

TESVOLT Energy Manager 3.0 – Release Notes

Version and Compatibility

- Software Version: TESVOLT Energy Manager 3.0
- Compatible Systems: TS-I HV 80, TS HV 30-80 E, TS-I HV 80 E, TS-I HV 100 E, TPS-E, TPS HV 80 E, TS HV 70 E, TS HV 70

Increase your energy efficiency and increase the control over your battery systems with the new features and improvements of the TESVOLT Energy Manager 3.0. The most relevant innovations include dynamic energy tariffs, multi battery support and the integration of older TESVOLT storage systems.

1. New Functions in Detail

1.1 Dynamic Energy Tariffs

Reduce your energy costs by leveraging the volatility of electricity prices. The TESVOLT Energy Manager automatically adapts the point of time for charging and actuating large consumers automatically based on the lowest prices and your individual settings.

Functions:

- Charge your battery from the grid with low or even negatively priced electricity based on your individual settings.
- Deliberately actuate large consumers (e.g. Wallbox, Heatpump) based on the electricity price.

Requirements:

- Pro version of the TESVOLT Energy Manager
- Germany: energy tariff with a provider via EPEX SPOT market, tibber or aWATTar
- Austria: energy tariff with aWATTar
- The Netherlands, Sweden, Norway: energy tariff with tibber

1.2 Multi Battery Support

Combine and control multiple different TESVOLT battery systems simultaneously. Expand your existing storage today with any newer TESVOLT storage.

Function:

- Group several storage systems into one actuator group, enabling them to execute the same energy service.

Limitations:

- no support for off-grid or replacement power supply

- individual application scenarios can be realized by our TESSVOLT service experts for a surcharge

Requirement:

- Basic version of the TESSVOLT Energy Manager

1.3 Integration of the STPS 60

Older TESSVOLT storage systems using the STPS 60 by SMA can now be integrated into the TESSVOLT Energy Manager.

Functions:

- Control the TS HV 70 E and TS HV 70 via the TESSVOLT Energy Manager.
- Expand the storage capacities of older TESSVOLT storage systems by combining them newer models (also see 1.2 Multi Battery Support).

Limitation:

- Integration into the TESSVOLT Energy Manager is not as deep as with newer systems (e.g. system shutdown can not be initiated via user interface).
- The TESSVOLT Energy Manager currently does not offer a functionality to communicate with an "EZA controller" and also will not in the future for the STPS 60. In Germany for systems with a mains connection power of >270 kW this will likely cause grid operators to reject the connection to their grid.

Requirement:

- Basic version of the TESSVOLT Energy Manager.

1.4 Technicians Interface

myTESWORLD now offers partners a new interface to easily monitor their customers systems remotely. The technicians interface shows status information and relevant system parameters. A user-friendly and extensive filter function helps to find the desired systems quickly.

Requirements:

- Signing up in myTESWORLD as a partner

1.4 New Update Feature

With the TESSVOLT Energy Manager 3.0 and coming versions firmware updates may be installed directly within the user interface by users and partners as soon as they become available.

The manual of installation and instruction offers a guide (see point 5.).

Requirement:

- Basic version of the TESSVOLT Energy Manager

1.6 Digital Input Signals (GPIOs)

Incorporate external devices like power switches and radio ripple control receivers.

Functions:

- Make use of GPIOs as initiators in the decision tree and in energy services.
- Status review and configuration via user interface.



Requirement:








- Basic version of the TESVOLT Energy Manager

2. Improvements of the User Interface and Miscellaneous

- Ripple control receivers can now be configured and used for control directly in the user interface.
- Formula components can be duplicated, modified and saved with separate names.
- Automatic backups of all changes in the energy manager. Option for manual backups included. Exceptions: changes made to the recorded power measurement (RLM) and automatically generated time series (e.g. prediction based times series or price histories for dynamic energy tariffs).
- Actuator groups and strategies can now be renamed.
- Tolerance for malfunctions of electricity meters improved - Energy services will continue to set valid set points as long as the set point can be calculated based on the remaining functioning meters.

3. New Drivers

Device	Manufacturer	Model	Protocoll	Communication Interface
Battery Inverter		Tripower Core 1 (STP50-40, STP50-41) STPS 60 (STPS60-10)	Modbus Sunspec Ethernet RJ45	Ethernet RJ45 Ethernet RJ45
Solar Inverter		Sunny Boy (SB 3.0-1AV-40, SB 3.6-1AV-40, SB 4.0-1AV-40, SB 5.0-1AV-40)	Modbus Sunspec	Ethernet RJ45

Solar Inverter		Piko CI 10,30,50,60	Modbus Sunspec	Ethernet RJ45
Wallbox		Belatron Modular T2	Modbus/TCP	Ethernet RJ45
Wallbox		eSat r20 eBox wr30	Modbus/TCP Modbus/TCP	Ethernet RJ45 Ethernet RJ45
Wallbox		EVTAP-11k EVTAP-22k EVTAP-180k-5M-2C	Modbus/TCP Modbus/TCP Modbus/TCP	Ethernet RJ45 Ethernet RJ45 Ethernet RJ45
Wallbox		AMTRON Charge Control	Modbus/TCP	Ethernet RJ45
Dynamic Energy Tariff		Monthly Hourly (only with additional hardware "Pulse" by tibber)	HTTP HTTP	tibber API tibber API
Dynamic Energy Tariff		Hourly	HTTP	aWATTar API

4. Bug Fixes

Among several others the following bugs have been fixed:

- A bug has been fixed for the inverter "Sunny Tripower X" by SMA that was caused by its new firmware update (03.01.28.R) and prevented the visualisation of performance data in the metered value analysis.
- A bug has been fixed due to which the inverters "SE XXk", "SE HD Wave / SE XXXXH" und "SE XXK-RWS" by Solaredge were not selectable individually in the device setup tab.

5. Manual of Installation and Instruction, Compatibility List

The complete documentation is available here:

- For customers on our website:
<https://www.tesvolt.com/en/products/tesvolt-energy-manager-updates.html>
- For partners in the partner portal:
<https://tesvoltcustomer.powerappsportals.com/en-US/Account/Login>

6. How to update your system?

The TESVOLT service team is gradually updating all existent systems. In case you have particular high interest in certain features of the version 3.0, feel free to reach out to your specialist partner for questions or to request a higher prioritisation for your system with the rollout of the update.

Certain features can only be used with a **Pro version** of the TESVOLT Energy Manager - contact us directly at team.backoffice@TESVOLT.com to learn more about the pro version.

Please note:

Due to extensive technical improvements to the TESVOLT Energy Manager, it is possible that some energy service strategies may become faulty as a result of the update to version 3.0 and can no longer be executed. In this case, the stored standard strategy will be executed instead. An error message will appear under 'Activation' (formerly decision tree) in the 'Energy services' area.

Please check your energy services for error messages after the update!

We will endeavour to rectify this error as quickly as possible.