

TPS HV 80 E

LITHIUM STORAGE SYSTEM

Compact in the container

Excellent performance and efficiency combined with optimum energy and power density

TESVOLT
Free to go green.



STRENGTHS

UNCOMPROMISINGLY

POWERFUL

The TPS HV 80 E storage system is optimised for continuous use in industrial and commercial applications. With 1 C maximum power rating, it can store energy very quickly, and release it again just as quickly. The different variants, with the option of connecting up to four systems per inverter, enable an extremely wide range of applications along with high-performance operation.

- Local container manufacturing in Wittenberg – **Quality Made in Germany**
- Easy installation and commissioning
- Suitable for outdoor use
- Minimises noise levels
- Saves space indoors
- External location of fire loads
- Lower operating costs due to external attachment of inverter
- Designed for a life cycle of 30 years
- Safe cell technology





APPLICATIONS¹

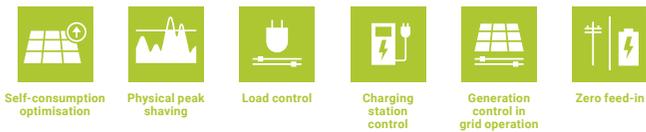
YOUR CHOICE OF ENERGY MANAGEMENT

Use either the **TESVOLT** or the **SMA** energy management system depending on your requirements

TESVOLT EMS²

With a wide range of customisation options, you can implement the most complex application requirements. For this you need the right configurable hardware: the TESVOLT Energy Manager. Combining it with the extensive monitoring and control options of the myTESWORLD portal or the app opens up numerous possibilities for the demanding user. Use the TESVOLT EMS to partition your storage system and apply a multi-use function to combine almost any applications, configuring the storage system and EMS for optimal efficiency of the entire generator system. And on top of all that – the TPS HV 80 E storage system lets you integrate generators and consumers from any manufacturer.

Basic functions



Pro functions: use functions for a fee



- 1 The applications shown apply for Germany. Please contact your area manager to find out which applications are available in the country of installation.
- 2 There are additional costs for integration of the TESVOLT EMS. Please determine the type and scope using our configurator in the Partner Portal.
- 3 For more than one charging station.

SMA EMS

The ennexOS energy management system from SMA, which is already integrated in the SMA SUNNY TRI-POWER STORAGE X inverter, is particularly suitable for optimal efficiency in the context of standard applications such as self-consumption optimisation or peak shaving. Proven, reliable and well-established, it has been used in the context of SMA photovoltaic inverters for many years.



COMPACT

WITH EXTRA

ENERGY

Our battery storage systems can be optimally adapted to suit every application.

Whether it's used for self-consumption optimisation, peak shaving or Time of Use, for forecast-based charging or zero feed-in, the TESVOLT TPS HV 80 E storage system offers a technical storage system solution to suit every application. Its advanced, cost-optimised design ensures unbeatable cost efficiency without compromising on quality and performance. It is extremely robust and well suited to even the toughest of tasks. High-quality battery cells from the automotive industry and innovative technologies such as the DynamiX Battery Optimizer make our TPS HV 80 E storage system one of the most durable and high-performance products on the market.



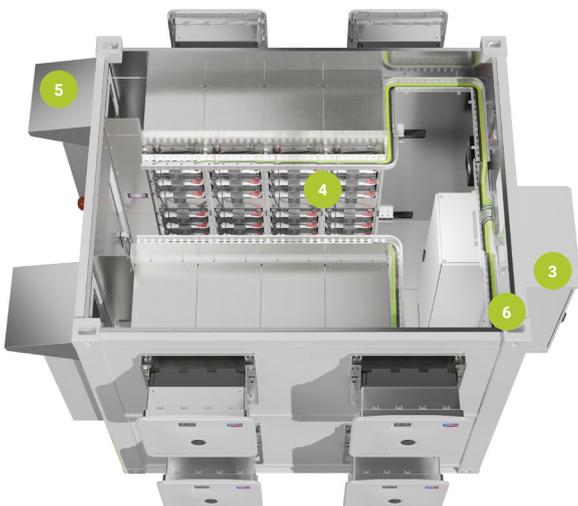
BATTERY MODULE

Maximum energy density

The Dynamix Battery Optimizer and the concept of active air conditioning allow for two or more cycles within 24 hours. Combined with a low LCOS, our modules form the core of optimal economic efficiency.

The TPS HV 80 E storage system has a fully modular design, from the battery modules to the container. It is therefore flexibly adaptable and, thanks to its long service life, it is also very efficient.

- 1 Battery module
- 2 Active Power Unit
- 3 AC sub-distributor
- 4 Battery racks
- 5 Air conditioning
- 6 Fire alarm control panel



SAMSUNG SDI CELL

Maximum safety

Prismatic cells from Samsung SDI are extremely safe. For example, the nail safety device ensures that, even when penetrated with a metal nail, the cell will not catch fire.



SMA SUNNY TRIPower STORAGE X

Optimised for use with the new three-phase SMA battery inverter

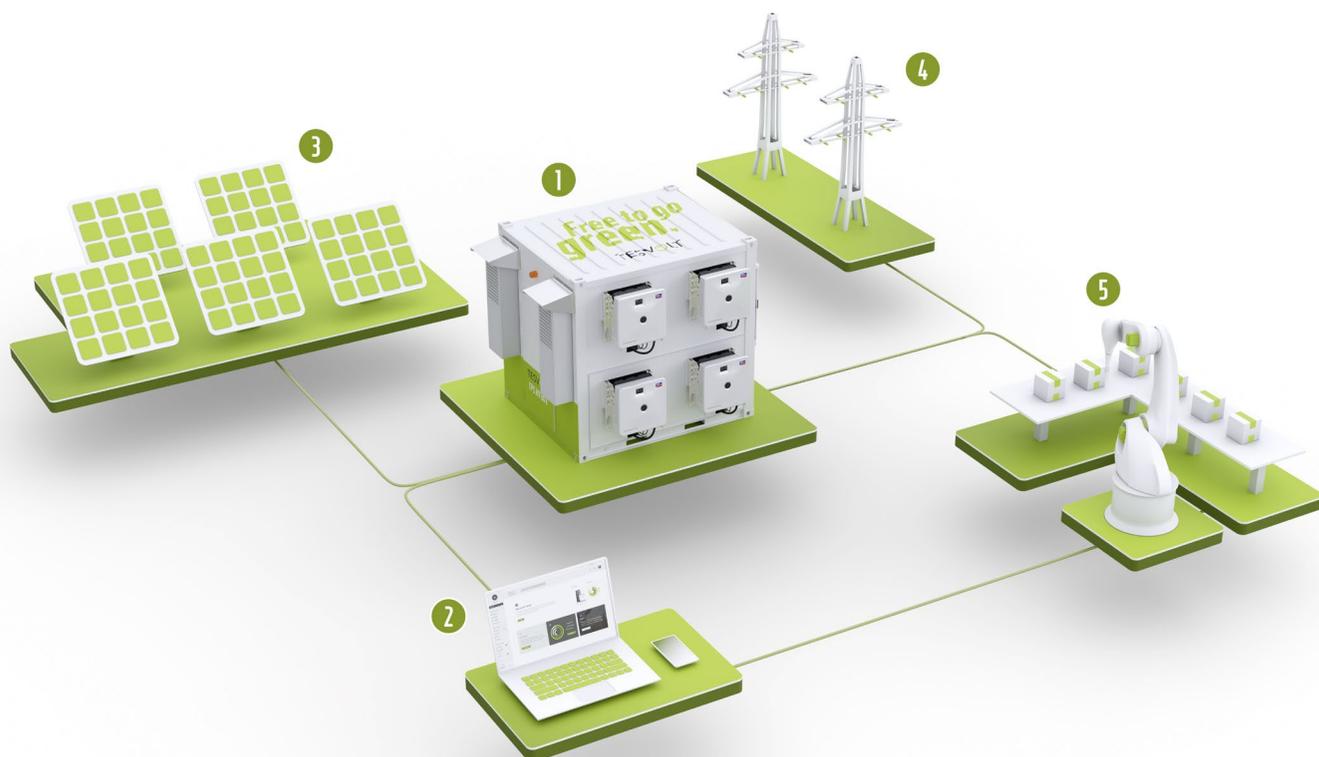
For small or large power requirements, for commercial or agricultural, tourism or trade purposes, the different variants adapt perfectly to the needs of the specific user.

With back-up operation* pending, the SMA SUNNY TRIPower STORAGE X offers a future-proof investment and will be able to supply power immediately in the event of a grid outage.

Thanks to the use of innovative materials in its semiconductor technology and a completely new system architecture, the SMA SUNNY TRIPower STORAGE X achieves maximum efficiency, very fast reaction and control times, and a broad usable DC voltage range.



*The graphics shown may differ from the actual structure.



TPS HV 80 E SYSTEM STRUCTURE

1. Battery storage system

The battery storage system stands as the pivotal component for seamlessly integrating renewable energies within the broader system. It not only stores generated energy but also facilitates load balancing, ensures supply security, and drives cost reduction. Teamed up with the externally mounted inverters, it guarantees efficient energy supply through flexible conversion of DC and AC, alongside swift responses to grid fluctuations. The integrated energy management system (EMS) optimizes energy flow, orchestrates charging and discharging processes, and unlocks a multitude of versatile applications.

2. Portal

For efficient and transparent management of the energy balance and to ensure a customised energy supply, the portal allows users to monitor energy flows, track the system status and analyse energy consumers.

3. Energy resources

The wide range of energy resources within the system design, such as photovoltaics and wind power, generate the required electricity, which the battery storage system stores without environmental impact.

4. Utility grid

The utility grid acts as an additional back-up resource within the system for times when renewable energy production is low. In combination with a battery storage system, it actively relieves the pressure on the public utility grid and provides a reliable supply of electricity, particularly at peak load times.

5. Consumers

Every consumer has their own individual energy requirements. All system components are tailored to these requirements and work together to ensure a sustainable and cost-efficient supply.

FREE TO GO GREEN

TESVOLT AG is an innovation and market leader for commercial and industrial energy storage system solutions in Germany and Europe. TESVOLT products enable companies to end their energy dependency and play a part in the energy transition. The agile company produces intelligent lithium storage systems with power ratings from 30 kilowatt hours through to multiple megawatt hours – with top quality and TÜV-certified safety.

TESVOLT manufactures its commercial storage system solutions in series production at its own carbon-neutral gigafactory in Lutherstadt Wittenberg and delivers them worldwide.

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Registration in the manufacturer's myTESWORLD portal (<https://mytesworld.tesvolt.com>) is required to use the energy management system (EMS) TESVOLT Energy Manager. Registration in Sunny Portal powered by ennexOS from the manufacturer SMA (**Sunny Portal powered by ennexOS**) is required to use the energy management system (EMS) Data Manager M.