

Release Notes - 6.4.1 Build 176 - 13.02.2026

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

Pixii:

- Power Shaper, Power Shaper XL, Power Shaper XLP

SIEL SRT/SPX:

- Soleil SRT 100K, Soleil SRT 125K, Soleil SRT 20K-S2, Soleil SRT 30K-S2, Soleil SRT 60K-S2, Soleil SRT 40K-S2, Soleil SPX 350K, Soleil SPX 250K-S1, Soleil SPX 250K-S2

Component Drivers - Adjustments & Extensions

Azzurro V3/V4:

- New models:
3PH 250KTL-HV Z0, 3PH 330KTL-HV Z0, 3PH 350KTL-HV Z0
- Speed up steering of active and reactive power control to enable VDE compatibility.

Fronius Gen24:

- New model:
Argeno 125

GoodWe Sunspec:

- New models:
GW4000-SDT-20, GW5000-SDT-20, GW6000-SDT-20, GW8000-SDT-20, GW10K-SDT-20, GW12K-SDT-20, GW15K-SDT-20, GW17K-SDT-20 and GW20K-SDT-20
- Support active power reduction functionality.

Huawei SUN2000 V2:

- New models:
SUN2000-150K-MG0, SUN2000-215KTL-H3, SUN2000-330KTL-H1, SUN2000-280KTL-H0, SUN2000-300KTL-H0, SUN2000-250KTL-H3, SUN2000-330KTL-H2, SUN2000-250KTL-H1

RefuSol 85xPx:

- New models:
20K-3T, 350K-8T
- The models 20K-2T, 25K-3T, 33K-3T and 50K-4T are now detected reliably.
- Speed up steering of active and reactive power control to enable VDE compatibility.

SMA Sunspec v2:

- Add full support for newer Sunny Tripower X firmware versions. Models which are offline after a SMA firmware update or detected with 6 MPP trackers needs to be re-detected to set the correct amount of trackers.

SofarSolar G3/G4:

- New models:
250KTLX0, 330KTLX0, 350KTLX0
- Speed up steering of active and reactive power control to enable VDE compatibility.

Component Drivers - Bugfixes

AROS:

- Power Management is now working again.

Azzurro V3/V4:

- Now recognize and monitor all occurring device errors.

Fox ESS H3:

- For the models H3-5.0-E and H3-6.0-E the second MPPT is now detected.

Hopesun:

- Yield determination is now working properly.

INVT XG:

- From now on the Solar-Log™ detects at least the available amount of MPP trackers. Depending on the specific model it is possible that a higher amount of MPP trackers will be detected. Those can be afterwards deactivated in the device configuration.

Kostal Modbus:

- Improved daily yield accuracy for models without an integrated battery.

RefuSol 85xPx:

- Now recognize and monitor all occurring device errors.

RefuSol Native:

- Data monitoring stabilized when using high frequent Feed In Management on the same serial interface.

Schneider Electric EM6400NG:

- RS485 communication on other interfaces than the used one is no longer disrupted by this component driver.

SMA Sunspec v2:

- Detection of SMA Core 2 inverters improved.
- Improve data processing for P_{DC} and I_{DC} to no longer monitor high data peaks in case of very low DC power.
- Q control now also works for Core 2 devices with a firmware version higher than 1.00.10.

SofarSolar G3/G4:

- Now recognize and monitor all occurring device errors.

SolarEdge:

- From now on the correct status messages for SolarEdge inverters will be shown.

Sungrow Hybrid:

- For models with 3 MPP trackers, the measurements of the third MPP tracker are now also recorded.
- Improved data acquisition for charge value to no longer store invalid values for some specific devices with a slightly different behavior.

Varta:

- Communication with Varta Link improved and stabilized.

Firmware adjustments, extensions & bug fixes

Data acquisition:

- When connecting devices from a manufacturer in parallel to several different interfaces, it can no longer happen that faulty values are stored immediately after the restart.

Direct Marketing:

- ModbusTCP DM register ProdW (10904, 10905) stabilized to prevent invalid high data peaks.

Factory reset:

- All settings and data are deleted reliable on factory reset.

Feed In Management - Analog Inputs:

- It is now possible to configure an optional input range for analog signals. If an analog signal leaves this range, the system enters the fallback.

Internet LED:

- The Internet LED state will now be updated correctly if the ethernet cable gets plugged or unplugged.
- Initialize Internet LED early in Solar-Log™ startup phase.

Modbus RTU:

- Improve stability of Modbus RTU communication with external components.

ModbusTCP Schnittstelle:

- Stability of the Solar-Log™ ModbusTCP interface regarding multiple simultaneous connections improved.

PM Pro Analyzer:

- Testcase Q(U) with Deadband works now correctly in combination with all configuration options.

PM Pro Analyzer - Functionality of PM Pro Analyzer extended:

- New tests available:
 - P(f)
 - Q(P)
 - Fallbacks
- PDF Report improved:
 - Q-diagram added.
 - Solar-Log™ Configuration details added.
- All tests can be executed in a single test run.

WebUI Modbus Diagnostic:

- Diagnostic / Feed In Management / Modbus:
Unit and scale handling improved.
- Diagnostics / Inverter Diagnostic / Inverter Details:
Improved inverter diagnostics graph in case of missing datapoints.

Release Notes - 6.4.0 Build 175 - 11.08.2025

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

Fronius Gen24 - New series:

- Verto 15.0, Verto 17.5, Verto 20.0, Verto 25.0, Verto 27.0, Verto 30.0, Verto 33.3, Verto 15.0 Plus, Verto 17.5 Plus, Verto 20.0 Plus, Verto 25.0 Plus, Verto 30.0 Plus, Verto 33.3 Plus

Seven Sensors:

- 3S-IS, 3S-IS-1, 3S-IS-2, 3S-IS-2T, 3S-IS-3, 3S-IS-4

SolarMG:

- SG-6KWT, SG-10KWT, SG-15KWT, SG-20KWT, SG-25KWT, SG-30KWT, SG-50KWT, SG-60KWT, SG-100KWT, SG-125KWT

SolaXPower X3 PRO/MIC:

- X3-PRO-8K-G2, X3-PRO-10K-G2, X3-PRO-12K-G2, X3-PRO-15K-G2, X3-PRO-17K-G2, X3-PRO-20K-G2, X3-PRO-25K-G2, X3-PRO-30K-G2, X3-MIC-3K-G2, X3-MIC-4K-G2, X3-MIC-5K-G2, X3-MIC-6K-G2, X3-MIC-8K-G2, X3-MIC-10K-G2, X3-MIC-12K-G2, X3-MIC-15K-G2

Solinteg:

- MHS-3K-30, MHS-3.6K-30, MHS-4.2K-30, MHS-5K-30, MHS-6K-30, MHS-8K-30, MHT-4K-25, MHT-5K-25, MHT-6K-25, MHT-8K-25, MHT-10K-25, MHT-12K-25, MHT-10K-40, MHT-12K-40, MHT-15K-40, MHT-20K-40, MHT-25K-100, MHT-30K-100, MHT-36K-100, MHT-40K-100, MHT-50K-100

Component Drivers - Adjustments & Extensions

Azzurro V3/V4 - Add support for newer variants for following models:

- 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

Ginlong 5G - Add support for more versions of the models:

- Solis50K-5G, Solis-100K-5G-PRO

INVT XG - New model:

- XG125KTR-F

Kehua:

- Fix a behavior related to wrong PDC values which were monitored in rare cases.

Kostal Standard:

- Monitor AC phases individually (UAC1, UAC2, UAC3) instead of a mean value (UAC).

SofarSolar G3/G4 - Add support for newer variants for following models:

- HYD 5KTL-3PH, HYD 6KTL-3PH, HYD 8KTL-3PH, HYD 10KTL-3PH, HYD 15KTL-3PH, HYD 20KTL-3PH, HYD 110KTL-3PH

SofarSolar G3/G4:

- IAC and UAC are now also be monitored.

Sungrow - New models:

- SH5T-V11, SH6T-V11, SH8T-V11, SH10T-V11, SH12T-V11, SH15T-V11, SH20T-V11, SH25T-V11

Weidmüller Car Charging Station:

- Add support to switch between 1 phase and 3 phase charging to enable charging with less available power.

Component Drivers - Bugfixes

ABB:

- Stability of PAC value determination increased.

Ads-Tec StoraXe:

- Now use correct scaling for battery current.

AROS SIRIO:

- Fixed a problem with huge data peaks in the morning.

Azzurro V3/V4:

- From now on the correct model names will be determined during a detection.
- Power reduction now also works without parallel usage of reactive power control.
- Unknown/unsupported models will no longer be detected.

Diehl AKO:

- Communication stability improved.

Fox ESS R Series:

- MPPT count for R120 and R136 updated from 12 to 10 as per datasheet.

Fronius SunSpec Modbus/SolarAPI:

- Stabilize detection routine.
- The sign of the reactive power management was inverted, so it now works as indicated in the configuration.

Ginlong 5G:

- Fix detection problem with older devices of Solis-80K-5G-PRO and Solis-100K-5G-PRO.
- Last character of serialnumber will now also be stored during detection.
- Reactive power management is now working properly.

GoodWe Hybrid:

- Increase detection compatibility regarding some specific models / firmware versions.

Growatt Modbus:

- Do no longer detect Growatt Gen X devices with the Growatt Modbus driver. Please use the dedicated Growatt Gen X driver to handle those devices.

INTILION Scalebloc:

- Now use correct scaling for battery current.

JFY Suntime:

- The models SUNTREE 10000TL+, SUNTREE 12000TL+, SUNTREE 15000TL+, SUNTREE 17000TL+, SUNTREE 20000TL+, SUNTREE 25000TL+, SUNTREE 30000TL+, SUNTREE 50000TL+, SUNTREE 28000TL+ can now be successfully detected again (issue since firmware 6.2.0).

my-PV:

- Increased device detection reliability.
- One physical device is no longer detected twice which happens under rare conditions.

RefuSol 85xPx:

- Power reduction now also works without parallel usage of reactive power control.
- Unknown/unsupported models will no longer be detected.
- Fix detection for following models: 20K-2T, 25K-3T, 33K-3T, 50K-4T.

SAJ Suntrio:

- Enable 3 phase for R5 series.
- Stabilize reading of IAC.
- Stabilize detection of number of MPP trackers.

Schüco:

- Improve communication stability.

SMA SOLID-Q 50:

- Solved Solar-Log™ crash caused by faulty reactive power control implementation (power factor).

SofarSolar G3/G4:

- Power reduction now also works without parallel usage of reactive power control.
- Unknown/unsupported models will no longer be detected.
- Fix detection for following models: 60KTLX-G3, 80KTLX-G3.

Solar-Log™ Pro:

- For non-powered meters during the day change, the correct yield is now calculated.

SolarEdge:

- Improve exception handling if power management commands get rejected by device.
- PAC will now also be calculated correctly in case of no charging or discharging.
- Ethernet detection routine improved.

SolarMax:

- Data acquisition of the fourth MPPT fixed.

Sonnen Eco 6/7:

- Filter out implausible high charge / discharge values.

Sungrow:

- Stabilized Reactive Power Management for devices connected via Ethernet.

Firmware adjustments, extensions & bug fixes

Authorization to local WebUI:

- Due to faulty exception handling, it was possible to enable password protection without setting a password. This could lead to the complete exclusion of the user.

CSV export via FTP / FTPs:

- Stabilize transmission to solve following issues if the CSV 1.0 format is used:
 - The first datapoint was missing in the CSV file.
 - The last datapoints were missing in the CSV file.
 - Past days were not be transmitted reliably, if the transmission failed on that date.

Event log in combination with Solar-Log™ Mod485:

- No longer create additional invalid event log entries for devices which are connected via Solar-Log™ Mod485 interfaces (happend under certain conditions during a Solar-Log™ reboot).

Extension Module Diagnostics:

- Popup menu for extension modules in Diagnostics / Components is now shown and refreshed correctly.

Local WebUI:

- Configuration / Devices / Configuration: usability for access restricted input fields slightly improved.

Portal Export:

- If no valid time is set, this does not lead to exporting all monitored data again to the Portal.

Smart Energy - Irradiation Sensor:

- Irradiation Sensor can now be disabled within Smart Energy.

Solar-Log™ Mod I/O:

- If the Solar-Log™ loses the connection to a Solar-Log™ Mod I/O during reboot it now tries to re-initialize the module.
- Stabilize connection to the Solar-Log™ Mod I/O extension module.

Solar-Log™ Mod485:

- Data acquisition stability during Solar-Log™ startup phase increased for devices which are connected via a Solar-Log™ Mod485.

Time:

- If the system boots without a valid time setting, an early NTP sync will be executed to prevent invalid data.

WebUI: Access Control settings:

- The switcher to enable the Public JSON Interface no longer gets switched off after saving the form.

WebUI: Diagnostics / Feed In Management / Modbus:

- Fix displaying issue of interpreted PAC value in some more complex plant setups.

WebUI: Smart Energy History:

- Show consumed power and available surplus curves also for car charging stations of Weidmüller and Mennekes.

Release Notes - 6.3.0 Build 172 - 03.03.2025

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 - MT/SMT series:

- GW25K-MT, GW29.9K-MT, GW30K-MT, GW36K-MT, GW50KS-MT, GW60KS-MT, GW50KN-MT, GW60KN-MT, GW75K-MT, GW80K-MT, GW50KBF-MT, GW60KBF-MT, GW75KBF-MT, GW80KBF-MT, GW70KHV-MT, GW80KHV-MT
- Notes:
 - With this firmware version, the Modbus protocol of the MT/SMT series is now supported for devices with an ARM version ≥ 20 and a DSP version ≥ 6 .
 - Due to a problem with the reactive power setting for the SMT devices, the MT and SMT series must not be connected to the same bus if reactive power control is used.

Component Drivers - Adjustments & Extensions

Fronius SunSpec Modbus/SolarAPI:

- Support of reactive power (Q) monitoring

Ginlong 5G - New models:

- S6-GC75K, S6-GC80K, S6-GC100K, S6-GC110K, S6-GC110K-BHV, S6-GC125K, S6-GC125K-HV, S6-GC136K-BHV, S6-GC150K-BHV, S6-GC50K-LV, S6-GC60K-LV, S6-GC75K-LV, S6-GC150K, S6-GC200K-HV, Solis-75K-5G-PRO, Solis-50K-LV-5G-PRO, Solis-60K-LV-5G-PRO, Solis-125K-HV-5G-PRO, Solis-110K-5G-PRO, Solis-125K-5G-PRO, Solis-125K-BHV-5G-PRO, Solis-136K-BHV-5G-PRO, Solis-150K-BHV-5G-PRO, Solis-75K-LV-5G-PRO, Solis-60K-5G-PRO, Solis-250K-EHV-5G, GCI-230K-EHV-5G-PLUS, Solis-185K-EHV-5G-US ON, Solis-185K-EHV-5G-US-PLUS ON, Solis-215K-EHV-5G-PLUS ON, Solis-125K-EHV-5G-US-PLUS ON, Solis-125K-EHV-5G-US-PLUS IN, Solis-125K-EHV-5G-US-PLUS Derate, S6-GU250K-EHV(-US) M12 IN, S6-GU350K-EHV M12 ON, S6-GU250K-EHV M12 ON, S6-GU333K-EHV M12 IN, S6-GU300K-EHV(-US) M12 IN, S6-GU333K-EHV M12 ON, S6-GU300K-EHV(-US) M12 ON

GoodWe HT series - New models:

- GW75K-HT, GW80K-HT

Growatt Gen X - New model:

- MID 25KTL3-X

Growatt MAX - New models:

- MID 30KTL3-X2, MID 33KTL3-X2, MID 36KTL3-X2, MID 40KTL3-X2, MID 50KTL3-X2

Kostal - New model:

- PIKO CI 100

Solarmax:

- From now on the AC voltage is monitored per phase as phase to neutral voltage.

Component Drivers - Bugfixes

ABB Sunspec:

- Fix communication issue with inverters which have more than 6 MPP trackers.

Fimer Sunspec:

- Fix detection via RS485.
- Fix communication issue with inverters which have more than 6 MPP trackers.

Fronius SunSpec Modbus/SolarAPI:

- Fixed: most inverters were offline after Firmware Update to 6.2.0.

Ginlong 5G:

- Uac + Idc acquisition fixed for Strings 11-24.
- Fix a communication issue, which sometimes led to missing DC values.

GoodWe HT:

- Communication stability improved.

GoodWe RS422:

- Fix logging of PAC > 65000W.

Huawei SUN2000 V2:

- Prevent a rare issue that after a firmware update of the Solar-Log the number of strings was invalid.

Janitza:

- Detection of a device with an IP address between xxx.xxx.xxx.246 - xxx.xxx.xxx.255 is now possible.

Kaco Generic:

- Pac acquisition fixed for inverters with 4-5 MPP trackers.

Kehua SPI >=100KW:

- Now always the line to neutral voltage is stored, even if the model provides a line to line voltage.

Kostal Modbus:

- In case of a device which is connected via RS485, the bus address (instead of a 0.0.0.0 IP address) is now shown in the device configuration.
- Improve connection stability.

Kostal Sunspec:

- Fix an issue with implausible large Pac values in the morning and/or evening.

Samil:

- Stabilize system in case of multiple Samil devices are detected.

SMA Sunspec V2:

- Communication stability improved.

Solar-Log Pro1 + Pro2:

- Since 6.1.1 the meters were configurable as consumption meter (bi-directional) which is a not supported mode for those types

SolarEdge Hybrid:

- Pac was invalid in certain situations.

SolarMax:

- Now the correct status (offline) is determined also if the device is not available directly after a Solar-Log reboot.
- 50SHT and 60SHT are now detected with all 4 MPP tracker instead of just 1.

SolarMax ST/MT:

- Fix the status shown for SolarMax ST and MT devices.

Steca:

- Stabilize detection for certain models / firmware versions (do not find a device on each bus address even if there is no device).

Sungrow:

- Voltage monitoring in channels is changed from line-to-line to line-to-neutral.

Sungrow Hybrid:

- Communication stability improved.

Firmware adjustments, extensions & bug fixes

Data Backup:

- Stability for huge data backup files improved.

Extension modules:

- Stability improved.

Local Webinterface via HTTPS:

- To further increase the overall security TLS versions less than 1.3 are no longer accepted. This affects the access to the local Webinterface via HTTPS.

Modbus Live Plant:

- In combination with some drivers the Uac of our Modbus Live Plant interface was wrongly shown as 0.

ModbusTCP PM interface

- Removed the registers 10236-10241 (IacR, IacS, IacT) and 10236 as Frequency.
- Added the register 10236 for Frequency.

NTP:

- Stabilized custom NTP server usage.

Password-Protection:

- Increase password protection by requesting the current login-level password before being able to change any password

Passwords:

- To further increase the overall security, the password of the currently logged in user must be entered again in case of changing or disabling the password of any access level.

PM-History:

- Fix an issue in combination with ModIO as PM input interface which sometimes created a short invalid PM Event at 3 a.m.
- The Solar-Log no longer crashes when enabling the PM-History for the first time.

Power-Management:

- P(f) is now available according to VDE 4110.

Release Notes - 6.2.0 Build 170 - 22.10.2024

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.

No further support for the GoodWe SunSpec driver

With **firmware version 6.2.0**, support for the **GoodWe SunSpec driver** will be discontinued until further notice. This change was necessary because the GoodWe SunSpec implementation led to stability problems with some devices. This only affects models that were previously only supported with the GoodWe SunSpec driver. Some models that were declared as GoodWe SunSpec compatible can still be operated via the RS485/RS422 GoodWe protocol. We are still working hard on the new implementation of (selected) GoodWe models. Models that are supported with the RS485/RS422 GoodWe protocol can be found in the component database.

Further information:

GoodWe HT series:

- Since firmware version V6.1.2, HT series models are still supported via the GoodWe HT driver.

Important notes:

- For all affected devices that worked with earlier versions, we recommend checking the current configuration during a firmware update.
- Models that were previously only supported by the GoodWe SunSpec driver can no longer be fully integrated into the system.

Component Drivers



Note!

For information on connecting the devices, refer to the [Component Connection Manual](#).

New

HopeWind:

- HSNV25K-G01, HSNV30K-G01, HSNV36K-G01, HSNV40K-G01, HSNV50K-G01, HSNV60K-G01, HSNV70K-G01, HSNV75K-G01, HSNV100K-G01, HSNV110K-G01

RefuSol Type 85xPxxx:

- REFUsol 20K-2T, REFUsol 25K-3T, REFUsol 33K-3T, REFUsol 50K-4T, REFUsol 110K-10T, REFUsol 125K-10T

Kstar KSG:

- G50KT, G60KT, G70KT, G80KT, KSG-10K, KSG-12K, KSG-15K, KSG-17K, KSG-20K, KSG-30K, KSG-50K, KSG-60K, KSG-25KT, KSG-30KT, KSG-40KT, KSG-30KT-M1, KSG-40KT-M1, KSG-120CL-M0, KSG-250UH-M0, KSG-150UM, KSG-120CL, KSG-200UH, KSG-250UH, BluE-G 1000S, BluE-G 1500S, BluE-G 2000S, BluE-G 3000S, BluE-G 3000D, BluE-G 4000D, BluE-G 5000D, BluE-G 5000D-AU, BluE-G 6000D, BluE-G 10000D, BluE-G-3K, BluE-G-3.6K, BluE-G-4K, BluE-G-5K, BluE-G-6K, BluE-G-8K, BluE-G-10K, BluE-G-12K, BluE-G-15K, BluE-G-17K, BluE-G-20K, BluE-12KTL, BluE-15KTL, BluE-20KTL, BluE-3KT-M1, BluE-4KT-M1, BluE-5KT-M1, BluE-6KT-M1, BluE-8KT-M1, BluE-10KT-M1, BluE-12KT-M1, BluE-15KT-M1, BluE-17KT-M1, BluE-20KT-M1, BluE-25KT-M1

Component Drivers - Adjustments & Extensions

Fronius SunSpec Modbus/SolarAPI:

- Inverters which are connected to a Datamanager of another Inverter will now be found during device detection.

GoodWe ET series:

- Support for new ARM versions.
- Devices without connected battery will now be detected as inverter instead of hybrid system.

Huawei V2:

- Speedup communication on RS485.

Kostal TCP:

- The driver was renamed from **Kostal TCP** to **Kostal Modbus**. Now the driver can also be used via RS485.

SMA Modbus:

- New models: SHP 172-21, SHP 180-21, SHP 165-US-21, SHP 172-US-21, SHP FLEX-US-21, SHP 100-21, SHP 150-21, SHP 125-US-21, SHP 150-US-21, SHP 100-JP-21, SHP 143-JP-21

Sofar Solar G3:

- New models: 60KTL-V3, 80KTL-V3

Solarmax:

- New models: 50SHT, 50SHT-S, 50SHT-S2, 60SHT, 60SHT-S, 60SHT-S2

Component Drivers - Bugfixes

Chint Power:

- Power management now also works for newer US models.

Kehua SPI >=100KW:

- Yield recording fixed.

Prisma:

- Entering the device configuration for a newly detected device leads to an error popup (issue introduced with firmware 6.1.1)

SMA Sunspec V2:

- Increased communication stability after firmware update of the Solar-Log.
- Stability increased.

SolarEdge:

- In case of a changing UnitID of the inverter, the Solar-Log will now take over the modification during a re-detection.

Solaxpower X3 Commercial:

- Data collection now works reliably.

Weidmüller:

- Data collection now works reliably.

Xantrex:

- Stability for data collection improved.

Firmware adjustments, extensions & bug fixes

Device detection:

- For some ethernet drivers the devices were not found if the netmask of the Solar-Log was set to a smaller netmask than 255.255.255.0.

Device configuration:

- Configuration field "**Nominal reactive power**" removed.

MOD I/O:

- The MOD I/O can now be used for Smart Energy purposes. As soon as it gets added via the interface definition and standard device detection it appears as switch device in the Smart Energy configuration with 8 available contacts.
- If the Solar-Log loses the connection to a MOD I/O it now tries to re-initialize the module.

Modbus PM V2 feedback:

- SolarEdge inverters report a wrong sign for CosPhi or Q depending on which one is used for power management. We are now showing the correct sign for CosPhi and Q in our PM V2 Feedback registers.

ModbusTCP free:

- New registers (100-1021) were added which includes information about the Solar-Log (manufacturer, Solar-Log model and serialnumber)

ModbusTCP PM interface:

- There is a limit of 4 open connections. Previously the 5 device was blocked. From now on the oldest inactive connection will be closed and the 5 device is able to connect.
- Register 10606 now includes the average over all available phases and not only Uac1.
- New registers (10610 - 10618) were added which includes Uac1, Uac2, Uac3 average of all inverters as well as Iac1, Iac2, Iac3 sum of all inverters.

Password Policy:

- Introduction of password policy:
 - at least one capital letter.
 - at least one lowercase letter.
 - at least one number.
 - at least one special character.
 - at least 10 characters.

To ensure all set passwords are regarding this policy, you are forced to set a new password as soon as you try to login.

PM-History / PM-Events:

- If a MOD I/O is used for power management and a power cycle happened, no invalid PM-Event is generated anymore

Reduce internet traffic volume:

- Fixed a bug which was introduced with firmware 6.1.1. This increased the daily internet traffic by around 8MB.

Smart Energy:

- Now always the correct irradiation values are used (was a problem in some cases in combination with having two sensors or a huge plant).

Networking:

- Now a default gateway and additional static routes can be configured.

Release Notes - 6.1.2 Build 165 - 16.07.2024

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

Ads-Tec StoraXe (Battery):

- StorageRackSystem, PowerBooster

INVT iMars XG-Serie:

- New models: XG17KTR, XG20KTR, XG22KTR, XG25KTR, XG30KTR, XG33KTR, XG36KTR, XG40KTR, XG50KTR, XG50KTRL, XG60KTR, XG60KTRL, XG66KTRL, XG70KTRL, XG100KTR-F, XG110KTR-F, XG136KTR-LF, XG136KTR-XF, XG1KTL-S, XG1.5KTL-S, XG2KTL-S, XG2.5KTL-S, XG3KTL-S, XG3.68KTL-S, XG4KTL-S, XG4.2KTL-S, XG4.6KTL-S, XG5KTL-S, XG3KTL-2M, XG3.68KTL, XG4KTL, XG4.2KTL, XG4.6KTL, XG5KTL, XG6KTL, XG7KTL, XG8KTL, XG10KTL, XG7KTL1, XG8KTL1, XG10KTL1, XG3KTR-S, XG4KTR-S, XG5KTR-S, XG6KTR-S, XG8KTR-S, XG9KTR-S, XG10KTR-S, XG11KTR-S, XG12KTR-S, XG15KTR1-S

Component Drivers - Adjustments & Extensions

Delta:

- New models: M50A Flex, M100A Flex

Ginlong:

- The new version of Solis-3P15K-4G is now also supported.

GoodWe Hybrid:

- Following data channels will be stored additionally: Pac per phase, Iac per phase, Uac per phase, battery voltage, battery current
- Newer ODM model names can now be read

MyPV:

- The Solar-Log now always sends the correct target power to an AC Thor with less than 3kW of heating rods.

Component Drivers - Bugfixes

ABB Sunspec:

- Negative production values are now ignored.

Diehl AKO:

- In some cases the devices were shown as offline even they provided valid data.

Fimer Sunspec:

- Negative production values are now ignored.

Fronius Sunspec:

- Fix communication and data collection during the night.

Ginlong:

- Fix detection for some Solis80K-5G models.

GoodWe HT:

- Power management now works properly.

GoodWe Hybrid:

- Now also the data of a possibly second battery, which can be attached to the system, is monitored.

GoodWe Sunspec:

- Sunspec models are read correctly, even if communication is unstable.

Inepro:

- In some cases the yield was not recorded.

Kostal Standard:

- Speedup Ethernet communication.

Platinum:

- In some cases the devices were shown as offline even they provided valid data.

SMA Sunspec:

- Increase communication stability.

SolarEdge:

- Increase communication stability.

SolarEdge Hybrid:

- The device is now always detected as hybrid system and not as normal inverter without a battery unit.

Solar-Log Pro Meter:

- In some cases the yield was not recorded.

Firmware adjustments, extensions & bug fixes

Decrease possibility of data corruption:

- An issue was found and fixed which led to data corruption in rare cases.

Device configuration:

- For devices with MPP trackers the module field of the first MPP Tracker was not configurable. This issue was introduced with firmware 6.1.0.

Legal Notices:

- Some Legal Notices for the used open source software were not shown in our local web-interface. This issue was introduced with firmware 6.1.0.

Link Local Addresses:

- The Link Local address will not be lost when switching between static IP and DHCP. This issue was introduced with firmware 6.1.0.

Networking:

- Gateway for Ethernet 2 can now be configured.

NTP:

- The time now also gets corrected if the time difference between Solar-Log and the NTP server is very high. This issue was introduced with firmware 6.1.0.

PM Feedbacks:

- Increase system stability in combination with invalid configurations.
- The RS485 Bus Analysis was not functional since 6.1.0. After starting the analysis, the operation never finished.

RS485 Bus Analysis:

- The RS485 Bus Analysis was not functional since 6.1.0. After starting the analysis, the operation never finished.

System stability in case of corrupted data:

- Data which was detected as corrupt will now be recovered if possible, otherwise deleted as before this update.

Yield calculation:

- Some devices provide us a daily yield, which gets reset on 0 o'clock.
- If the device does reset the daily at exactly 0 o'clock (different clock settings etc.) this led to a wrong daily yield. We improved the handling so this does not lead to an invalid yield for the whole day.

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 were 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 insulation 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

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:

- ST0N 0825, ST0N 1225, ST0N 1625, ST0N 2425, ST0HS 0825, ST0HS 1225, ST0HS 1625, ST0HS 2425.

SMA - Sunny Tripower X:

- Sunny Tripower X 12, Sunny Tripower X 15, Sunny Tripower X 20, Sunny Tripower X 25

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
- 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, SUN2000-12K-MB0, SUN2000-15K-MB0, SUN2000-17K-MB0, SUN2000-20K-MB0, SUN2000-25K-MB0, SUN2000-15K-MB0-ZH, SUN2000-17K-MB0-ZH, SUN2000-20K-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, 50KTLX-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
- 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 than 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 $\geq 4.10.24$.

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, SH8.0RT-V112, SH10RT-V112, SH5.0RT-V122, SH6.0RT-V122, SH8.0RT-V122, SH10RT-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:

- Improved 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 won't 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, 4.4KTLX-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 Electric's 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-AU, Solis-30K-LV-5G, Solis-33K-5G, Solis-36K-5G, Solis-36K-HV-5G, Solis-36K-LV-5G, Solis-40K-5G, Solis-40K-HV-5G, Solis-50K-5G, Solis-50K-HV-5G, Solis-50K-LV-5G, Solis-50K-LV-5G-PLUS, Solis-60K-5G, Solis-60K-HV-5G, Solis-60K-LV-5G, Solis-60K-LV-5G-PLUS, Solis-70K-5G, Solis-70K-HV-5G, Solis-75K-5G, Solis-75K-5G-PLUS, Solis-75K-HV-5G-PLUS, Solis-80K-5G, Solis-80K-5G-PLUS, Solis-80K-HV-5G, Solis-80K-HV-5G-PLUS, Solis-90K-5G, Solis-90K-HV-5G, Solis-90K-HV-5G-PLUS, Solis-100K-5G, Solis-100K-5G-PLUS, Solis-100K-HV-5G, Solis-100K-HV-5G-PLUS, Solis-104K-EHV-5G, Solis-110K-5G, Solis-110K-5G-PLUS, Solis-110K-BHV-5G, Solis-110K-BHV-5G-PLUS, Solis-124K-HV-5G, Solis-125K-BHV-5G, Solis-125K-BHV-5G-PLUS, Solis-125K-EHV-5G, Solis-125K-EHV-5G-PLUS, Solis-125K-HV-5G, Solis-125K-HV-5G-PLUS, Solis-136K-BHV-5G, Solis-136K-BHV-5G-PLUS, Solis-185K-EHV-5G, Solis-185K-EHV-5G-PLUS, Solis-196K-EHV-5G-PLUS, Solis-215K-EHV-5G-PLUS, Solis-230K-EHV-5G, Solis-230K-EHV-5G-PLUS, Solis-250K-EHV-5G, Solis-250K-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-GC36K-LV, S5-GC40K, S5-GC40K-HV, S5-GC50K, S5-GC50K-HV, S5-GC60K, S5-GC60K-HV, S5-GC70K-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 Electric

- Schneider Electric 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, ASW8K-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-CNLO, SUN2000-3KTL-L0, SUN2000-3.8KTL-USLO, SUN2000-4KTL-CNLO, SUN2000-4KTL-L0, SUN2000-4.95KTL-JPLO, SUN2000-5KTL-USLO, SUN2000-5KTL-CNLO, SUN2000-5KTL-L0, SUN2000-6KTL-CNLO, SUN2000-7.6KTL-USLO, SUN2000-9KTL-USLO, SUN2000-10KTL-USLO, SUN2000-11.4KTL-USLO, 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, SUN2000-42KTL-M3, SUN2000-44KTL-M3, SUN2000-50KTL-M3, SUN2000-30KTL-NAM3, SUN2000-33KTL-NAM3, SUN2000-36KTL-NAM3, SUN2000-40KTL-NAM3, SUN2000-43KTL-INM3, SUN2000-20KTL-M3, SUN2000-29.9KTL-M3, SUN2000-30KTL-M3, SUN2000-36KTL-M3, SUN2000-40KTL-M3, SUN2000-30KTL-M3, SUN2000-12KTL-M1, SUN2000-125KTL-JPH0, SUN2000-196KTL-H0, SUN2000-200KTL-H2, 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 [PM control manual](#))

- 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.