

# Release Notes (Security Hotfix) (Solar-Log<sup>™</sup> 4.2.8 Build 117, 30.05.2022)

for Solar-Log 250, 300, 1200, 1900 and 2000

Inverter/SCBs/Meter/Battery Systems/other Devices

# **Bug fixes**

Critical security vulnerability closed.



# Release Notes (Solar-Log™ 4.2.7 Build 116, 20.02.2020)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverter/SCBs/Meter/Battery Systems/other Devices

#### New

#### E3DC:

Series S10:
 S10 E, S10 E Pro, S10 Mini.

#### Growatt X Generation:

MIN Series:

MIN 2500TL-X, MIN 3000TL-X, MIN 3600TL-X, MIN 4200TL-X, MIN 4600TL-X, MIN 5000TL-X, MIN 5000TL-X, MIN 5000TL-XE, MIN 3600TL-XE, MIN 4200TL-XE, MIN 4600TL-XE, MIN 5000TL-XE, MIN 2500TL-XH, MIN 3000TL-XH, MIN 3600TL-XH, MIN 4200TL-XH, MIN 4600TL-XH, MIN 5000TL-XH, MIN 5000TL-XH

MID Series:

MID 15KTL3-X, MID 17KTL3-X, MID 20KTL3-X.

MAC Series:

MAC 30KTL3-X LV, MAC 40KTL3-X LV, MAC 50KTL3-X LV, MAC 60KTL3-X LV, MAC 50KTL3-X MV, MAC 60KTL3-X MV, MAC 66KTL3-X MV, MAC 70KTL3-X MV.

MAX Series:

MAX 50KTL3 LV, MAX 60KTL3 LV, MAX 70KTL3 LV, MAX 80KTL3 LV, MAX 60KTL3 MV, MAX 70KTL3 MV, MAX 80KTL3 MV, MAX 90KTL3 MV, MAX 100KTL3 MV.

#### **Extensions**

#### INVT:

New US models:
 BG7KTR, BG9KTR, BG10KTR, BG12KTR, BG15KTR, BG17KTR, BG20KTR, BG30KTR.

#### Omnik:

Omniksol TL2-Serie: Omniksol-1k-TL2-M, Omniksol-1.5k-TL2-M, Omniksol TL3-Serie: Omniksol-2k-TL3-S, Omniksol-2.5k-TL3-S, Omniksol-3k-TL3-S, Omniksol-3k-TL3, Omniksol-3k-TL3, Omniksol-3k-TL3, Omniksol-4k-TL3, Omniksol-5k-TL3, Omniksol-6k-TL3.

#### Azzurro:

AZZURRO 20000TL-G2, AZZURRO 25000TL-G2, AZZURRO 30000TL-G2, AZZURRO 33000TL-G2.

### **Bugfixes**

#### Sungrow:

Data recording from devices with a maximum of 3 MPP trackers works again.

#### Fronius Symo Hybrid:

• Improved recorded value for foreign batteries.

#### System error:

Fixed when operating with devices from Kostal (Modbus TCP), QCells or SMA Sunny Island.

#### Huawei V2:

- Read out correct DC values, even if not all trackers are connected.
- The tracker values are now correctly recorded for 3-20KTL size models marked with M0, M1 and M2.

#### Various manufacturers:

• Daily yield was sometimes not correctly summed.

#### Ingeteam:

Communication stability improved.

### Supplement

#### With version 4.2.5 Build 114 - 20.08.2019 the following models have already been released:

Huawei V2:
 SUN2000-3KTL-M0, SUN2000-4KTL-M0, SUN2000-5KTL-M0, SUN2000-6KTL-M0, SUN2000 8KTL-M0, SUN2000-10KTL-M0, SUN2000-12KTL-M0, SUN2000-15KTL-M0, SUN2000-17KTL-M0, SUN2000-20KTL-M0, SUN2000-3KTL-M1, SUN2000-4KTL-M1, SUN2000-5KTL-M1, SUN2000-6KTL-M1, SUN2000-8KTL-M1, SUN2000-10KTL-M2,

SUN2000-12KTL-M2, SUN2000-15KTL-M2, SUN2000-17KTL-M2, SUN2000-20KTL-M2.



# Release Notes (Solar-Log™ 4.2.6 Build 115, 15.10.2019)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverter/SCBs/Meter/Battery Systems/other Devices

#### **Extensions**

#### Sungrow:

SG33CX, SG40CX, SG50CX, SG110CX.

# **Adaptions**

• Improved system stability during data processing.

#### GoodWe:

• For devices with 4 mpp-trackers the tracker values are now recorded separately.

#### sonnen Eco 8:

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

### **Bugfixes**

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

#### S0 Input:

• Corrected the processing of persistant impulses.

#### Components:

#### SolaXPower:

• The X3 series is available again.

#### Sungrow:

• The data aquisition is functional again.

#### Elkor MKII:

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

#### Keba:

• The target power required to start charging is now correctly calculated for vehicles that charge with less than 3 phases.

### SMA Sunspec:

• The detection did not work anymore. Fixed.

#### SMA Core1:

• Fixed recording wrong values in cases of communication failures.

#### Fronius TCP:

• Increased the fault tolerance when reading the battery values.



# Release Notes (Solar-Log™ 4.2.5 Build 114, 20.08.2019)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverter/SCBs/Meter/Battery Systems/other Devices

#### **NEW**

#### Kostal Modbus TCP:

- Piko IQ 4.2, Piko IQ 5.5, Piko IQ 7.0, Piko IQ 8.5, Piko IQ 10
- PLENTICORE plus 4.2, PLENTICORE plus 5.5, PLENTICORE plus 7.0, PLENTICORE plus 8.5,
   PLENTICORE plus 10.0

#### **Extensions**

New certificates for smtp servers of gmx and web.de

#### Kaco:

blueplanet 87 TL3, blueplanet 92 TL3, blueplanet 110 TL3, blueplanet 125 TL3, blueplanet 137
 TL3, blueplanet 150 TL3

#### SolarMax:

- SolarMax 17SHT, SolarMax 20SHT, SolarMax 22SHT, SolarMax 25SHT, SolarMax 28SHT,
   SolarMax 30SHT
- SolarMax 6SMT, SolarMax 8SMT, SolarMax 10SMT, SolarMax 13SMT, SolarMax 15SMT
- SolarMax 1000SP, SolarMax 1500SP, SolarMax 2000SP, SolarMax 2500SP, SolarMax 3000SP, SolarMax 3600SP, SolarMax 4000SP, SolarMax 4600SP, SolarMax 5000SP

# **Adaptions**

#### Huawei V1:

All Firmware versions of the Huawei inverters 8-40 KTL can now communicate with Solar-Log™.

# **Bugfixes**

• The timezone GMT +10:00 resulted in a wrong system time. Fixed.

#### Webinterface:

Configuration / Devices / Configuration / Configuration:
 Pyranometer can be configured again (The form validation failed before).

#### Components:

Janitza via Ethernet:

From now on in all cases of communication errors the connection will be closed.

Sonnen Eco 8:

Extended the range of meter values.

SAJ:

Fixed Power Management functionality.

Fronius TCP:

Improved the fault tolerance when reading the battery values.

RCT Power:

All power reduction modes are now supported.

Sofarsolar:

The yield is now correctly shown for models Sofar50000TL, Sofar60000TL und Sofar70000TL-HV.

Chintpower (Modbus), Solectria (V4), Canadian Solar (CSI-CT):

Improved behaviour in case of communication errors.

Varta:

Improved the detection routine for Varta flex.

RCT Power:

The sum of the cosumption meter does not show 0 anymore, but the correct value instead.



# Release Notes (Solar-Log™ 4.2.4 Build 113, 04.06.2019)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverter/SCBs/Meter/Battery Systems/other Devices

#### **NEW**

#### Kostal via Sunspec:

• Piko IQ 4.2, Piko IQ 5.5, Piko IQ 7.0, Piko IQ 8.5, Piko IQ 10

#### Huawei SUN2000:

70KTL-C1, 75KTL-C1, 50KTL-M0, 60KTL-M0, 65KTL-M0, 70KTL-INM0, 50KTL-JPM0, 63KTL-JPM0,
 50KTL-JPM1

#### Autarco:

- SX Series: SX1500, SX2000, SX2500
- MX Series: MX3000, MX3600, MX4600, MX5000
- LX Series: LX6000, LX10000, LX15000
- XLX Series: XLX20000, XLX25000, XLX30000
- UX Series: UX50000, UX60000
- SX Mark II Series: SX700-MII, SX1000-MII, SX1500-MII, SX2000-MII, SX-2500-MII, SX-3000-MII, SX-3600-MII
- MX Mark II Series: MX3000-MII, MX3600-MII, MX4000-MII, MX4600-MII, MX5000-MII

#### Ginlong:

Solis-Mini-3600-4G

#### **RCT Power:**

- New Inverters: Power Inverter 4.0, Power Inverter 5.0, Power Inverter 6.0
- New Hybrid Systems: Power Storage DC 4.0, Power Storage DC 5.0, Power Storage DC 6.0
- New Battery Systems: Power Storage AC 4.0, Power Storage AC 5.0, Power Storage AC 6.0

#### SMA Modbus:

• Sunny Tripower Modbus Series: STP 3.0-3AV-40, STP 4.0-3AV-40, STP 5.0-3AV-40, STP6.0-3AV-40

#### SAJ:

R5 Series: R5-3K-S2, R5-3.6K-S2, R5-5K-S2, R5-6K-S2, R5-7K-S2, R5-8K-S2, R5-4K-T2, R5-5K-T2, R5-6K-T2, R5-8K-T2, R5-9K-T2, R5-10K-T2, R5-12K-T2, R5-13K-T2, R5-15K-T2, R5-17K-T2, R5-20K-T2

#### ABB:

Microgrid MGS100

# **Adaptions**

• my-PV: AC Elwa-E with replacement power electronics are now detected.

#### Webinterface:

If the Solar-Log™ does not answer a request within 30 seconds, this request is not cancelled
anymore. Instead a notice is shown. This way the Solar-Log™ can be accessed better using slow
connections.

# **Bugfixes**

#### **ABB Sunspec:**

• Powermanagement via RS485 now works reliably.

#### Huawei:

• For the 8KTL-28KTL Series, Idc, Iac and Uac were not recorded correctly. Fixed.

#### All ethernet based devices:

 The range during detection now considers the subnet mask to be able to search smaller ranges than class C.

#### SMA Sunny Island:

 The -12 series had an "Unknown"-Error. This, however was the code for "no Error" and is now treated correctly.

#### Secure Meters:

Error codes are now processed correctly.

#### Keba:

During re-detection a changed ip-address is considered correctly.

#### SMA Data1:

• Increased the stability of the Solar-Log in cases of faulty inverter communication.

#### Yield Data / Finances

• Fixed a data overflow in the calculations.

#### Smart Energy:

- When using the power reduction types "Adjustable reduction with the calculation of self-consumption" as well as "Remote controlled with the calculation of self-consumption" the irradiation value of an irradiation sensor is now being considered as available production. Thus consumers can be activated and the inverters are limited less via the power management.
- The currency of Macau is now shown as MOP instead of Pat.

#### **Extensions**

- Instead of ADAM4022-T IO-Boxes, ADAM-6022 devices can now be used. (Adaption of wiring and correct configuration of the ADAM-6022 are needed)
- New Country: Vietnam.

#### Solar-Log PRO380:

Adding additional data channels for accounting purposes (climkit): Etotal Forward, Etotal Reverse, Etotal Raw.



# Release Notes (Solar-Log™ 4.2.3 Build 112, 12.02.2019)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverter/SCBs/Meter/Battery Systems/other Devices

#### **NEW**

#### Kehua - models:

• SPI3600-B2, SPI4600-B2, KF-SPI3600-B2, KF-SPI4600-B2

#### Sineng String - models:

SP-8K, SP-10K, SP-12K, SP-20K, SP-40K, SP-50K, SP-60K, SP-40KLB, SP-50KLB, SP-60LB, SP70KLB

#### **Extensions**

#### SMA Sunny Tripower Core1 - new models:

STP33-US-41, STP50-US-41, STP62-US-41

# **Adaptions**

#### SMA Sunny Tripower Core1:

• Only Parameters marked as "Parameter for Plant Control" can be written repeatedly.

# **Bugfixes**

#### HiQ Solar:

• The dc current is now being scaled correctly.

#### CanadianSolar:

• The models CSI-4KTL1P-GI und CSI-5KTL1P-GI will now be detected.

#### SMA Solid Q:

• The AC power is now being shown correctly when it reaches higher values.

#### SMA RS485:

 On Plants with more than 16 inverters the data was sometimes not recorded correctly anymore. Fixed.

#### **Extensions**

#### New countries:

Hongkong, Macau

# **Adjustments**

#### Webinterface:

- When saving changes, texts that exceed the maximum length will not be truncated anymore.
   Instead they will be discarded.
- If individual values could not be saved the will now be highlighted in red.

#### (Addendum for 4.2.1 Build 109):

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

# **Bugfixes**

- Changed the resolution of the data channel for self consumption to Watthours to prevent overflow.
- Very Big Data Backups could not be restored. Fixed.

#### Webinterface:

• Configuration / System / Licenses: it is again possible to upload \*.lic license file. This was aborted since Firmware 4.2.1 with unknown error 99.



# Release Notes (Solar-Log™ 4.2.2 Build 111, 11.12.2018)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverter/SCBs/Meter/Battery Systems/other Devices

#### **NEW**

#### CanadianSolar models:

CSI-15KTL-GI-LFL, CSI-20KTL-GI-LFL, CSI-25KTL-GI-L, CSI-30KTL-GI-L, CSI-4KTL1P-GI, CSI-5KTL1P-GI, CSI-7KTL1P-GI-FL, CSI-8KTL1P-GI-FL, CSI-9KTL1P-GI-FL, CSI-10KTL1P-GI-FL, CSI-700KTL1P-GI, CSI-1KTL1P-GI, CSI-1.5KTL1P-GI, CSI-2.5KTL1P-GI, CSI-3KTL1P-GI

#### Ginlong models:

Solis-15K-LV, Solis-20K-LV, Solis-25K-LV, Solis-30K-LV, Solis-1P4K-4G, Solis-1P5K-4G, Solis-1P7K-4G, Solis-1P8K-4G, Solis-1P9K-4G, Solis-1P10K-4G, Solis-Mini-700-4G, Solis-Mini-1000-4G, Solis-Mini-1500-4G, Solis-Mini-2000-4G, Solis-Mini-2500-4G

#### JFY models:

SUNTREE 25000TL+, SUNTREE 28000TL+, SUNTREE 50000TL+

#### HiQ Solar models:

• TS208-5K75, TS480-8K (Kommunikation erfolgt nur über ein TrueString Gateway)

# **Extensions**

#### Keba:

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

# **Bugfixes**

#### Rishabh Radius:

• The yield is now recorded correctly.

#### Schneider Electric EM6400NG:

When configured as consumption meter the communication with other devices could be distorted.

#### Benning:

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

#### JFY:

• The model SUNTREE 30000TL+ is now correctly detected with 3 MPP trackers instead of 2.

# **Bugfixes**

#### TFT-Display:

The inverter selection in the initial configuration of the Solar-Log 1200 TFT display did not work.
 Fixed.

#### Webinterface:

 The contents of deactivated input fields is now readable in Safari webbrowser (Different grey tones are used now).



# Release Notes (Solar-Log™ 4.2.1 Build 110, 20.11.2018)

for Solar-Log 250, 300, 1200, 1900 and 2000

# **Bugfixes**

#### Solar-Log 1200/2000:

• If no weather forecast data was available it could lead to an invalid state (Freeze) of the TFT-display. Fixed.



# Release Notes (Solar-Log™ 4.2.1 Build 109, 13.11.2018)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverter/SCBs/Meter/Battery Systems/other Devices

#### **NEW**

#### SAJ - Models:

Suntrio 4K-60K.

#### Ingeteam - Series:

Ingecon 3Play 100K

#### Kehua - Models:

SPI3000-B2, SPI4000-B2, SPI5000-B2, SPI6000-B2, SPI7000-B2, SPI8000-B2, KF-SPI3000-B2, KF-SPI3000-B2, KF-SPI4000-B2, KF-SPI5000-B2, KF-SPI6000-B2, KF-SPI7000-B2, KF-SPI8000-B2, SPI8K-B, SPI10K-B, SPI12K-B, SPI15K-B, SPI17K-B, SPI20K-B, SPI30K-B, SPI33K-B, SPI36K-B, SPI40K-B, SPI50K-B, SPI60K-B, SPI60K-B, SPI60K-BHV, SPI60K-BHV, SPI60K-BHV, KF-SPI8K-B, KF-SPI8K-B, KF-SPI10K-B, KF-SPI12K-B, KF-SPI15K-B, KF-SPI17K-B, KF-SPI20K-B, KF-SPI30K-B, KF-SPI33K-B, KF-SPI36K-B, KF-SPI40K-BHV, KF-SPI50K-BHV, KF-SPI60K-BHV, KF-SPI60K-BHV, KF-SPI70K-BHV, KF-SPI80K-BHV

#### JFY - Models:

SUNTREE 5000TL, SUNTREE 6000TL, SUNTREE 8000TL, SUNTREE 10000TL, SUNTREE 12000TL,
 SUNTREE 15000TL, SUNTREE 17000TL, SUNTREE 20000TL, SUNTREE 30000TL, SUNTREE
 5000TL+, SUNTREE 6000TL+, SUNTREE 8000TL+, SUNTREE 10000TL+, SUNTREE 12000TL+, SUNTREE 17000TL+, SUNTREE 17000TL+, SUNTREE 17000TL+, SUNTREE 17000TL+

#### SMA - Model:

SOLID-Q 50

#### Canadian Solar - Models:

• CSI-25KTL-GS-FL, CSI-30KTL-GS-FL, CSI-36KTL-GS-FL, CSI-40KTL-GS, CSI-50KTL-GS-FL, CSI-50KTL-GS, CSI-50KTL-GS-FL, CSI-50KTL-GS, CSI-60KTL-GS-FL

#### VARTA - Models:

VARTA flex storage P, VARTA flex storage E

#### Ginlong - Models:

 Solis-5K-4G, Solis-6K-4G, Solis-8K-4G, Solis-9K-4G, Solis-10K-4G, Solis-12K-4G, Solis-15K-4G, Solis-17K-4G, Solis-20K-4G, Solis-5K-4G-LV, Solis-10K-4G-LV, Solis-25K-4G, Solis-30K-4G, Solis-33K-4G, Solis-40K-4G

# **Adaptions**

#### Ingeteam: Ingecon Sun Smart TL (3-phase):

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

#### ABB (Sunspec):

- Stability improvements.
- Changed communication to prevent damaging the inverter.
- Power reduction and reactive power commands are now sent individually to each inverter.

# **Bugfixes**

#### TBEA:

- Since Firmware 4.1.2 the inverter selection was not filled correctly:
  - Sunoasis 10k-20k, Inverter selection is now "Sunoasis 10-20k"
  - Sunoasis 50KTL-S, Inverter selection is now "Sunoasis 50/60KTL"

#### KACO:

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

#### 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.

#### Generic Sunspec-Protocol:

 In combination with this protocol the data aquisition for other components was sometimes disturbed.

#### ABB (Sunspec):

 In combination with this protocol the data aquisition for other components was sometimes disturbed.

# **Adaptions**

#### Webinterface:

- Configuration / Plant / Plant groups:
  - If plant groups are activated, at least one valid plant group must be configured from now on.
  - Inactive plant groups are not shown anymore. New Plant groups can be added using the (+) icon and deleted using the (-) icon.
  - The function "distribute automatically' from now on only assigns unassigned devices to groups. (Empty groups are preferred.).
- Configuration / Feed-In Management / Reactive power:
  - For functiosn requiring a utility meter, a warning is shown if the utility data is missing.
- Configuration / Feed-In Management / Active power + Reactive power:
  - The warning "No interface assignment chosen!" is not shown for deactivated control
    anymore.

# **Bugfixes**

#### Webinterface:

- Configuration / Plant / Plant groups:
  - Due to a bug it was possible to assign more than 15 device. Fixed.

### HTTP-Export:

- After a manual data correction the data for the first corrected day was not transmitted automatically. Fixed.
- The data for the very first day of data aquisition as well as in certain scenarios where a manual data correction was performed were not always transmitted correctly. Fixed.



# Release Notes (Solar-Log™ 4.2.0 Build 108, August 28, 2018)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverter/SCBs/Meter/Battery Systems/other Devices

#### New

#### Schneider Conext CL125 (new Inverter):

 Schneider Conext CL125 via Sunspec protocol (includes power reduction and reactive power management).

#### Rishabh Radius (new Inverter)

#### TBEA (new Inverter):

TS50KTL-s

#### SiNeng (new Inverter):

• CP-1000-B, EP-1260-A, EP-0500-A, EP-0630-A, EP-1000, EP-1000-B.

#### Universal Sunspec protocol:

 Universal Sunspec protocol. Selection of Manufacturer: Solar-Log, Type: Sunspec via RS485 or Ethernet.

#### Kostal via Sunspec as beta version

#### Secure Meters (new Meter):

• Secure Meters: Elite 440 series ( 440-445, 440-446, 440-447, 440-448).

#### SiNeng (new SCB):

• SiNeng Smart MPPT Combiner Box Model EJB-16-M4 (License needed).

#### Fonrich (SCB)

Support for the following models from the FR-DCMG Series: FR-DCMG-MMPB, FR-DCMG-MMPD,
 FR-DCMG-MMPU

### Adaptions

- Changed interface assignment selection from ABB:PVS to ABB:PVS Central.
- SMA Sunny Tripower Core1 (STP 50-40): The detection is now limited to Device Type ID CORE1.
- Solar-Log Pro: The detection routine now handles unused adresses faster.

#### Hoval:

 The heatpump can now be coupled with a switch group so additional data is shown in the smart energy history.

#### M&T Sensor:

• The insolation value is now recorded as a raw value.

#### SolarEdge:

 Matched the communication timing when using modbus protocol to the changed behaviour of the inverters (after a firmware update on the inverters).

#### Huawei:

Accelerated the reactive power management.

#### Solar-Log™ Pro:

• The detection routine processes unused addresses faster now.

### **Bugfixes**

 Reactive power management was sometimes not done correctly if an additional power reduction was active. Fixed.

#### SMA Speedwire:

 The inverter detection now considers the subnet mask to search in a smaller range than Class C if suitable.

#### Sonnenbatterie Eco 8:

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

#### Solar-Log Pro1-Mod:

• The data channel Pac1 is now filled correctly. Until now it was empty.

#### 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.

#### 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.

#### Schneider Electric EM6400S:

• The Device showed a wrong status. Fixed.

#### **Extensions**

#### Varta:

For the Varta battery systems it is possible to shift the time of charging based on wheather forecast data under "Devices/Configuration/Delay Battery Charge". This is useful for plants that have configured a fixed reduction. Not available for Solar-Log 50/250, to receive the weather data the device has to transmit to an Enerest Portal (only via HTTP) and the Plant location and orientation/inclination of the modules have to be configured correctly.

#### **New Countries:**

- Palestine
- Philippines

# **Adaptions**

- The values of a manual data correction will be transmitted to the portal automatically with the next http transfer.
- Until now more than one battery system was allowed during detection. Fixed.
- The languages Dutch and Turkish will not receive new translations. New labels will only be shown in english.

#### Webinterface:

- Diagnostics / Inverter Diagnostic / Modulefield Comparison:
  - The legend is now shown below the plot to accomodate a bigger number of lines.
  - The mouseover of a line now also shows the device name in addition to the tracker index.
  - The number of lines is now limited to 50 (Performance reasons).
- Configuration / Feed-In Management / Reactive power:
  - The switches for inductiv (yes/no) were replaced by a switch to select the phase shift (inductive/capacitive).
  - Modes "Fixed value cos (Phi) shift factor" & "Fixed reactive power in Var":
     Unused entries in the tables are now hidden and can be added/removed dynamically.
     The times in the tables are now validated to be in ascending order.
  - Mode "Controled cos (Phi) shift factor":
     The step assignments are now configured through select-boxes instead of text fields.
     The connectable areas now appear under the table.
- Configuration / Internet / Portal: As the red "X" (retrieve portal server automatically) was hardly recognizeable as a button it was replaced by a button.
- Configuration / Network / Ethernet: When de-/activating DHCP the browser will now forward to http://solar-log-XXXX or the configured ip address.
- Configuration / Plant / Forecast: If plant groups were activated without configuring a valid plant group, a warning is now shown instead of an empty yearly target table.

# **Bugfixes**

#### Solar-Log 1200,2000:

 Under Configuration/System/Display/Startscreen: When Day or Month was chosen, the data was not shown. Fixed.

#### Webinterface:

- Assistant: Device Detection: The deactivated button "continue" can not be clicked anymore.
- The calculation of the connected generator power now works correctly with meters in production mode.



# Release Notes (Solar-Log™ 4.1.2 Build 107, July 10, 2018)

for Solar-Log 250, 300, 1200, 1900 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**

#### Webinterface:

- Configuration / Plant / Tariff: When using plant groups, any of the groups (but only one of them) can be assigned the modes "Feed-in tarif & Self-consumption refund", "Feed-in tarif & Self-consumption" oder "Consumption of self-produced power" again. (With Firmware 4.1.1 these modes could only be assigned to the first group).
- The changes for the LCD progress during firmware updates mentioned in firmware 4.1.2 Build
   106 03.07.2018 were not active. Fixed.



# Release Notes (Solar-Log™ 4.1.2 Build 106, July 3, 2018)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverters/SCBs/Meter/Battery systems/other Devices

#### New

#### ABB (Sunspec)

Support for Modbus Sunspec via TCP/IP

Added support for the following models

- S (1 MPPT) and SX2 (3 MPPTs) models of TRIO-TM-50.0-400, TRIO-TM-60.0-480, TRIO-TM-60.0-480-US
- UNO-DM-5.0-TL-PLUS
- UNO-DM-6.0-TL-PLUS, UNO-DM-6.0-TL-PLUS-US
- UNO-DM-3.8-TL-PLUS, UNO-DM-3.8-TL-PLUS-US
- UNO-DM-4.6-TL-PLUS
- UNO-DM-4.0-TL-PLUS
- UNO-DM-3.3-TL-PLUS-US
- UNO-DM-2.0-TL-PLUS
- UNO-DM-1.2-TL-PLUS
- TRIO-50.0-TL-OUTD-US-480
- SIRIUS PVS-120.0-480-EU
- SIRIUS PVS-100.0-400-EU

#### **Extensions**

#### QCells

• Added support for power reduction.

# **Bugfixes**

#### Keba

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

#### Sunways NT10000

• Added status codes 42-44 (Relais error 1-3).

#### **ABB Sunspec**

• The protocol only worked for address 1 via RS485. Fixed.

#### **Extensions**

#### Solar-Log 50

 Power reduction (with and without consideration of self-consumption) is now available without an additional licence.

# **Bugfixes**

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

#### Webinterface

 Diagnostics / Components / SCB Monitor: The correct table header will now always be shown for the corresponding table content.

#### Solar-Log 50

 Data aquisition is not blocked for over 30 minutes anymore (Problem with certain devices, especially Meters in mode consumption- or utility-meter).



# Release Notes (Solar-Log™ 4.1.1 Build 105, 15.05.2018)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverters/SCBs/Meter/Battery systems/other Devices

#### New

#### **QCells**

Support for the following devices from the Q.HOME+ ESS-G1 series

- ESS-G1 3.6
- ESS-G1 5.0
- ESS-G1 8.0
- ESS-G1 Scalable

# **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 50

• When a consumption meter and an inverter were configured on the same 485 bus with active power control the data aquisition was faulty. Fixed.

#### Webinterface

Configuration / Plant / Grafics: The switches to use "Graphic autoscale" as well as "Consumpti-

- on: Line graphics" can be used again and shows the correct state of the configuration. (Faulty in Firmware 4.1.1 Build 104)
- Configuration / Devices / Definition / SCB: ABB can be chosen as SCB type again, if the correct SCB license is installed, or rather this configuration will not be shown as faulty anymore. (Faulty since Firmware 4.1.0)



# Release Notes (Solar-Log™ 4.1.1 Build 104, 02.05.2018)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverters/SCBs/Meter/Battery systems/other Devices

#### New

#### Azzuro (new Inverters):

- 1100TL, 1600TL, 2200TL, 2700TL, 3000TL
- 10000TL, 15000TL, 17000TL, 20000TL
- 30000TL, 33000TL, 40000TL
- 50000TL, 60000TL, 70000TL
- 3000TLM, 3680TLM, 4000TLM, 4600TLM, 5000TLM, 6000TLM
- 4.4KTL, 5.5KTL, 6.6KTL, 8.8KTL, 11KTL, 12KTL
- 3KTLM, 3.6KTLM, 4KTLM, 4.6KTLM, 5KTLM, 6KTLM

#### Polycab (new Inverters):

- PSIS Series: 0.7K, 1K, 1.5K, 2.0K, 2.5K, 3K, 3.6K, 4K, 4.6K, 5K, 3K-ST, 3.6K-ST
- PSIT Series: 6K, 10K, 15K, 20K, 25K, 30K, 36K, 40K, 50K-DC

#### **Extensions**

#### Huawei (added support for the following models):

SUN2000-45KTL-US-HV-D0, SUN2000-55KTL-HV-D1, SUN2000-55KTL-IN-HV-D1, SUN2000-55KTL-HV-D1-001, SUN2000-60KTL-HV-D1-001, SUN2000-60KTL-HV-D1, SUN2000-33KTL-US, SUN2000-36KTL-US, SUN2000-40KTL-US.

#### Varta:

• The integrated current sensor of the Varta Pulse models is now used as a consumption meter.

#### Ginlong:

- Extended support for the Solis Three Phase Series to support the following models:
  - Solis-33K, Solis-40K, Solis-50K, Solis 60K-HV, Solis-70K-HV.

#### KStar:

- The Series "KSG" and "KSG DM" will now record data for single AC-Phases, DC-Voltages and DC-Currents.
- The summed up AC-values were removed.

#### Omnik:

Added support for communication via RS485.

#### SMA Sunny Tripower Core1 (STP 50-40):

• It is now possible to enter the SMA Gridguard Code if it is neccessary for Powermanagement.

# **Bugfixes**

#### Schneider EM6400NG:

- Values were always "0" on Solar-Log 250/300/1200/1900/2000. Fixed.
- The yield calculation was wrong in the meter mode "Consumption meter (bi-directional)". Fixed.

### Sonnen Eco 8:

- The meter modes for the 2 additionally detected meters (Consumption & Generation) were not restricted to useful values. Fixed.
- The re-detection in case of communication errors was not working correctly. Fixed.

#### GoodWe:

Negative temperature values were displayed incorrectly. Fixed.

#### my-PV - AC ELWA:

Under certain circumstances the Smart-Energy-Control did not work with the my-PV heatrod.
 Fixed.

#### SMA Sunny Island:

• The device detection did not work correctly. 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, independent of the actual configuration). Fixed.

#### Phonosolar:

The available meter modes for the integrated consumption meter is restricted to useful values.

#### Janitza / Inepro / Schneider Electric EM6400S / Iskra / L&T / Mikro / Solar-Log™ Meter:

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

#### Ingeteam:

• Some inverters were detected with 0 MPP-Trackers. Fixed.

#### SMA Data1 Protocol:

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

### Solar-Log™ Pro380:

Fixed problems during detection and data aquisition for old versions of the Pro380 meters.

#### **Extensions**

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.

#### FTP-Export:

 With an activated FTP-Export license the minute data CSV-Format of the current day will now be exported with every transmission.

#### Webinterface:

• Input fields now contain the unit of the value (e.g. Watt or Volt).

#### Restoring system settings from a backup:

• The handling of faulty backups was improved.

# **Adaptions**

#### Webinterface:

- Several small changes and optimizations.
- The error message for an invalid text input field will now be displayed with an mouseover on the input field instead of an extra icon.
- Configuration / Internet / Backup & Configuration / Notifications / Yield:
  - The checkboxes to de-/select days were replaced by buttons.
- Configuration / Plant / Tariff & Configuration / Plant / Electricity costs:
  - To increase clearness, only the used entries are shown in the tables.
- Configuration / Devices / Configuration / Configuration:
  - The module field can now be chosen via a select box instead of textual input.
  - The field for connected generator power was removed for pyranometers and weather stations.
  - The field for connected generator power was removed for sensors.

# **Bugfixes:**

- On plants with an irradiation sensor installed, it could happen that failure emails were sent mistakenly. Fixed.
- New email certificates for T-Online und Gmail.
- In the setting for Device Notifications the setting "Activate after X readings" could change by itself.

#### FTP-Export:

• The exported CSV files only contained values for 3 MPP-trackers. Fixed.

#### Webinterface:

Fixed some mistakes in the translations.

- Diagnostics / Inverter diagnostic / Modulefield comparison:
  - If only MPP-trackers greater 3 of an inverter were assigned to a modulefield, the corresponding curve was not shown. Fixed.
- Diagnostics / Inverter diagnostic / Tracker comparison:
  - Instead of the voltages of the MPP-trackers, 0-values or power values of trackers with higher numbers for devices with more than 3 MPP-trackers were shown. Fixed.
- Configuration / Plant / Forecast:
  - With Firmware 4.1.0 in combination with the Safari webbrowser an error message was shown and the page was not useable anymore. Fixed.
- Configuration:
  - The cancel button did not reset switch elements correctly. Fixed.
- Configuration / Devices / Configuration / Configuration:
  - When changing MPP-tracker values the total generator power was recalculated after leaving the input field. This is now done immediately.
  - The module field for meters in mode "Generator Photovoltaic" as well as "Total plant meter" is now editable again.
- The following pages caused an error when the cancel button was pressed:
  - Configuration / Devices / Definition / SCB.
  - · Configuration / Notifications / Power & Failure.
  - Configuration / Feed-In Management / Active power.
  - · Configuration / Feed-In Management / Reactive power.

#### Solar-Log 250:

- The maximum number of inverters was incorrectly set to 1 instead of 2. Fixed.
- Since firmware 4.1.0 the pages "Configuration / Internet / Export" & "Configuration / Internet / Backup" were shown by mistake. Fixed.

# Configuration / Notifications / Device Notifications & Configuration / Notifications / Power & Failure:

 When leaving the page or changing the device after using the options "Save all..." or "Save multiple..." the notification about unsaved changes will not be shown anymore.

#### Licenses:

- Without a working internet connection, previously synchronized licenses were removed. Fixed.
- If the maxmimum alowed plant size was increased by a license a restart of the device was necessary. Fixed.
- For licenses that activate a driver, a restart of the device and reload of the webinterface was necessary. Fixed.



# Release Notes (Solar-Log™ 4.1.0 Build 103, 28.02.2018)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverters/SCBs/Meter/Battery systems/other Devices

# **Bugfixes**

#### Solar-Log™ Pro380:

• The data query only worked in the mode "Consumption meter". Fixed.

#### Sungrow:

• Active power reduction did not work correctly for all models. Fixed.

#### SolarEdge:

• With Firmware 4.1.0-102 too many MPP trackers were created for these devices. Fixed.

#### Schneider EM6400NG:

• The name for this device was wrong in the interface assignment. Fixed.

# **Bugfixes**

#### Webinterface:

- With Firmware 4.1.0-102 the Page Configuration / Devices / Configuration / Plant passwords was not shown although SMA inverters were in use. Fixed.
- The page Configuration / Devices / Definition / Large external display was not shown with Firmware 4.1.0-102. Fixed.
- Some options were shown in the user menu, although the proper permissions were missing.
   Fixed.

Diagnostics / Inverter diagnostic / Modulefield comparison: With negative module temperatures too high sensor values were shown. Fixed. Data Backup: Devices with more than 3 MPP trackers caused problems during the creation of a data backup. Fixed.



# Release Notes (Solar-Log™ 4.1.0 Build 102, 13.02.2018)

for Solar-Log 250, 300, 1200, 1900 and 2000

# Inverters/SCBs/Meter/Battery systems/other Devices

## New (Pre-Release)

#### Ingeteam:

New Models: Ingeteam 1Play/3Play Series.

#### SMA:

• SUNNY TRIPOWER CORE1 (STP 50-40) (including Active & Reactive Power Management).

#### Sofarsolar (New inverters):

• TL Series:

Sofar1100TL, Sofar1600TL, Sofar2200TL, Sofar2700TL, Sofar3000TL, Sofar10000TL, Sofar15000TL, Sofar17000TL, Sofar20000TL, Sofar30000TL, Sofar30000TL, Sofar40000TL, Sofar50000TL, Sofar60000TL

TL-X Series:

Sofar4.4KTL-X, Sofar5.5KTL-X, Sofar6.6KTL-X, Sofar8.8KTL-X, Sofar11KTL-X, Sofar12KTL-X

TL-HV Series:

Sofar70000TL-HV

TLM Series:

Sofar3000TLM, Sofar3680TLM, Sofar4000TLM, Sofar4600TLM, Sofar5000TLM, Sofar6000TLM, Sofar7.5KTLM

TLM-G2 Series:

Sofar3KTLM-G2, Sofar3.6KTLM-G2, Sofar4KTLM-G2, Sofar4KTLM-G2, Sofar5KTLM-G2, Sofar6KT-LM-G2

#### Solectria:

New Models PVI3800TL/PVI5200TL/PVI6600TL/PVI7600TL
 (Selection in interface assignments ,Solectria\_V5')

#### Schneider Electric:

New Meter EN6400NG.

#### ABB:

New Model TRIO 50.0 TL OUTD (Selection in interface assignments ,Sunspec')

#### Rainwise:

• Support for the weather station PV-Met<sup>™</sup>-200.

#### Solar-Log:

New Meter: Pro1-Mod, Pro2-Mod.

#### SMA:

• New battery System: Sunny Island SI3.0M-11/SI4.4M-11/SI6.0H-11/SI8.0H-11.

# **Bugfixes**

#### Sonnen Eco 8:

• If no device was found the detection could not be completed. Fixed.

#### **Extensions**

• Support for the Solar-Log 1900 devices.

#### Webinterface:

- Diagnostics / CSV-Export: Added the option to export the units to the csv header.
- Extended the usable range for the finacial overview.

# **Bugfixes**

#### Webinterface:

- Yield Data / Current values / Cockpit: The axis labeling of the weekly overview was wrong for language selection Chinese and Turkish. Fixed.
- After changing the interface assignments the Plant/Connected DC power was not immediately recalculated. 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.
- The left navigation was not being rebuilt after login/logout which lead to some elements only being shown after an additional click in the title bar.



# Release Notes (Solar-Log™ 4.1.0 Build 102, 13.02.2018)

Adjustments / Extensions for Solar-Log 250, 300, 1200 and 2000 (already released for Solar-Log 50 with Firmware 4.0.0)

# Inverters/SCBs/Meter/Battery systems/other Devices

#### **Extensions**

#### Sungrow:

Support for 4 MPP Trackers.

#### Huawei:

Support for 4 MPP Trackers.

#### Ginlong:

Support for 4 MPP Trackers.

#### **Extensions**

- New Licence model.
- Extension of the Modbus TCP Advanced Interface for up to 12 MPP Trackers.

#### Webinterface:

In addition to Yield Data, Diagnostics and Configuration there is an additional user menu, that
offers quick access to central functions. The Logic button has been moved to this new user
menu.

- Configuration / Plant / Forecast:
  - The monthly shares can now be optionally entered nun in kWh. After entry they will be converted to percentages.
  - From the given yearly target in kWh/kWp the yearly target in kWh will be calculated and displayed.
- Diagnostics / Inverter diagnostic / Inverter Details: If available, string currents will be shown.

# **Adjustments**

• Support for Japanese, Danish and Polish languages has been removed.

#### Webinterface:

- Configuration / System / Assistant was removed. This function is now included in the user menu.
- Configuration / Feed-In Management / Plant Parameters: The section plant passwords (currently only for sma inverters) was moved to a dedicated page under Configuration / Devices / Configuration / Plant Passwords.
- Configuration / Internet / E-Mail: Unneccessary entry fields will be hidden if the corresponding function is deactivated.
- Canvas-Support for Internet Explorer 9 has been removed.

# **Bugfixes**

#### Webinterface:

 Configuration / Devices / Definition / Interfaces: Depending on the Solar-Log™ Model, only the device classes that are actually supported are displayed. Additionally devices needing an interface that is not available will be hidden.



# Release Notes (Solar-Log™ 4.1.0 Build 102, 13.02.2018)

Changes since firmware 3.6.0 for Solar-Log 250, 300, 1200 and 2000

# Inverters/SCBs/Meter/Battery systems/other Devices

#### **Extensions**

#### Ginlong:

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

### **Bugfixes**

#### 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 values.

#### PvPowered:

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

#### 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:

• Of Samil, Sungrow and Weidmüller were not recorded. Fixed.

#### Sonnen Eco 8:

- If it was not possible to detect a solar battery Eco 8, this caused the Solar-Log™ system to crash.
   Fixed.
- Due to an update of the Sonnen Eco 8 the detection did not work anymore. Fixed.

#### **Extensions**

New country: Simbabwe.

# **Bugfixes**

#### Webinterface:

- Some special characters were not allowed when entering a password. Fixed.
- Some special characters were not saved 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").
- Gaphics:
  - The mouseover tooltip of a curve is now held on the left side inside the chart.
  - When using the zoom function some webbrowser 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 integrated 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 choice to not show the security note (No user password is configured) anymore, was not exported in system settings. Additionally the choice was reset when using the remote configuration of the Solar-Log WEB Enerest™ portal.
- The configuration was exported to the portal after each reboot. Fixed.