or when monthly, annual or total view has been selected.
- Upon clicking forward or backward, the corresponding minute file is loaded on the day view. The same applies when changing from monthly, annual or total view to day view.
- Button for selecting all or no inverters has been added.
- For plant groups, a button has been added for direct visualization of this group.
- 24h visualization is always available.
- The index_pc.html can be viewed with parameter. This allows to create favorites for certain views.
- The consumption is now displayed in the value table of the monthly, annual and total view

Bug fixing:

- English text adaption: Udc->Vdc, Uac->Vac
- SMA: Issues with power management for Tripower FW 2.50 are solved.
- SMA: Issues with display of power reduction ("Derating") of older inverter are solved.
- Solar-Log⁵⁰⁰: Janitza meter were always searched as default - solved
- Issues with backup files with many inverters are solved.
- Diehl AKO: Using Diehl AKO inverter on both RS485-buses or with different bus versions power management and reactive power management did not work properly on some inverters - solved

- SolarLog²⁰⁰ + Easy Installation: order of test transmission, after that inverter selection did not work properly anymore. solved.
- Refu-reactive power management:
- Important settings! Parameter 1164 needs to be set manually to value 2 on all inverters. Reactive power management is not possible without these settings.
- In the PDA-view of the Solar-Log the Pdc-value has partly not been displayed correctly- solved
- The FTP export to some FTP servers did not work with multi-line server responses - solved
- Sunways: since version 2.8.0 Build 47 of 20.06.2012 and NT+ devices, the Pdc value has been incorrect recorded - solved
- Samil: with plant extensions the recognition of additional inverters did not work- solved.
- Solar-Log⁵⁰⁰ Bluetooth: If BT-inverters were not reachable, the Solar-log pieped sometimes - solved.
- PowerOne reactive power management did not work - solved.
- Solar-Log¹⁰⁰⁰: The forecast curve was fauly when a consumption meter was connected. Solved
- Motech: The values for Vdc, Pdc and temperature were wrong on all inverters with only one MPP tracker. Solved.
- SMA: After entry, the Grid Guard Code was shown as an empty field. Solved.
- Solutronic: Power reduction commands were sent with delay. Solved.

2.8.0 Build 47 - 15.08.2012

Extensions:

- Power-One: Error list extended
- Allnet smart plugs 3075 V2 supported

Troubleshooting:

- SMA: Compatibilities issues with inverter Firmware 2.50 fixed
- Delta: data recording fixed for :
SOLIVIA 2.5 EU4, SOLIVIA 3.0 EU4, SOLIVIA 3.3 EU4, SOLIVIA 3.6 EU4, SOLIVIA 4.4 EU4, SOLIVIA 5.0 EU4
- SMA: Issues with power management with Tripower Fw 2.50 fixed
- SMA: Issues with power reduction of older inverters fixed
- Issues with time setting via WEB-Dialog Configuration/intern/system, when time has not been set before, fixed
- Solutronic SP100, SP120: wrong Udc value (10times to high) fixed
- Issues with initial value import, when only meter and sensor were connected, fixed

- Solar-Log™ PM-Master without inverter but with utility-meter and I/O boxes will not restart anymore after every 15 minutes.
- Solar-Log⁵⁰⁰: Janitza was always be searched as meter. fixed
- Visualization: In the overview table sometimes the yields were not be correctly displayed. fixed
 - In the value table the DC target value were displayed incorrect - fixed
- Growatt, Aten, Lufft: Backup file could not be reimported because of wrong exported serial numbers. - fixed
- Kaco: Multistring-inverter showed inverter offline with only one connected string. Fixed
- Sunville: inverter exchange reworked
- Default-Values for Australia have not been taken over - fixed.
- Kostal: Inverter with 3 MPP-Tracker: If Tracker 2 has not been used, wrong data were recorded – fixed.
- Australia: new default-values for forecast, grafik and GPRS

New inverters/Devices:

- Schneider Conext TL
- Trannergy PVI 1800TL, 2300TL, 3200TL, 4000TL, 4600TL, 5400TL
- Lufft Pyranometer WS501
- ABB inverters of the PVS 300 Series
- SMA Meter Connection Box (MCB)
 Now with the help of the MCB it is possible to connect a number of power meters with S0 outputs to the Solar-Log via RS485. As in the past, the meters can be set as types "Inverter"/"Total plant power"/"Consumption meter". The MCB is also indicated for S0 cable lengths > 10m.

Extensions:

- Direct marketing module integrated. Provider is Energy2Market.
- Extended PM functionality:
 - I/O box management
 - Loading of utility company profile
 - Cos(phi) function - Stabilisation at the grid point of input. Setting found in the PM dialogue: Measurement at the point of input (only with utility meter U+I)
 - It is now also possible to set a performance value in percentages for the remote-controlled active power with all inputs at 0.
 - Example: Step 1 : D_IN_1 to D_IN_4 are not selected, but a performance of 80 percent is set. If there is no signal the power will be reduced to 80 percent.
- Easy Installation: On Solar-Log500 and Solar-Log1000 it is now also optional to search for S0 meters, Sensor Boxes and RS485 energy meters.
- Menu entry to display the firmware version for Solar-Log500
- Solar-Log1000 external display menu: New "Universal Display" selection.

- Q(U) functionality now also available for up to 9 Solar-Log 1000s over the network
- Ingeteam: New "Ingeteam 4.6 TL"
- Growatt: New types (3-phase, 1-phase for US market)
- Sputnik: Solarmax 10MT2, 13MT2, 15MT2
- Motech: Power reduction and reactance control
- Refu: Extension of the error list; no forwarding of the error messages: LT, Ethernet connection 2, System restart
- Carlo Gavazzi: Power reduction and reactance control
- SMA: Clear text display for known status and error messages
- Zentral Solar: Power reduction and reactance control
- Power reduction and reactive power control with Diehl-AKO inverters are now possible via broadcast
- Better naming of different types of Diehl-Ako inverters
- Feedback of power and reactive power to utility company sums up also all values of Slave Solar-Logs. Connected utility meters are considered as well.
- Error message of APL-Trifase inverters are supported
- Support of two additional smart plugs of GUDE (www.gude.info)
 - EPC 1100/1101 – smart plug with up to 16 A, controlled via ethernet
 - EPC 1002 – din rail device, 4 relais each 16A, controlled via ethernet

Troubleshooting:

- Fronius: A wrong efficiency value was displayed on the model IG Plus 120 / V. Fixed.
- Danfoss: The detection was not completed on many inverters. Fixed.
- The DC values were too high on Sunways NT3+10K. Fixed.
- Visualisation: Energy balance did not function correctly on Effekta inverters. Fixed.
- Inaccuracies behind the decimal point in the manual data correction (e.g. 2.88kWh instead of 2.9kWh). Fixed.
- Visualisation: When there were several MPP trackers in the overview table below the graphics, the DC value of the 2nd tracker was overwritten by the third tracker.
- The third tracker was shown with 0. Fixed.
- Negative GMT times were not read correctly. Fixed.
- The monthly average in the yield email was too small. Fixed.
- A maximum AC power of only 65000W could be entered. Fixed.
- Problems in the EasyInstallation-WEB dialogue with special characters in the registration status. Fixed.
- Visualisation/Table/Value table: There were deviations between yields in the monthly and daily views. Fixed.
- Value table/Overview table: All positive actual/target percentual values from 0 on, hence 100% for actual=target.

- Visualisation: Buttons were hidden in the graphics where there were > 10 inverters without group division. Fixed.
- Visualisation: Now a warning appears when the group division is not done properly.
- On large plants, too small a power value was shown by S0 meters configured as consumption meters. Fixed.
- Error registries were read on Solarmax MT and TS that didn't exist on those models (e.g. Alarm 16). Fixed.
- Inverter Exchange function modified.
- Display of multiple groups in day overview graphic fixed.
- Special characters of wifi SSID is now correctly displayed.
- I/O Box is now correctly supported in PM-Profil "Generic".
- Diehl-AKO inverter of TLD serie with multiple MPP tracker will not report offline, when DC power of 1st String is 0.
- Validation of incorrect values of Albatech APL-Trifase inverter is completed.
- In the total view with activated groups the yields of each group will now be displayed correctly for the current year.
- In the total view with activated groups the bars for each groups will now be linked correctly to the year view.
- After 5 Minutes with configuration password expired, no inverter configuration were possible anymore – fixed
- SL 500: by setting DHCP via the display "no success" has been displayed – fixed
- Samil: the inverter status has been incorrect analyzed
- Samil: visualization of power balance with connected consumption meter optimized
- Samil: backups were not correctly generated and imported. – fixed
- Enfinity: backups were not correctly generated and imported- fixed
- Steca: error values of inverter are now validated

2.7.1 Build 45 - 26.04.2012

Extensions:

- Sputnik: Solarmax 10MT2, 13MT2, 15MT2
- Event protocoll:
 - In Internet Explorer browsers the events are now also properly sorted
 - Sorting and filtering have been accelerated
 - After changing filter settings, the page no longer has to be completely reloaded.
 - The number of events displayed in IE and FireFox increased to 1600, in other cases 800

- If multiple events need to be displayed, they will now be displayed on more than one page
- **WLAN:**
 - Faster connection setup
 - better support for hidden SSIDs (works with multiple hidden networks)
 - better support of Wifi repeater (automatic connection with access point with best reception)

Error fixes:

- Solar-Log²⁰⁰: Firmware-Update to 2.7.1 build 44 could have hindered Solar-Log²⁰⁰ from being restarted. Fixed
- WLAN: Settings on Solar-Log 200s were not retained upon a restart of the device when no inverter had been detected. Fixed
- Visualisation: On devices with multiple MPP trackers, the DC value of the 2nd tracker was overwritten in the overview table by the 3rd tracker. The 3rd tracker was displayed with 0 values. Fixed
- Santerno TG-WR having firmware-version ≥ 1700 : the yield values were 10 times too small. Fixed
- Danfoss TLX: optimized error groups. Previous error messages are sometimes displayed as "undef."
- Socomec: Read-out of error status optimized
- Inepro DMM 1250D (3 phase): recognition of meter optimized.
- Fronius: diagnostic function 10% could not be carried out. Fixed.

2.7.1 Build 44 - 22.03.2012

Attention:

Solar-Log²⁰⁰: Firmware-Update to 2.7.1 build 44 could have hindered Solar-Log²⁰⁰ from being restarted. Don't use it for Solar-Log²⁰⁰.

Power management:

- 70 percent fixed throttling, taking own consumption into account.
Note: Only possible with an S0 consumption meter
- Reactive power support for inverter manufacturer:
 - SMA
 - Kaco
 - Diehl
 - Delta
 - Sungrow

New inverters

- Valenia
- Fronius RL
- Chintpower <20K
- Chintpower 20K+
- PV Powered Central inverter via RS485 (Types: PVP 30KW, 35KW, 50KW, 75KW, 100KW, 250KW, 260KW, 500KW)

New meters:

- Janitza (Utility-Meter)
- Inepro/DMM Pro-1250D 3-phase, uses RS485

New SCB type:

- String monitor box Solar-Log SMB (Phoenix Contact) prepared

Extensions

- Mastervolt: New INV types ES 2.2, ES 3.3, ES 4.6, ES 5.0, ES 3.6, CS30TL, CS7TL, CS10TL, CS12TL
- Delta: new inverter type SOLIVIA 11 EU G4TR
- For newer Diehl-AKO inverters of the TLD family with multiple MPP trackers are now evaluated individually
- (Types: 13000 TLD, 18000 TLD, 19000 TLD, 22001 TLD, 22000 TLD)
- CO2 display in lbs for USA
- Solar-Log500: PM+ display at device start-up
- Sensor boxes and serial current meters retain their position in the INV sequence.
- Danish translation updated
- Improvements on the visualisation of the yield data via the local WEB browser
- The "Balance" display now automatically activates "All" inverters
- If an inverter or group of inverters additionally activated with the "Balance" display activated, the "Balance" display is automatically deactivated.
- Thus, in the Balance View, the comparison is now always seen between the total yield and the consumption.
- In the Months/Years/Total overviews additional columns pop up for the consumption or total meters when their boxes are checked.
- In the table under the Total View an averaged specific power is now displayed instead of a total power.
- For the current year, a procentual value is additional used hereby.
- In the corresponding value table, both the averaged value as well as the total is displayed.
- Mouseover on the temperature curve in Fahrenheit showed °C. Fixed.

- Button for temperature showed °C in the English version. Now T-Inv appears here.
- In leap years, differing forecast values were shown in the value tables and graphics.
- This was unified: In the forecast a daily target value is now assumed for the 29th of February just as in non leap years.
- In the Table under the day overview the actual value is now surplus/shortage in percent.
- Changes in the total view (Curve View - comparison of the last X years):
- The number of the viewable years were increased (up to 10).
- Title is now shown correctly.
- Data at the beginning/end of the year are now shown correctly.
- Monthly and yield curves now harmonize with each other.
- €-yield is displayed.
- In the own consumption level, yield meter values were compared with Pac-based values.
- Now the yield values are also used by the inverters.
- When only one consumption meter is visualized, a consumption is now displayed correctly and not a yield.

Troubleshooting:

- Optimizing of the PM 100% regulating for Vectron, Sunways, Sungrow, Ingeteam, Convteam, Refu, Phoenixtec.
- Solarmax 10 MT: On new installation only 2 strings are now logged.
- Phoenixtec: Evaluation of an additional error registry, if entered in the protocol.
- Phoenixtec/Sunville: Optimizing of the error evaluation (e.g. "FanLock-Warning")
- SMA derating: Erroneous 'derating' signalisation of older inverters fixed.
- Sungrow: Udc was too large by a factor of 10. Fixed.
- Ingeteam: Ingecon 5.4 kW is now correctly detected and logged.
- Sunways: Reading of the error on PT30/33 was corrected.
- After "Firmware-Update" or "Load System Setting", "please wait" stuck in the browser. Fixed.
- When reading in the initial data, not all previous data was deleted. Fixed.
- Data in the initial data from the current day or in the future can no longer be imported.
- WLAN key or SSIDs with special characters are now supported.
- In WLAN networks with repeaters that use the same SSIDs, no more switching is done between the Aps.
- During the PM-Dialogue, not all values were stored when many check boxes were selected. Fixed.
- After changing the INV sequence, sometimes 100 INV were entered. Fixed.

- On Solar-Log1000 without PM 70% fixed regulation did not work. Fixed.
- Danfoss TLX: display of error messages in groups (e.g. "Grid 40-99"). Older existing messages may now be displayed as "undef".
- Mastervold XL5000: up to now only the yields of string 1 were read, not the total yield. Fixed.
- Helios: error

2.7.0 Build 43 – 09.01.2012

New inverter:

- AEG 3ph (PV10KW,PV12.5KW,PV15KW)
- Helios
- Motech: new INV types: PVMate 2900U, PVMate 3840U, PVMate 3900U, PVMate 4900U, PVMate 5300U, PVMate 6500U, PVMate 7500U

Inverter firmware improvements:

- Diehl-AKO: Improved Power-Management. A network scan of the inverters is no longer necessary.
- Danfoss UniLynx. Solar-Log™ PM: When inverter power must be reduced by the utility company, the UniLynx INV can be switched to Standby and switched back to 100% by command. A 'finer' switching possibility is not possible for technical reasons. This power management only works on plants that are exclusively composed of UniLynx INV.
- Kaco: New error numbers 67-100
- PVPowered PVP5200 inverters within a certain series of serial numbers in could not be detected. Fixed.
- PvPowered: The communication problem with the Ethernet connection is fixed.
- RefuSol: Error messages for English, French, Italian and Spanish revised.

Certification process corresponding to the German EEG 2012 law is in discussion with following inverter manufacturer:

- Danfoss
- AEG PV10, PV12.5, PV15
- Fronius
- Refu
- Powerone
- Siemens
- Omron

- Sungrow

Extensions:

- Optimized performance monitoring: When there is more than one MPP tracker, the fault counter is incremented only once per inverter.
- Reactive power control implemented in compliance with the new EEG 2012 (only for Germany)
- Reactive power control now configurable to a fix value of 70%.
- Reactive power control optimized by the reference to maximum AC power of the INV
- Configurable email traffic when the power limitation is changed.
- Relays close when power limitation is applied.
- PM diagnostic screen for Solar-Log1000
- Elkor: now possible as utility meter
- Roaming for internal GPRS is now configurable. Default=Roaming off.
- New country selectable: Malaysia
- Some translation correction in English

Troubleshooting:

- The browser input "solar-log" did not function when DHCP was activated in the Solar-log but there was no DHCP-Server. Fixed.
- Not all parameters were accepted when Full-Service/Commercial edition was selected and the configuration followed via WEB. Fixed.
- Problem with very long WLAN keys. Fixed.
- The values in the month view of the value table were doubled when "All" inverters and single inverters were selected at the same time – fixed.

2.6.0 Build 42 - 02.11.2011

Extensions:

- New WR: Omron
- New WR: Enfinity
- New WR: Ginlong
- New WR: Oelmaier
- Schneider Electric: Xantrex GT30E
- PowerOne: New INV models PVI-4.6, PVI-3.8, TRIO-20.0, TRIO-27.6, PVI-UNO-2
- KACO: Error texts are now available in English and French.
- PowerOne: The AC-Network-Error is activated only briefly. Therefore, an error email is generated by a status 1 when activated longer than half an hour.

- New current meter for RS485: Iskra (WS1102)
- New current meter for RS485: DMM (Pro75D –Mod bus)
- Starting immediately, besides the daily yield, the absolute current meter reading of the digital meters will also be logged via RS485.
- From now on, digital current meters using RS485 will display the last meter reading in Wh in the browser view instead of the PAC max (maximal value) of the last meter reading in Wh.
- Solar-Log¹⁰⁰⁰: During inverter detection, the status will now be shown ("---", "INV", "Sensor", "Meter" or "Finished"), depending on what is presently searched for.
- In the initial configuration, current meters that can operate on the RS485 bus can now be selected from a list as in the case of inverters.
- Solar-Log⁵⁰⁰: In the inverter menu there is now the menu selection "Current meter". Here it is possible to select "Elkor WattsOn", "Iskra" or "DMM" to also operate on the RS485 bus.
- During the inverter detection, the inverter type being searched for will now always appear in the upper lines; also the sensor or current meter if sharing the RS485 bus.
- Solar-Log²⁰⁰: In the start configuration, current meters can now be selected from a dropdown list to share the RS485 bus with the inverters.
- IP addresses of the Ethernet interface: The Ethernet interface now always has an additional address in the auto-IP sector (169.254.WX.YZ), in which WXYZ stands for the last four digits of the serial number.
- Reachability of the logger now possible via the entries "solar-log" and "solar-log-wxyz" (no longer 3 digits but 4!)
- Display of ">98%" efficiency on the SL1000 display
- Increasing of the plausibility limit for temperatures from 100°C to 200°C.
- FTP transfer process revised. => New error numbers for FTP test transfers!
- The display of the wind speed was improved in the visualization.
- The status of the internal GPRS modem is now displayed more detailed in the browser view: Initialization->connecting...->connected (XX%)->Dialing...->Online (XX%)
- Emails sent by the Solar-Log now have the serial number additionally inserted into the subject heading in brackets behind "Solar-Log - "
- Improvement on the RS495 radio package – in the future, it must be defined in the Solar-Log if there is a wireless connection installed on the RS485 bus. When this is the case, the Solar-Log is then optimized for wireless transmission. The configuration of all new radio packages will be modified correspondingly. Henceforth, these packages will only be operable with Solar-Logs having firmware release 2.6.

Trouble Shooting:

- The blink-code is back again when the date/time is not set.
- When the date /time has not yet been sent, the default value of 1.1.2000 00:00 is now set. Previously, the year 2018 was set.
- The problem with special signs in the country names when selecting a country has been solved.
- The problem has been solved in the browser view where the summer time setting "None" could not be selected.
- Samil: The problems with the logging of the "SolarLake" and possibly the "SolarOcean" yield values have been solved.
- When there are several errors in a row, these are now entered successively into the event protocol .
- For Oelmaier inverters the maximum temperature has been changed from 70° to 90°.
- Steca 3000/3600: Pac is now read correctly.
- AROS: Default setting when failures occur: "Permanent Fault" as status now also generates an email.
- SMA/Bluetooth: Uac/Pdc deviations mornings and evening resolved.
- For Aten inverters the inverter detection for multiple inverters has been revised.
- Kaco: * Adjustments for older 100k models (Tagesertrag/Nachtabstaltung)
- TL3/TR3: Detection of the overnight shutdown improved.
- Detection resulted sporadically in too many inverters. Fixed.
- In the value table for the energy balance, total consumption was formerly calculated from the performance values; now converted to yield meter.
- The problems with the Reset key on older BT devices are solved with the latest firmware.
- Solar-Log⁵⁰⁰: The problems in connection with the selecting again of a sensor have been solved.
- The problems in connection with logging the wind-sensor on the sensor boxes at night have been solved.
- When a sensor box is added, the event protocol is now correctly integrated.
- The problems created when the existing generator power of the individual MPP trackers was set to 0 have been solved.
- The problems are solved in connection with the checkbox setting on the Solar-Log¹⁰⁰⁰ in the plant monitoring dialog in relation to the error messages with the format "from 1 to 1".

2.5.0 Build 39 - 23.08.2011

Inverter Samil now selectable Bluetooth with SL500 now selectable.

2.5.0 Build 39 - 08.08.2011

Expansions:

- Solar-Log String Connection Box monitoring
- Sensor Box M&T Basic on RS485
- Sensor Box can now also be connected to Solar-Log200 and Solar-Log500
- Elkor Wattson electrical current meter on RS485
- New rectifier manufacturer: Albatech Trifase und Albatech Monofase
- New rectifier manufacturer: Growatt
- New rectifier manufacturer: Siemens
- New rectifier manufacturer: Carlo Gavazzi
- New rectifier manufacturer: Eaton
- New rectifier manufacturer: Aten
- New rectifier manufacturer: Pairan
- New rectifier manufacturer: Samil
- Danfoss: new 8k rectifier and modification for new version of rectifier software – Version 2.1
- Danfoss: optimization of power reduction function
- Kaco: new types of rectifier - TL3 and TR3
- Easy-Installation Solar-Log200 extended with S0
- Easy-Installation Solar-Log200 extended with M&T sensor
- Easy-Installation-WEB can now be booted via web interface
- WLAN: support for WPS pushbutton
- GPRS connection quality also visible via web interface
- Value for remuneration now max. 654.00 cents (previously 99.99 cents)
- Input of user / password ("solarlog"/"solarlog") no longer required for file uploads via web interface
- Maximum permitted temperature on M&T Sensor Box increased to 100°C
- GMT time details now also possible with HH:MM (previously only HH)

Rectification of faults (bug fixes):

- Not possible to save config in Danish language version. Remedied.
- The combination of Diehl rectifier and Schneider display was malfunctioning. Remedied.
- The reset function for yield data on the Solar-Log500 was not functioning properly. Remedied.
- WLAN: improved support for fixed IP addresses
- Easy-Installation: LED status was not set correctly after termination. Remedied.
- SL1000: during reset of the rectifier configuration, yield data were not always deleted. Remedied.
- Calculation of kWp nominal values in the 1st plant assembly was defective. Remedied.
- Mastervolt: on the XL5000, now only one MPP tracker is evaluated.
- Fronius: calculation of the efficiency rating for IG Plus 100V-3 corrected.

- Sunpower: calculation of efficiency rating on series SPR-X0001F / SPR-X001F has been corrected.
- Table of figures in Current Day view has been revised
- Figures from SO meters on plants with ratings of > 100 kWp are being displayed incorrectly on the touchscreen display and, to a limited extent, also on the web interface.

2.4.0 Build 38 - 27.06.2011

Error fixes:

- SMS data protocol - timing behavior adapted especially for TriPower inverter continuous data record will be provided.
- WLAN: open-system authentication for WEP is fixed
- Plausibility check of yield data for Zentral-Solar and Motech
- Ingeteam: Inverter name inserted for alarm emails

2.4.0 build 37 – 06.06.2011

Extensions:

- The SolarMax MT series is now correctly supported with all 3 MPP trackers
- AROS: PM integrated.
- SCB emails with SIEL deactivated
- Delta: warning sent on inverter errors: I/O Discrepancy & Power Unsymmetric
- RefuSol: power management is now possible on models 4K,5K and 6K, and error messages have been updated

Bugfixes:

- No special functionality of the Reset-button with Easy Installation
- Solar-Log PM – power reduction: Status "all entries unlined" is a valid status and can be configured with 100%
- Kaco XP100 (old version) is now supported
- SMA US-versions: Pdc is now correctly read
- Fronius/Sunpower: wrong display of DC-power on some models - fixed number of inverters shows higher on larger plants (without further consequences)- fixed
- GE: Pdc is now also correct on multiple strings with different sizes.
- AUTOIP functionality is also activated on updated solar-logs.
- WLAN: problems (freezes) when connecting with wrong key selection - fixed wrong detection on WEP 64/128 mode with key change - fixed translation of WLAN dialog in the WEB view completed status display without configured WLAN was wrong - fixed.

- Motech/Central Solar: the second string is displayed correctly on PVMate 3300MS, PVMate 3800MS(Motech), ZSD 4500TL and ZSD 5000TL(Zentralsolar)
- WEB User Interface: special characters such as "/" are now correctly used.
- In the day view, the percentage in the value table are correctly displayed when single inverters are selected.
- WLAN: the encryption type WPA2-AES (CCMP) has now been correctly configured
- Password-input length has been different for password set and login. Now it is possible to enter 19 characters for both.
- Self consumption of power: It is now possible to set switch-on time and -off time to 0 without getting default values

2.4.0 Build 36 - 06.05.2011

Extensions:

- Entry of the sensor yield data also in the months.js and years.js files.

Troubleshooting:

- Between the months of May and October, the sensor box wrongly detected a breakdown during the night. Fixed.
- Language files for EN, ES,NL,DK are faulty in the graphical visualization. Fixed.

2.4.0 Build 35 - 04.05.2011

Support the new Solar-Log™ "WiFi" and "GPRS" modules

WiFi / WLAN:

- Configuration of the WLAN module via the local WEB interface, on Solar-Log1000 also via the Touch-Screen
- Support of all encryption types
- WPS function in preparation
- Display of the WLAN signal strength for optimal positioning of the Solar-Log

GPRS:

- The internal GPRS module can be switched off completely
- Display of the GPRS signal strength
- "Unintentional" roaming, i.e. logging into borderline radio networks, is no longer possible

"Easy Installation":

- New function for simple installation without configuration on site
- Automatic connection to the Solar-Log WEB Commercial / Classic2 platforms

- Automatic detection of the connected inverters
 (Presently supported manufacturers: SMA, Kaco, Fronius, Solarmax, Powerone, Danfoss, RefuSol, Kostal, Diehl, Sunways, Mastervolt, Delta, Sungrow, Sunville, AEG PS, AROS, Europa Solar, Salicru EQX, SE SunEzy, Ever-Solar. All others must be configured manually as before!)

New inverters:

- Sunways: Support of the PT series via RS485. Important: The inverter must be updated with the newest firmware

Extensions:

- In the local Web view, the number of power meters and sensors are shown in the entry dialogue

Troubleshooting:

- Ingeteam: PM is now supported
- Santerno: PAC overflow on large inverters has been eliminated
- SMS telephone number was not always permanently stored when entered via the Solar-Log1000 display. Fixed.
- S0 meter (As total plant meter or as inverter) at times gave no daily yield. Fixed.
- S0:PAC at factor > 1000 was wrong. Fixed.
- Sensor boxes were not displayed in the graphic value table. Fixed.
- Yield curves for AROS, Riello, Phoenixtec... with plateau. Fixed.
- Danfoss detection optimized.
- Motech/Zentralsolar: PAC on 3 phase INV wrong. Fixed.
- Sunville SV10000 displayed only 1/3 of the actual value on the daily yield graphic. Fixed.
- Mastervolt QS3500 now records 2 MPP trackers.
- Mitsubishi: Daily yield partially too high in the morning. Better plausibility. No "plateaus" any more.
- Sunpower: The efficiency factor calculation was faulty. Fixed.
- GE:PDC calculation was faulty for 2 strings. Fixed.
- SMA: Tripower - Detection of night time deactivation improved. Problems with the daily yield calculations thereby eliminated.
- On the yield correction, the date format of the respective countries is now considered.
- Motech/ZSD: Correction of the yield values.
- Mastervolt: Yield plausibility
- Delta: Daily yield plausibility.
- Saving of the inverter/graphic scaling (Y axis) was partially incorrect. Correct.
- Display of the address/serial number for Zentralsolar was always 0. No effect on the functionality. Fixed.
- Inverter selection on the Solarlog500 was partially incorrect. Fixed.

2.3.1 Build 33 - 22.03.2011

Newly supported inverter manufacturers:

- Q3, connected via RS485
- EKO Energy, connected via RS485

Extensions:

- RefuSol/Sinvert: When set to 9600 Baud, now compatible with the RS485 radio package(only possible on 3-phase models!)
- Firmware updates are now indicated by rolling LEDs. This is especially helpful for the SL200, which has no display to show that an update is running.
- Schneider SunEzy and inverters from Phoenixtec: Yield calculation switched over to total counter.
- Delta: New INV types for USA and Australia Solivia 5.0 AP G3 extended to 2 strings
- Bridge Error and BPC Comm error are only displayed if they last longer than 10 Min. Temperature plausibility check
- Aros SIRIO central inverters are now supported.
- Diehl AKO: New error messages (E-90 to E-95) have been built in. Furthermore, error messages that were not built in up to now but are located within valid error areas are now allocated properly (E < 100 = installation error, E < 200 gen. system error ...).
- Email dispatch has been accelerated

Troubleshooting:

- Firmware update via "Check now for new firmware" doesn't function. Fixed.
- When BT was combined with RS485A, no sensor-box could be selected. Fixed.
- GE: 2-string INV were displayed as 1-string INV. Fixed. No new detection necessary.
- Effekta: Errors in the handling of defective telegrams. Fixed.
- Comlynx/Danfoss: Negative temperature values are shown with value 0, no longer with value 30.
- Regarding sensor-boxes:
- "DC daily yield" is now carried over correctly according to days.js (was previously always =0)
- Temperatures at -1 to 0 degrees led to false calculations (+- sign error). Fixed.
- Default for the sensor monitoring now set to 15% deviation (will also be corrected in old firmware)
- Emails from the performance monitoring often gave the wrong target value for the inverter. Fixed.

- Ingeteam: The inverters with 2.5kW and 25kW power have an identical detection. The Solar-Log thereby detected the 25kW device as a 2.5kW device. Now, internally, the comparison is made with the connected module power to set the configuration to the 25kW device.
- Due to large email volume and/or wrong SMTP configuration there were gaps in the logging. Fixed, after three failed attempts in a row, all emails in the queue with error 98 are not sent.

2.3.0 Build 32 - 01.02.2011

Trouble shooting:

Solutronic

Solutronic error detection was correct for one inverter only

- *If inverter detection fails using the new (Solutronic) protocol, the search is continued with the old (Solar-Log™) protocol ('mixed' operations, however, is not possible on the same port)
- SMS dispatch via GPRS modem optimized (error11 appeared although the SMS was sent).
- New Delta inverter type SOLIVIA_CS (66KW)
- Memory extended for file names during the ftp data transfer (necessary for serial numbers of 10 digits or more).

2.3.0 Build 32 - 25.01.2011

Troubleshooting:

- The display of the address/serial number on Zentralsolar inverters was always 0.
- No effect on the function. Corrected.
- Inverter selection was sometimes not correct on the Solar-Log™ 500. Corrected.
- GE: Problems with the inverter search over the network. Corrected.

2.3.0 Build 31 – 18.01.2011

Extensions:

- The new Mitsubishi "PV-S" model are now recognized.

Troubleshooting:

- Country selection at the initial configuration was not possible via the WEB-browser in the Internet Explorer. Corrected.
- Fronius: In the version 2.3.0-30, only max. 4 inverters could be detected. Corrected.

2.3.0 Build 30 - 17.01.2011

Newly supported inverter manufacturers:

- GE (General Electrics), connection via network cable
Types:
 - SVT 2000, SVT 3000, SVT 4000, SVT 5000
- Hyundai
Types:
 - HPC-050-HT-E, HPC-100-HT-E (PM performance reduction)
 - HPC-250-HT-E (PM performance reduction/reactive power regulation)
- IDS (all models) Please contact the manufacturer for detailed questions.
- Aros
- Solutronic
Types:
 - SP25, SP35, SP50, SP55 Version 1.2.57
 - SP100, SP120 Version 1.28, SP300(all with Power Management performance reduction)
Starting with this release, the original protocol from Solutronic is supported. This means that all Solutronic models are now compatible, also the new ones.
- Rudolf Fritz (central inverters) – Technical support is given directly by this manufacturer.
- Fronius:
The Fronius driver has been completely revised.
All Fronius inverters are now supported, also central inverters.
 - Power Management is supported for all IGPlus / V / CL models.
 - The date and time are now correctly initialized in the inverter.
 - Thus, the daily yield meter on the inverter now displays correct values.
- Kaco: All Kaco inverters are now supported, also central inverters.

Country selection:

The selection of the country now comes directly after selecting the user language. The time zone, date & time formats, the currency and the temperature unit is preset in relation to the language. Daylight saving time can also be adapted to the region or completely switched off.

Smart Metering:

It was already possible to connect an S₀ meter to the Solar-Log⁵⁰⁰ and ¹⁰⁰⁰ to monitor and visualize energy consumption. In the Solar-Log¹⁰⁰⁰, additional functions have been

installed that involve private energy consumption and the optimization of personally used current:

- Representation of the current energy balance (only in connection with an electricity meter)
- Remote control of up to 4 external network electrical outlets, taking the current production or over-production of energy (only in connection with an electricity meter) into account.

Sensor technology:

Up to 9 sensor boxes can be connected. It is necessary to make sure that the last 2 numbers of the sensor box serial numbers are different.

Attention!

More than one sensor box can only be installed in the RS485 BUS using M&T sensors produced from the beginning of 2011 onward. Each sensor box must be assigned with a module field number so that a distinct sensor<->inverter allocation can be made.

Graphical representation:

Depending on the selection of inverter, the sensor irradiation values are proportionally calculated and superimposed as green reference lines as has been previously the case.

Alarm function:

Starting with this release, the Solar-Log™ alarm function takes the irradiation sensor into account.

- defective inverters are now detected earlier
- defective sensors are detected
- performance comparison now also possible for small plants with only 1 inverter or 1 digital meter
- poorly directed or covered up sensors are detected

Power Management:

Beginning with Solar-Log¹⁰⁰⁰ production in 2011, additional PM hardware is installed that supports the connection of two digital RCRs (Ripple Control Receiver). This is specified on the Solar-Log touchscreen in the main menu as "Power Management+" (Plus). By means of this addition, an external Cos-Phi regulation can now also be carried out. Statistical Cos-Phi regulation or regulation via P/Pn response curve could already be carried out with the previous hardware. For further information and supported inverters with Cos-Phi regulation, please look on our homepage at www.solar-log.com.

2.2.0 Build 28 - 01.12.2010

Newly supported inverter manufacturers:

- Motech (PVMate 3300MS, PVMate 3800MS, PVMate 4600MS, PVMate 15E, PVMate 20E)
- Zentralsolar (ZSD 4500TL, ZSD 5000TL, ZSD 6000TL, ZSD 17000TL, ZSD 23000TL)

Bug fixes:

- The impulse factor of S0 meters could not be changed in the Web Interface. Fixed.
- Delta Central Inverter: For larger AC power outputs, the values do not appear correctly. Fixed.
- Diehl AKO: There were occasional gaps in the recordings of the central inverter 100CS. Fixed.

2.2.0 Build 27 - 01.11.2010

Inverter manufacturers now supported:

- Delta (all inverters, also central inverters)
- Sungrow (all inverters, also central inverters)
- Sustainable Energy
- (all inverters)
- Salicru EQXLV (all INVs)

The data cable assignments are available on our homepage in the Downloads area.

Enhancements:

- Power-One:
- Central inverters are now correctly supported.
- Power-Management (power reduction) is now supported.
- Mastervolt: The CS series is now correctly supported.
- Kaco: Power-Management (power reduction) improved, especially for
- large plants with many INVs.
- RefuSol: Power-Management (power reduction) is supported.

Bug fixes:

- The power display on oversize displays was smaller on central inverters by factor 10. Corrected.
- Schneider Electric (SunEzy-INV): Power values partially wrong. Corrected.
- Effekta: Some problems with daily yield calculation. Corrected.

When an inverter was connected to a current meter using the S₀ interface, the prognosis and CO₂ values were not displayed correctly in the graphics. Corrected.

2.2.0 Build 27 - 29.09.2010

Inverter manufacturers now supported:

- Steca: only model 10000 (3-phase), including power management

Enhancements:

- Fronius IG TL3.6 is now correctly supported
- Sunways NT3+ 10000/11000/12000 are now supported.

Note: The daily yields are rounded off to kWh.

Bug fixes:

- SMA Bluetooth: When inverters were rearranged within the Solar-Log™ it could have led to incorrect yield values. Corrected.

2.2.0 Build 27 – 17.09.2010

Bug fixes:

- Time zones +-10/11/12 were not correctly processed. Corrected.

2.2.0 Build 27 – 13-15.09.2010

Inverter manufacturers now supported:

- Alphasol
- Europa Solar
- Ever-Solar
- Evoco (all models)
- Powercom
- Salicru (EQX)
- Santerno (Sunway MPlus)
- Schneider-Electric (SunEzy)
- Winaico
- The data cable assignments are available on our homepage in the Downloads area.

2.1.0 Build 26 – 29.07.2010

Bug fixes:

- The inclusion of the single phase Refusol inverter in the previous version negatively influenced the data communication with the SMA inverters, thereby leading to their partial malfunctioning. Corrected.

29 Sept. New firmware for the new inverters

Solar-Log™ now supports a whole range of additional inverter manufacturers. Others, such as Delta and Sungrow, will also be added in the near future:

- Alphasol
- Europa Solar
- Ever-Solar
- Evoco (all models)
- Powercom
- Salicru (EQX)
- Santerno (Sunway MPlus)
- Schneider-Electric (SunEzy)
- Steca (10000)
- Winaico

(The models that are current officially supported are shown in brackets)

The cable assignment for the respective inverters can be queried in the area Service / Download / Manual.

2.1.0 Build 26 - 26.07.2010

Enhancements:

- Refu: 1-phase RefuSol-INV (<10kW) inverters can now be monitored.

2.1.0 Build 26 - 16.07.2010

Enhancements:

- The new "Solar-Log WEB" WEB service, with the corresponding services 'Full Service / Classic 2 Edition / Self Made / Classic 1', is now included in the Internet-related configurations. From 19.07.2010 on, the log on will be available at "home.solarlog-web.de".
- SMS can now be sent directly from the GPRS modem (Dialogue box Network/LAN). The SMS costs are debited directly from the SIM card.

2.0.4 Build 25 - 02.07.2010

Bug fixes:

- SMA: Solar-Log 1000: Incorrect data when SMA was used on both interfaces. Pdc was not correctly displayed on SB/SWR inverters up to 2.5kW and SB3000-TL20. Corrected
- PDA view: Previous daily yields were not displayed. Corrected. (Refers to the self made view. The "palm.html" file had to be removed from the current home page kit).
- Mastervolt: On model XL15000 the second string for each power unit was not analysed and thus only 50% of the power was displayed. Corrected.
- Refu: Models over 10kW were sometimes not detected. Corrected.
- Power management: With gradual changes in power, the selected reduction was sometimes not reached exactly. Corrected.
- Diehl: On 100kW inverters Pac/Pdc was cut off above 65kW of power.
- Kostal: The calculation of the total yield was revised. Incorrect Pac in the morning and evening hours has now been fixed.

2.0.4 Build 24 - 19.05.2010

Enhancements:

- Fronius: New device types are now supported: 5.0TL, 3.8TL, 3.0 TL