

# Release Notes - 6.1.1 Build 164 - 03.05.2024

Firmware releases extend the range of functions and contain improvements for the security, stability and reliability of your Solar-Log product. Compatibility of component drivers is improved by adaptations. The following release notes contain the most important new features.

# **Component Drivers**



#### Note!

For information on connecting the devices, refer to the **Component Connection Manual**.

#### New

# Janitza:

New model: UMG96RM-E

#### SolarEdge:

• Speed up power management commands over ethernet.

# Sungrow:

New models: SG100CX, SG250HX-IN, SG25CX-SA, SG49.5CX-JP, SG22RT, SG23RT, SG25RT, SG5.0RT-P2, SG6.0RT-P2, SG8.0RT-P2, SG10RT-P2, SG12RT-P2, SG15RT-P2, SG17RT-P2, SG20RT-P2, SG23RT-P2, SG25RT-P2, SG3.0RT-P2, SG4.0RT-P2, SG7.0RT-P2, SG5.5RS-JP, SG3.0RS-L, SG4.0RS-L, SG5.0RS-L, SG6.0RS-L, SG8.0RS-L, SG9.0RS-L, SG10RS-L, SG125HX, SG75CX, SG350HX-US (up to 12 MPPT and 24 Strings), SG320HX-20, SG350HX-20 (6 MPPT and 24 Strings), SG15CX-P2-LV, SG20CX-P2-LV, SG25CX-P2-LV, SG200HX-US

# **Component Drivers - Adjustments & Extensions**

#### Diagnostics / Feed In Management / Utility Meter:

Stability improved.

# Extended reach-ability in networks:

Additionally to http://solar-log and http://solar-log-xxxx (last 4 digits of SN)to access the Webinterface, http://solar-log.local and http://solar-log-xxxx.local are now added. The new URLs are working on multiple OS like Windows, Linux, MacOS, iOS and Android, whereas the old URLs only work in combination with Windows.

# FTP(s) export:

 Now the correct Solar-Log serial number is provided by the base\_vars.js which is written from FTP(s) export.

# Login passwords:

 We updated the storage format of all login passwords (User, Installer, Installer/PM) to an up to date cryptographic algorithm. Although the passwords are no longer part of the configuration and don't change if you apply a configuration.

#### MOD 485:

Communication stability improved (especially Feed In Management commands).

# MOD 485 RS485 payload communication:

• Serial communication configuration parameter "7 data bits" is now functional again.

# Modbus Inverter Data Feedback Qac is wrong:

• If the Qac is > 32767 var or < -32768 var the value is wrong.

#### Modbus SCADA interface:

• Now the correct Solar-Log serial number is provided by the Modbus SCADA interface.

#### ModbusTCP PM interface:

New registers where added which includes the current Pac of each generator device.

#### Self consumption:

• The energy for self consumption is now saved and displayed correct in all cases.

# **Component Drivers - Bugfixes**

#### AROS:

Monitoring for RS485 and RS422 driver fixed.

# Bonfiglioli Vectron SCB:

Data monitoring fixed.

# Diehl AKO:

• The inverters are now shown as offline if can't communicate with them.

# **Growatt MAX:**

- General adjustments including:
  - · correct tracker count is now determined.
  - all string values are read.
  - · fixed daily yield.

# Huawei SUN2000 V2:

• For a few models the wrong number of strings were collected, if the devices were detected with a 5.x firmware version.

# Mencke&Tegtmeyer:

Prevent insolation value to fallback to 0 in case of no communication.

#### SMA SCB:

Data monitoring fixed.

# SMA Speedwire:

Speedwire displays correct status again.

# SolarEdge:

Abnormal high yield values from the device will be filtered out.



# Release Notes - 6.1.0 Build 163 - 12.04.2024

Firmware releases extend the range of functions and contain improvements for the security, stability and reliability of your Solar-Log product. Compatibility of component drivers is improved by adaptations. The following release notes contain the most important new features.

# **Component Drivers**



#### Note!

For information on connecting the devices, refer to the Component Connection Manual.

#### New

#### GoodWe HT:

 GW73KLV-HT, GW100K-HT, GW110K-HT, GW120K-HT, GW136K-HTH, GW150K-HTH, GW225K-HT, GW225KN-HT, GW250K-HT, GW250KN-HT

# GoodWe Sunspec:

New driver for GoodWe sunspec inverters:

GW5000-MS, GW6000-MS, GW7000-MS, GW8000-MS, GW8500-MS, GW9000-MS, GW10K-MS,
GW3600D-SS, GW4200D-SS, GW5000D-SS, GW3000-DNS-30, GW3600-DNS-30, GW4200-DNS-30,
GW5000-DNS-30, GW6000-DNS-30, GW5000-DNS-BR30, GW6000-DNS-BR30, GW4K-DT, GW5K-DT, GW6K-DT, GW8K-DT, GW10K-DT, GW12K-DT, GW15K-DT, GW8KAU-DT, GW10KAU-DT, GW15KAU-DT, GW20KAU-DT, GW12KLV-MT, GW15KLV-MT, GW20KLV-MT, GW25K-MT, GW29.9K-MT,
GW30K-MT, GW36K-MT, GW40KS-MT, GW50KS-MT, GW60KS-MT, GW50KS-MT-US, GW60KS-MTUS, GW73KLV-HT, GW75K-HT, GW80K-HT, GW100K-HT, GW110K-HT, GW120K-HT, GW136K-HTH,
GW125K-HT-JP, GW225K-HT, GW250K-HT, GW700-XS, GW1000-XS, GW1500-XS, GW2000-XS,
GW2500-XS, GW3000-XS, GW4000-SDT-20, GW5000-SDT-20, GW6000-SDT-20, GW8000-SDT-20,
GW10K-SDT-20, GW12K-SDT-20, GW15K-SDT-20, GW15KT-DT, GW17KT-DT

#### GoodWe Sunspec (Continued):

New driver for GoodWe sunspec inverters:

GW20KT-DT, GW25KT-DT, GW25K-MT, GW29.9K-MT, GW30K-MT, GW36K-MT, GW50KN-MT,

GW60KN-MT, GW75K-MT, GW80K-MT, GW50KBF-MT, GW60KBF-MT, GW75KBF-MT, GW80KBF-MT, GW30KLS-MT, GW35KLS-MT, GW70KHV-MT, GW80KHV-MT, GW12KLV-MT, GW15KLV-MT,

GW20KLV-MT.

#### Intilion:

• New driver for scalebloc energy, power, powerboost and scalestac.

#### Kehua SPI Series:

SPI250K-B-H, SPI200K-B-H, SPI225K-B-H, SPI175K-B-H, SPI136K-BHV, SPI125K-B, SPI100K-B.

#### Kernel:

 STON 0825, STON 1225, STON 1625, STON 2425, STOHS 0825, STOHS 1225, STOHS 1625, STOHS 2425.

#### SolaXPower X3-Commercial:

New driver for SolaXPower X3-Commercial inverter:
 X3-MGA-40K-G2, X3-MGA-50K-G2, X3-MGA-60K-G2, X3-MGA-20K-G2-LV, X3-MGA-25K-G2-LV,
 X3-MGA-30K-G2-LV, X3-MGA-35K-G2-LV, X3-FTH-80K, X3-FTH-100K, X3-FTH-110K, X3-FTH-120K,
 X3-FTH-125K, X3-FTH-136K-MV, X3-FTH-150K-MV, X3-FTH-40K-LV, X3-FTH-50K-LV, X3-FTH-60K-LV, X3-FTH-70K-LV.

#### Weidmüller:

New charging station driver:
 AC SMART ADVANCED, AC SMART VALUE and AC SMART ECO.

# **Component Drivers - Adjustments & Extensions**

#### **ABB Sunspec:**

New model: PVS-175-TL

#### Azzurro V3:

New models:

HYD 5500-ZSS HP V4 models (these models have a 20 character serial number) 3PH 100-110KTL-V4

#### Azzurro V3:

Renamed models:

```
3PH 15000-V3 -> 3PH 15000TL-V3
3PH 17000-V3 -> 3PH 17000TL-V3
3PH 20000-V3 -> 3PH 20000TL-V3
3PH 22000-V3 -> 3PH 22000TL-V3
3PH 24000-V3 -> 3PH 24000TL-V3
```

Removed model:

3PH 75KTL-HV

#### CCS:

• Support for usage as battery and consumption meter (bi-directional) added.

#### Fronius RS422 / SolarAPI:

New models from the "Symo Advanced" series:
 10.0-3-M, 12.5-3-M, 15.0-3-M, 17.5-3-M, 20.0-3-M

#### Fronius SunSpec Modbus / SolarAPI:

Power Management gets now refreshed at least every 30 seconds (or on change).

# Huawei, after appropriate tests and checks, we can now also release the following models:

SUN2000-12KTL-M5, SUN2000-15KTL-M5, SUN2000-17KTL-M5, SUN2000-20KTL-M5, SUN2000-25KTL-M5, SUN2000-15K-MB0, SUN2000-17K-MB0, SUN2000-20K-MB0, SUN2000-25K-MB0, SUN2000-25K-MB0, SUN2000-15K-MB0-ZH, SUN2000-17K-MB0-ZH, SUN2000-25K-MB0-ZH, SUN2000-25K-MB0-ZH, SUN600-15KTL-ZHM0, SUN600-17KTL-ZHM0, SUN600-20KTL-ZHM0, SUN600-23KTL-ZHM0, SUN600-25KTL-ZHM0, SUN2000-15KTL-ZHM5, SUN2000-17KTL-ZHM5, SUN2000-20KTL-ZHM5, SUN2000-25KTL-ZHM5

# Mennekes:

Adding more Status and Error Codes.

# SMA Sunspec v2:

• Speed up power management via Ethernet.

# Sofar Solar G3:

New models:

HYD 5500-EP, 25KTLX-G3, 30KTLX-G3, 33KTLX-G3, 36KTLX-G3, 40KTLX-G3, 45KTLX-G3, 50KT-LX-G3, ESI 3K-S1, ESI 3.68K-S1, ESI 4K-S1, ESI 4.6K-S1, ESI 5K-S1, ESI 5K-S1-A, ESI 6K-S1

# Sofar Solar G3:

• G4 models (these models have a 20 character serial number):

```
100KTLX-G4, 110KTLX-G4, 125KTLX-G4
```

Renamed models:

80KTL-LV -> 80KTL

100KTL-LV -> 100KTL

110KTL-LV -> 110KTL

Removed model:

75KTL-HV

# SolarEdge:

• Speed up power management via Ethernet.

# **Component Drivers - Bugfixes**

# AC THOR:

• If the heating element on an AC THOR 9S had less then 9kW the target power we set was too low.

#### Azzurro V3:

 Power Management is now also working correctly if more than one inverter is connected to the same RS485 bus.

# ChargeX:

• Yield was too small by a factor of 10.

# ComLynx:

Improved power management timing.

#### Diehl AKO:

• Filter invalid values receiving from the inverter.

# Fox ESS H3:

The values yield, Pac and Idc are now stored correctly.

# Fox ESS R:

- Improve data acquisition of devices which switch from not reachable to reachable state.
- Fault flags are correctly displayed.
- Computation of daily yield fixed.

#### Fronius Gen24:

 Now all bus addresses, not only 1, are found again during a device search when searching on RS485 (was an issue since 6.0.2).

# GoodWe Hybrid:

- Yield data will now recording correctly.
- Device was detected two times on its real address and on 247.

#### Growatt Gen X:

MPP tracker 9 - 12 are now also monitored correctly.

#### **Growatt Modbus:**

Improved power management timing.

# Huawei Smart Logger:

• The yield is now monitored correctly.

#### Huawei SUN2000 V2:

Driver stability improved.

#### Huawei V1:

 When steering to 0% Pdc values are very high for a short time. Now those values get filtered out.

#### INVT:

Improved power management timing.

# Kaco Ethernet:

Daily yield is now computed correctly.

#### Kaco RS485:

• Improve calculation of active power limit.

# Kaco Sunspec:

• The data acquisition now works reliably after a Solar-Log reboot.

#### Keba:

 Directly after a reboot triggered via Webinterface, no devices were found by device search, if the same search was performed before the reboot.

# **Kostal Modbus TCP:**

The data acquisition now works reliably after a Solar-Log reboot.

# **Kostal Standard:**

- Stability improved in case of Ethernet as interface.
- When searching for devices via Ethernet, it could happen that the search took an extremely long time, depending on the devices in the network.

# Mencke&Tegtmeyer:

• Insolation value is now recorded correctly.

#### Mennekes:

• Yield was too small by a factor of 10.

# MyPV:

Status and Error messages are corrected.

#### Omron:

• Status is now determined correctly.

#### **RCT Power:**

• Calculation of yield adjusted.

#### Schneider Electric iEM3000:

• Support for active power control at the grid connection point.

#### SMA Modbus:

• The data acquisition now works reliably after a Solar-Log reboot.

# SMA Speedwire:

 Directly after a reboot triggered via webinterface, no devices were found by device search, if the same search was performed before the reboot.

# SMA Sunpec v2:

- Communication stability for Core1 and Core2 improved.
- The data acquisition now works reliably after a Solar-Log reboot.

# Sofar Solar G3:

 Power Management is now also working correctly if more than one inverter is connected to the same RS485 bus.

# Solar-Log Pro:

• Yield was wrong if the Meter is connected to a MOD485.

# Solar-Log Pro:

Yield was wrong if the Meter is connected to a MOD485.

#### SolarEdge:

- The data acquisition now works reliably after a Solar-Log reboot.
- Improve communication stability if a Commercial Gateway or Firefighter Gateway is used.
- Correctly disable power management ramps for inverter firmware versions >= 3.2545 and >= 4.10.24.

# Solplanet:

• Improve power management.

# Sungrow:

- SG36CX-US is now correctly detected with 4 MPPTs.
- Invalid Pac peaks in the morning and evening are now filtered out.

# Sungrow Hybrid:

Yield data will now recording correctly.

#### Varta:

- Communication stability improved.
- The data acquisition now works reliably after a Solar-Log reboot.

# Firmware adjustments, extensions & bug fixes

# Configuration / Data / Initial Yield:

- Dates provided with a 4 digit year are now processed correctly.
- Yearly statistic data is now always summed up correctly.

# Configuration / Devices / Configuration:

Automatic distribution of MPP tracker power is now always equal to the total generator power
of the device. This mechanism is active during startup if the MPP tracker value of a device is not
configured at this time.

# Configuration / Direct Marketing:

- Following features are added:
  - Upload configuration files for Interconnector.
  - Visualization of current connection status to Interconnector.
- The settings now get saved instead of reset when a file upload is done before saving the changes.

#### Configuration / Feed In Management / Reactive Power:

• It is now possible to configure U/Uref and P/Pn values with 3 instead of 2 decimal places for the Curves Q(P/Pn), CosPhi(P/Pn), Q(U/Uc), CosPhi(U/Uc).

#### Device detection:

Changed the default name for newly detected devices to "Device".

#### Device events:

• Fixed a bug where device events won't be shown anymore and in the web portal the inverters were shown as offline.

#### Extension modules:

• Communication stability increased if 1 of 2 extension modules has failed.

# Feed In Management Feedbacks without ModbusTCP PM license:

 Feedbacks which do not need ModbusTCP PM as feedback output now work also without a ModbusTCP PM license.

# Increase data acquisition stability in combination with meters:

Increase data acquisition stability with specific meter configurations and not available meters.

#### Missing Status/Error Strings:

• All Status/Error strings will be written again to base\_vars.js during CSV Export via FTP.

#### Mod485 extension module:

Stability improved.

# Modbus TCP server:

The Modbus TCP server now always accepts up to 4 parallel connections.

#### Network Configuration:

- When the Solar-Log is assigned an address by a DHCP server, the Solar-Log's hostname is now displayed in the router in the format SOLAR-LOG-XXXX. The last four characters in the hostname correspond to the last four digits of the serial number.
- Deny an incorrect subnetmask in the frontend and backend of the Solar-Log. Prevents saving of invalid configuration.

# Power Management:

• In rare cases 0% was sent as command instead of the correct value.

# Reactive Feed In Management - steering the cos(phi) with digital inputs:

 Steering the cos(phi) through 5 digital inputs of an Adam Box (configured via PM profiles) was not working as expected. In previous versions, only the first 4 digital inputs were working.

# Security and Stability:

• Several adjustments are done to increase the security and stability topics.

# System stability in case of corrupted data:

• Improve detection and cleanup of corrupted data which could lead to system instability.



# Release Notes - 6.0.2 Build 162 - 25.09.2023

Firmware releases extend the range of functions and contain improvements for the security, stability and reliability of your Solar-Log product. Compatibility of component drivers is improved by adaptations. The following release notes contain the most important new features.

# **Component Drivers**



#### Note!

For information on connecting the devices, refer to the **Component Connection Manual**.

#### New

# Mennekes (Ethernet):

Mennekes ev charger: ECU-BRx and ECU-BBx.

# ChargeX (Ethernet):

Aqueduct charging system: Aqueduct 1.0, Aqueduct 2.0.

# Fox ESS (RS485):

- Fox ESS R series inverter:
   R75,R100, R110, R120, R136
- Fox ESS H3/AIO series hybrid inverter:
   AIO-H3-5.0, AIO-H3-6.0, AIO-H3-8.0, AIO-H3-10.0.

# Growatt (RS485):

Inverter driver for Mod, Max and Mid series.

# **Component Drivers - Adjustments & Extensions**

#### ChintPower Modbus:

New models:

25(20)kW inverter series, 100kW(125kW)\_1500V inverter series

#### Fronius Gen24:

 PM timeout is set to 30s this means if the Solar-Log stops sending PM commands the inverter will fallback to it's PM fallback value.

# Ginlong S5/S6:

New models:

S5-GR1P0.7K-1, S5-GR1P1K-M, S5-GR1P1.5K-M, S5-GR1P2K-M, Solis-3P5K-4G-AU-MX, Solis-3P8K-4G-AU-MX, Solis-1P6K-4G-US, Solis-1P7.6K-4G-US, Solis-1P8.6K-4G-US, S5-GR1P3.6K-M, S5-GR1P2.5K-M, S5-GR1P3K-M, S5-GR1P2.5K, S5-GR1P3K, S5-GR1P3.6K, S5-GR1P4K, S5-GR1P4.6K, S6-GR1P0.7K-M, S6-GR1P1K-M, S6-GR1P1.5K-M,S6-GR1P2K-M, S6-GR1P2.5K-M, S6-GR1P3K-M, S6-GR1P3.6K-M, S6-GR1P7K-M-LV, S6-GR1P2.5K, S5-GC25K, S5-GC30K, S5-GC33K, S5-GC36K-AU, S5-GC40K-AU, S5-GC40K-HV-AU, S5-GC50K-HV-AU, S5-GC50K IN, S5-GC60K IN, S5-GC60K-HV, S5-GC70K-HV, S5-GC25K-LV, S5-GC30K-LV, S5-GC36K-LV, S5-GC124K-HV, S5-GC124K-HV, Solis-80K-5G-PRO, Solis-110K-5G-PRO, Solis-100K-5G-PRO, GCI-230K-EHV-5G, Solis-250K-EHV-5G-PLUS, Solis-255K-EHV-5G-PLUS, Solis-185K-EHV-5G-US-PLUS, GCI-196K-EHV-5G-PLUS, GCI-215K-EHV-5G-PLUS, GCI-215K-EHV-5G-PLUS, S6-GR1P3K, S6-GR1P3.6K, S6-GR1P4K, S6-GR1P4.6K, S6-GR1P5K, S6-GR1P6K, S6-GR1P2.5K-LV, S6-GR1P3K-LV, S6-GR1P3.8K-LV, S5-GR1P7K2, S5-GR1P8K2, S5-GR1P7K, S5-GR1P8K, S5-GR1P9K, S5-GR1P10K, S5-GR1P6K, S5-GR1P7.6K, S5-GR1P8.6K, S5-GR1P8K, S5-GR1P9K, S5-GR1P10K, S5-GR3P3K, S5-GR3P4K, S5-GR3P5K, S5-GR3P6K, S5-GR3P8K, S5-GR3P9K, S5-GR3P10K, S5-GR3P12K, S5-GR3P13K, S5-GR3P15K, S5-GR3P17K, S5-GR3P20K, S5-GR3P23K, S5-GR3P25K, S5-GR3P12K, S5-GR3P13K, S5-GR3P15K, S5-GR3P5K, S5-GR3P6K, S5-GR3P8K, S5-GR3P9K, S5-GR3P10K, S5-GR3P5K-HV, S5-GR3P6K-HV, S5-GR3P8K-HV, S5-GR3P9K-HV, S5-GR3P10K-HV, S5-GR3P12K-HV, S5-GR3P15K-HV, S5-GR3P17K-HV, S5-GR3P20K-HV, S5-GR3P5K-LV, S5-GR3P6K-LV, S5-GR3P10K-LV

# Adam I/O Module:

• Communication status is now shown in local Web interface.

#### KACO (RS485):

New models:

KACO blueplanet 50 NX3 M5, KACO blueplanet 60 NX3 M5

# my-PV:

New models:

AC ELWA 2

# Sungrow Hybrid:

New models:

SH3.0RS, SH4.0RS, SH5.0RS, SH5.0RT-20, SH6.0RT-20, SH8.0RT-20, SH10RT-20, SH5.0RT-V112, SH6.0RT-V112, SH6.0RT-V112, SH6.0RT-V122, SH6.0RT-V122, SH6.0RT-V122, SH6.0RT-V122

# **Component Drivers - Bugfixes**

# ABB PVI/TRIO/Ultra/UNO:

Reactive power management fixed.

#### Adam 4050:

Functional improvements.

#### Azzurro V3:

- Driver is now named V3 instead of G3.
- Etotal and PAC values during battery charging/discharging corrected.

#### CanadianSolar CSI-CT:

• Power management improved.

# **ChintPower Modbus:**

• Power management improved.

#### Evoco:

• Reliability of yield data improved.

# Fronius Hybrid:

Imporved meter value monitoring when using Sunspec.

# Ginlong 5G:

• For some models DC values are corrected/included in device table.

# Huawei Smart Logger:

• The sign for the reactive power commands is now correct.

#### Huawei SUN2000 V2:

• Daily yield didn't reset to 0 at midnight. If this update is installed the yield data wont increase for the rest of the day. If possible install it in the evening.

#### Huawei V2:

• Communication reliability improved.

#### Inepro:

• Yield is calculated correctly even if the meter has been installed the wrong way.

# **Kostal Sunspec:**

• Include negative Pac values.

# **Kostal TCP:**

• Communication stability improved.

#### Mod485 extension module:

• Improved interface recognition after Solar-Log reboot.

# my-PV:

• After a firmware update from < 6.0, the AC ELWA was not fully functional anymore.

# Oelmaier:

• Included in firmware generation 6.

#### QCells:

• Reliability of yield data improved.

#### **RCT Power:**

• Reliability of yield data improved.

# Schneider iEM3000:

Reliability of yield data improved.

#### SMA Modbus:

• Communication improvement with enabled power management.

# SofarSolar G3:

 KTLX-G3 devices require to set power management registers in a batch. Corrected PAC if the battery is charged/discharged.

# Solaredge Hybrid:

• If two batteries are installed battery values are now correct.

# Solarmax:

Show correct status.

#### Solectria V4:

Power management didn't work with newer inverter firmware versions.

#### Solplanet:

• Power and device detection management improved.

#### Sonnen Eco 8:

- Increase system stability during battery detection improved.
- Reliability of yield data improved.

# Sungrow:

Fixed Communication over Modbus TCP.

# Sungrow Hybrid:

Power management improved.

#### Varta:

- Communication reliability improved.
- Reliability of yield data improved.

# Firmware adjustments, extensions & bug fixes

# Configurable feedback values for Adam box:

 On the tab Configuration / Feed In Management / Feedbacks it's now possible to configure a minimum value which is higher than the maximum value.

# Feedback value Modbus V3:

Possible production power feedback register is filled without active direct marketing.

# PM History wrong DM entries:

PM history entry handling improved.

# Wrong yearly and total yield displayed:

Yield data calculation for Year and Total improved.

# Solar-log loses Config after 3 years:

 System stability for a Solar-Log with a runtime over more than 3 years increased. For FW5 from V5.1.2 (Build 157 - 06.07.2023) and for FW6 from V6.0.1 (Build 161 - 08.05.2023) and higher resolved.



# Release Notes - 6.0.1 Build 161 - 08.05.2023

Firmware releases extend the range of functions and contain improvements for the security, stability and reliability of your Solar-Log product. Compatibility of component drivers is improved by adaptations. The following release notes contain the most important new features.

# **Component Drivers**



#### Note!

For information on connecting the devices, refer to the **Component Connection Manual**.

#### New

# CSS Meter (RS485):

WattNode Series: WND-WR-MB.

#### GoodWe Hybrid (RS485):

GW5K-ET, GW6.5K-ET, GW8K-ET, GW10K-ET, GW15K-ET, GW20K-ET, GW25K-ET, GW29.9K-ET,
 GW5KN-ET, GW6.5KN-ET, GW8KN-ET, GW10KN-ET

# Kaco (Ethernet):

• New Driver: Kaco Sunspec. Existing driver was renamed to Kaco Generic.

# Sofarsolar Inverter (RS485): New Driver for G3 protocol

• 3KTLM-G3, 3.68KTLM-G3, 4KTLM-G3, 4.6KTLM-G3, 5KTLM-G3, 6KTLM-G3, 3.3KTLX-G3, 4.4KT-LX-G3, 5.5KTLX-G3, 6.6KTLX-G3, 8.8KTLX-G3, 11KTLX-G3, 12KTLX-G3, 15KTLX-G3, 17KTLX-G3, 20KTLX-G3, 22KTLX-G3, 24KTLX-G3, 25KTLX-G3, 30KTLX-G3, 33KTLX-G3, 36KTLX-G3, 40KTLX-G3, 45KTLX-G3, 50KTLX-G3, 80KTL-LV, 100KTL-LV, 110KTL-LV, 75KTL-HV, 100KTL-HV, 125KTL-HV, 136KTL-HV, 250KTL-HV, 255KTL-HV

#### Sofarsolar Hybrid system (RS485): New Driver for G3 protocol

HYD 3000-ES, HYD 3600-ES, HYD 4000-ES, HYD 4600-ES, HYD 5000-ES, HYD 6000-ES, HYD 3000-EP, HYD 3600-EP, HYD 4000-EP, HYD 4600-EP, HYD 5000-EP, HYD 6000-EP, HYD 5KTL-3PH, HYD 6KTL-3PH, HYD 8KTL-3PH, HYD 10KTL-3PH, HYD 15KTL-3PH, HYD 20KTL-3PH, HYD 110KTL-3PH

#### ZCS Azzurro Inverter (RS485): New Driver for V3 protocol

• 1PH 3000 TLM-V3, 1PH 3680 TLM-V3, 1PH 4000 TLM-V3, 1PH 4600 TLM-V3, 1PH 5000 TLM-V3, 1PH 6000 TLM-V3, 3PH 3.3KTL-V3, 3PH 4.4KTL-V3, 3PH 5.5KTL-V3, 3PH 6.6KTL-V3, 3PH 8.8KTL-V3, 3PH 11KTL-V3, 3PH 12KTL-V3, 3PH 15000-V3, 3PH 17000-V3, 3PH 20000-V3, 3PH 22000-V3, 3PH 24000-V3, 3PH 25KTL-V3, 3PH 30KTL-V3, 3PH 33KTL-V3, 3PH 36KTL-V3, 3PH 40KTL-V3, 3PH 45KTL-V3, 3PH 50KTL-V3, 3PH 80KTL-LV, 3PH 100KTL-LV, 3PH 110KTL-LV, 3PH 75KTL-HV, 3PH 100KTL-HV, 3PH 125KTL-HV, 3PH 136KTL-HV, 3PH 250KTL-HV, 3PH 255KTL-HV

#### ZCS Azzurro Hybrid system (RS485): New Driver for V3 protocol

HYD 3000-ZSS, HYD 3600-ZSS, HYD 4000-ZSS, HYD 4600-ZSS, HYD 5000-ZSS, HYD 6000-ZSS, HYD 3000-ZSS HP, HYD 3600-ZSS HP, HYD 4000-ZSS HP, HYD 4600-ZSS HP, HYD 5000-ZSS HP, HYD 6000-ZSS HP, HYD 3PH 5000 ZSS, HYD 3PH 6000 ZSS, HYD 3PH 8000 ZSS, HYD 3PH 10000 ZSS, HYD 3PH 15000 ZSS, HYD 3PH 20000 ZSS, HYD 3PH 110000 ZSS

# **Adjustments - Extensions**

# Huawei SUN2000 V2:

• Hybrid systems read/show daily generation of according meter.

# Ingeteam:

Ingecon Sun 1play / 3Play Reactive power command is sent as Unicast instead of Broadcast.

# Kaco:

- Kaco Generic: Support of blueplanet NX3 models.
- Support of blueplanet TL3 models.

# Kostal Modbus TCP:

Power Management uses a Broadcast for inverter with Kostal Firmware
 MC >= 60090-06, IOC >= 00220-07.

#### Schneider Electrics iEM3000 Series:

Net-Meter mode is now selectable.

# SMA Sunspec V2 - (New models):

STP 50-US-40, STP 50-JP-40, STP 62-US-41, STP 50-US-41, STP 33-US-41, STP 50-41, STP 50-JP-4

#### Sofarsolar:

• Support of SOFAR 3300TL-V3 via G1/G2 protocol.

#### SolarMax - (New models):

20HT2, 20HT4, 25HT2, 25HT4

# Sungrow - (New models):

- SG250HX, SG250HX-US, SG320HX\*, SG350HX\*, SG125HX-JP, SG25CX-P2, SG30CX-P2, SG33CX-P2, SG36CX-P2, SG40CX-P2, SG50CX-P2, SG125CX-P2, SG110CX-P2, SG110HX-CN, SG285HX, SG333HX\*
- Models marked with a \* are only supported for up to 12 MPPTs and 24 Strings.

# ZCS Azzurro:

• Support of AZZURRO 3300TL-V3 via G1/G2 protocol.

# **Bug fixes**

# **ABB Sunspec:**

• Increase communication reliability.

# Delta Sunspec M50A:

Scaling of Pac corrected.

#### Diehl AKO:

- Udc, Idc and Pdc of each MPP tracker will be stored again (Issue in Firmware 6.0.0).
- Fixed scaling of some values.
- Temperature will be stored.

## EGO:

System stability improved.

# Extension modules:

• Firmware update stability increased.

#### Fimer:

Communication reliability improved.

#### Fronius:

System stability improved.

# Huawei SUN2000 V2:

- Negative Pac of inverter is interpreted as 0.
- Hybrid systems show invalid SOC (State of charge) as 0.

#### Platinum:

- Udc, Idc and Pdc of each MPP tracker will be stored again (Issue in Firmware 6.0.0).
- Fixed scaling of some values.
- Temperature will be stored.

# Kostal Modbus TCP:

- Read values of the 4th MPP Tracker.
- Reliability of device detection increased.

# MOD485 extension module:

• Improve communication stability with Solar-Log.

#### M&T Sensor:

• Insolation value [Wh/m²] is calculated correctly again (Issue in Firmware 6.0.0).

#### SMA Modbus:

Improve power management.

# SMA Sunspec V2:

• System stability during inverter detection improved.

# SolarEdge:

- RS485:
  - Power Management now also works if some inverters are not available.
- Ethernet:
  - If there is already a connection between the Solar-Log and a device, a new search will fail.
  - Reliability of device detection increased.

# SolarEdge Hybrid:

• Pac, Pdc and battery values are now correctly stored.

#### Sungrow:

• Temperature and daily generation corrected. DC values at night time are validated.

# Sungrow Hybrid:

Stability increased.

#### Varta:

- All devices will be detected reliable (Issue in Firmware 6.0.0).
- System stability in combination with this driver increased.
- Yield was by factor 10 too high.

# Firmware adjustments, extensions & bug fixes

- Automatic time synchronization is functional again (Issue in Firmware 6.0.0).
- Device search: if among other devices a Solar-Log PRO was searched, it was possible that not all devices were found.
- Firmwareupdate:
  - Firmware updates failed without authentication as Installer.
  - Firmware update information: only new (not confirmed) update information will be shown.
- SCB (String Combiner Boxes): SCB configuration was lost after controller reboot.
- Solar-Log Portal configuration: data.enerest.world is now set as default portal server.
- System stability for a Solar-Log with a runtime over more than 3 years increased.
- WEB-UI:
  - Displaying issue with the speedometer in live cockpit fixed.
  - Configuration assistant: improvements in visualization (e.g. progress bar).
  - Configuration | Feed In Management | Remote Control: when activating the ModbusTCP
     PM interface without a installed PM Pro license, a error message won't be shown anymore.
  - Improved content updated after change in language selection.



# Release Notes - 6.0.0 Build 160 - 27.01.2023

Firmware releases extend the range of functions and contain improvements for the security, stability and reliability of your Solar-Log product. Compatibility of component drivers is improved by adaptations. The following release notes contain the most important new features.

# **Component Drivers**



#### Note!

For information on connecting the devices, refer to the **Component Connection Manual**.

#### New

# Fimer

PVS-10-TL, PVS-12,5-TL, PVS-15-TL, PVS-20-TL, PVS-30-TL, PVS-33-TL, PVS-50-TL, PVS-60-TL,
 PVS-100-TL, PVS-120-TL.

#### **Fronius**

- Primo Gen24:
  - 3.0 Plus, 3.6 Plus, 4.0 Plus, 4.6 Plus, 5.0 Plus, 6.0 Plus, 8.0 Plus, 10.0 Plus.
- Symo Gen24:
  - 3.0, 4.0, 5.0, 6.0, 8.0, 10.0.
- Tauro:

50-3-D, ECO 50-3-D, ECO 99-3-D, ECO 100-3-D. 50-3-P, ECO 50-3-P, ECO 99-3-P, ECO 100-3-P.

#### Ginlong

• Ginlong Solis-5G:

Solis-1P7K-5G, Solis-1P8K-5G, Solis-15K-LV-5G, Solis-20K-LV-5G, Solis-23K-LV-5G, Solis-25K-5G, Solis-25K-LV-5G, Solis-30K-5G, Solis-30K-5G, Solis-30K-5G, Solis-30K-5G, Solis-36K-5G, Solis-36K-5G, Solis-36K-HV-5G, Solis-36K-5G, Solis-36K-HV-5G, Solis-36K-LV-5G, Solis-36K-LV-5G, Solis-50K-LV-5G, Solis-50K-LV-5G, Solis-50K-LV-5G, Solis-50K-LV-5G, Solis-50K-LV-5G, Solis-50K-LV-5G, Solis-50K-LV-5G, Solis-70K-5G, Solis-70K-5G, Solis-75K-5G, Solis-75K-5G, Solis-75K-5G-PLUS, Solis-75K-HV-5G-PLUS, Solis-80K-HV-5G, Solis-80K-HV-5G, Solis-80K-HV-5G-PLUS, Solis-90K-5G, Solis-90K-HV-5G, Solis-100K-5G, Solis-100K-5G-PLUS, Solis-100K-5G, Solis-110K-5G-PLUS, Solis-10K-5G, Solis-110K-5G, Solis-110K-5G, Solis-110K-5G, Solis-125K-BHV-5G, Solis-125K-BHV-5G, Solis-125K-BHV-5G, Solis-125K-BHV-5G, Solis-125K-HV-5G, Solis-125K-HV-5G, Solis-125K-HV-5G, Solis-125K-HV-5G, Solis-125K-HV-5G, Solis-125K-HV-5G, Solis-125K-HV-5G, Solis-125K-EHV-5G, Solis-125K-EHV-5G, Solis-125K-EHV-5G, Solis-125K-EHV-5G, Solis-125K-EHV-5G, Solis-230K-EHV-5G, Solis-230K-EHV-5G-PLUS, Solis-230K-EHV-5G, Solis-255K-EHV-5G-PLUS, Solis-255K-EHV-5G, Solis-255K-EHV-5G-PLUS, Solis-255K-EHV-5G, Solis-255K-EHV-5G-PLUS, Solis-255K-EHV-5G, Solis-255K-EHV-5G-PLUS, Solis-255K-EHV-5G, Solis-255K-EHV-5G-PLUS, Solis-255K-EHV-5G, Solis-255K-EHV-5G-PLUS, Solis-255K-EHV-5G, Solis-255K-EHV-5G-PLUS.

• Ginlong S5/S6:

S5-GC15K-LV, S5-GC20K-LV, S5-GC23K-LV, S5-GC25K, S5-GC25K-HV, S5-GC25K-LV, S5-GC30K, S5-GC30K-LV, S5-GC33K, S5-GC33K-HV, S5-GC36K, S5-GC40K, S5-GC40K-HV, S5-GC50K, S5-GC50K-HV, S5-GC50K-HV, S5-GC50K-HV, S5-GC50K-HV, S6-GU320K-EHV, S6-GU350K-EHV

# Huawei:

• Power management of the inverters via the Huawei Smart Logger.

#### my-PV

• AC-THOR / AC-THOR 9s.

# Real Energy Systemys

• Prisma 310A, Prisma 310A-Lite.

# Schneider Electrics

Schneider Electrics iEM3000 Series:
 3150, 3155, 3250, 3255, 3350, 3355, 3455, 3555.

#### **SMA**

SMA Sunny Tripower Core2.

#### Solplanet

ASW30K-LT-G2, ASW33K-LT-G2, ASW36K-LT-G2, ASW40K-LT-G2, ASW45K-LT-G2, ASW50K-LT-G2, ASW3K-LT-G2, ASW4K-LT-G2, ASW5K-LT-G2, ASW6K-LT-G2, ASW8K-LT-G2, ASW10K-LT-G2, ASW12K-LT-G2, ASW13K-LT-G2, ASW15K-LT-G2, ASW17K-LT-G2, ASW20K-LT-G2, ASW3K-LT-G2-Pro, ASW4K-LT-G2-Pro, ASW5K-LT-G2-Pro, ASW6K-LT-G2-Pro, ASW10K-LT-G2-Pro, ASW12K-LT-G2-Pro, ASW13K-LT-G2-Pro, ASW15K-LT-G2-Pro, ASW17K-LT-G2-Pro, ASW20K-LT-G2-Pro.

#### Sungrow

Sungrow Residential Hybrid:
 SH5K-20, SH3K6, SH4K6, SH5K-V13, SH5K-30, SH3K6-30, SH4K6-30, SH5.0RS, SH3.6RS, SH4.6RS, SH6.0RS, SH5.0RT, SH6.0RT, SH8.0RT, SH10RT.

# **Adjustments & Extensions**

# ABB Sunspec (New models):

PVS-50-TL, PVS-60-TL, PVS-100-TL, PVS-120-TL.

#### Extension module:

The Solar-Log MOD 485 module expands the Solar-Log Base models by 4 x RS485 interfaces.

# Huawei (New models):

- SUN2000-2KTL-L0, SUN2000-3KTL-CNL0, SUN2000-3KTL-L0, SUN2000-3.8KTL-USL0, SUN2000-4KTL-CNL0, SUN2000-4KTL-L0, SUN2000-4.95KTL-JPL0, SUN2000-5KTL-USL0, SUN2000-5KTL-CNL0, SUN2000-5KTL-USL0, SUN2000-9KTL-USL0, SUN2000-10KTL-USL0, SUN2000-11.4KTL-USL0, SUN2000-15KTL-M3, SUN2000-17KTL-M3, SUN2000-20KTL-M3, SUN2000-23KTL-M3, SUN2000-25KTL-NAM3, SUN2000-28KTL-M3, SUN2000-29.9KTL-M3, SUN2000-30KTL-M3, SUN2000-36KTL-M3, SUN2000-40KTL-M3, SUN2000-40KTL-M3, SUN2000-36KTL-M3, SUN2000-30KTL-NAM3, SUN2000-30KTL-NAM3, SUN2000-30KTL-NAM3, SUN2000-30KTL-NAM3, SUN2000-30KTL-NAM3, SUN2000-30KTL-M3, SUN2000-30KTL-M1, SUN2000-36KTL-M3, SUN2000-215KTL-H0.
- Transmission of string values for devices with string monitoring.

#### Janitza (only RS485) (New models):

• UMG96-PA, UMG96-PA MID, UMG96-PA MID+.

# Kaco:

• Capture of additional data channels: Uac1, Uac2, Uac3, Iac1, Iac2, Iac3, CosPhi.

#### Kostal TCP: PIKO CI Series über Ethernet (New models):

PIKO CI 30/50/60.

#### QX Protocol 9:

• Capture of additional data channels: Uac1, Uac2, Uac3, Iac1, Iac2, Iac3, CosPhi.

# RCT Power (New models):

• Power Storage DC 8.0, Power Storage DC 10.0.

# RefuSol (New models):

 20K-2T (850P020), 33K-2T (850P033), 40K (842P040), 46K (842P046), 50K-3T (850P050), 100K (880P100).

#### Schüco:

• Capture of additional data channels: Uac1, Uac2, Uac3, Iac1, Iac2, Iac3, CosPhi.

# SolarEdge

Ethernet interface support for suitable inverters.

#### New hybrid inverter:

 SE2200H-RWS, SE3000H-RWS, SE3680H-RWS, SE4000H-RWS, SE5000H-RWS, SE5K-RWS, SE7K-RWS, SE8K-RWS, SE10K-RWS.

# SMA CORE1 (New models):

• STP 50-US-40, STP 50-JP-40, STP 62-US-41, STP 50-US-41, STP 33-US-41, STP 50-41, STP 50-JP-4

# SMA Modbus (New models):

- STP3.0-3AV-40, STP4.0-3AV-40, STP5.0-3AV-40, STP6.0-3AV-40, STP8.0-3AV-40, STP10.0-3AV-40, STP 15000TL-30, STP 20000TL-30, STP 25000TL-30, SHP 100-20, SHP 150-20, SHP 125-US-20, SHP 150-US-20, SHP 100-JP-20, SHP 150-JP-20.
- Reactive power control via Q added.

#### SMA Net:

• Support of baud rate of 19,200 bit/s for suitable models.

# **Smart Relais Station:**

• Support of Smart Relay Station v2 (article number: 257257).

#### Solutronic Protocol 9:

• Now more channels are recorded: Uac1, Uac2, Uac3, Iac1, Iac2, Iac3, CosPhi.

#### Sungrow (New models):

- SG8KTL-M, SG10KTL-M, SG12KTL-M, SG15KTL-M, SG17KTL-M, SG20KTL-M, SG30KTL-M, SG-36KTL-M, SG50KTL-M-20, SG30KTL-M-V31, SG5KTL-MT, SG6KTL-MT, SG10KTL-MT, SG111HV, SG125HV, SG125HV-20, SG33K3J, SG36CX-US, SG60CX-US, SG3.0RT, SG4.0RT, SG5.0RT, SG6.0RT, SG7.0RT, SG8.0RT, SG10RT, SG12RT, SG15RT, SG17RT, SG20RT.
- Transmission of string values for devices with string monitoring.

#### Vaillant:

Now more channels are recorded: Uac1, Uac2, Uac3, Iac1, Iac2, Iac3, CosPhi.

# **Bug fixes**

- ABB Sunspec:
  - Bug in Q control fixed.
  - Stability of active power reduction and reactive power control increased.
- AEG Protect: Stability increased.
- Astroenergy: Stability increased.
- Bonfiglioli / Vectron: Stability increased.
- Danfoss Comlynx: Stability increased.
- Delta Sunspec: Stability increased.
- Diehl Ako: Communication stability improved.
- DMM: Stability increased.
- Effekta: Stability increased.
- Elkor Wattson and Schneider EM6400S: Stability increased.
- Fronius Gen24:
  - Display the correct Pac value.
- Fronius TCP: Stability increased.
- GoodWe: Stability of the reactive power functionality increased.
- Growatt Mod And Max:
  - Stability increased.
  - The prioritization of error messages has been adjusted.
- HIQ: Stability increased.
- Hoval: Stability during increase increased.
- Huawei V1: Active power reduction now also works for 60KTL-HV-D1, 45KTL-US-HV-D0, 55KTL-HV-D1, 55KTL-IN-HV-D1, 55KTL-HV-D1-001, 60KTL-HV-D1-001.
- Huawei V2: Output of DC string values improved.
- INVT: Stability increased.
- Iskra: Stability increased.
- Kehua: Stability increased.
- Kostal: Removed incorrect plausibilization of Pac values.

- Kostal TCP: Status messages corrected.
- M&T Sensor: Devices with address 0 are now also detected.
- Omron: Stability increased.
- Platinum: Communication stability improved.
- Refusol: Communication improved and stability increased.
- SMA Modbus:
  - GridGuard code can be entered via the Plant password input field.
- SMA Speedwire: Stability increased.
- SMA Sunny Island: Stability increased.
- SMA Sunspec V2: Handling of error messages improved.
- Sofarsolar: Active power reduction for Sofarsolar 50KTL-70KTL devices revised.
- Solar-Log™ PRO380: Maximum recordable values increased.
- Solarmax: Reactive power control improved.
- Sungrow Hybrid: Device communication improved.
- Sungrow Residential Hybrid: Data recording now also works via Modbus TCP.
- Surpass: Stability increased.
- Varta:
  - Detection meter also for models one L/XL, element, flex (with serial number 601x).
  - · Data capture improved.
  - · Varta and Varta Flex: improvement of the detection process.
- Zentralpower: Stability increased.

# Firmware adjustments, extensions & bug fixes

- Time:
  - The time can now only be changed if NTP is deactivated.
  - NTP: the NTP servers can now be reconfigured (up to 10 servers can be stored).
- All device drivers have been extensively revised in terms of speed and stability.
- CSV files:
  - Files are generated in UTF-8 format (previously Windows-1252).
  - Incorrect column headings corrected.
- FTP export:
  - Special characters allowed in password.
- Feed-in management:
  - Control: Active power control to a measuring point, for self-consumption optimization is now possible, if the components are suitable for this.
  - PM Pro license: The Solar-Log PM Pro license is now available for VDE-AR-4110 compliant control. It enables the use of extended functions for power control. (see <u>PM control manual</u>)

- The master-slave control is replaced by the composite control. A license must be purchased to use it. ATTENTION: The existing master-slave configuration is not taken over.
- The active power mode "Reduction to percentage of consumption" is replaced by the new function "Active power control".
- The Modbus V1 interface is no longer supported and is replaced by Modbus V2.