



LITHIUM STORAGE SYSTEM TS 48 V

The commercial all-rounder

TESVOLT
THE ENERGY STORAGE EXPERTS



APPLICATIONS

- **Back-up power:**
In the case of a power failure, your storage system is ready to supply power in a split second.
- **Self-consumption optimisation:**
Use more of the power you have generated.
- **Off-grid power supply:**
Create your own utility grid, for example in combination with a photovoltaic system.



MAXIMUM SAFETY

Prismatic battery cells are incredibly durable, safe and powerful – particularly in comparison to round cells. TESVOLT uses Samsung SDI cells and offers a performance guarantee of 10 years on the battery modules.



FLEXIBILITY NOW AND IN THE FUTURE

Our TESVOLT TS storage systems not only offer flexible configuration options at the moment of purchase – thanks to the innovative Active Battery Optimizer technology, the capacity can also be expanded years later.





LONG LIFESPAN

The lifespan of a battery has a huge impact on its economic efficiency. Our storage system features outstanding performance: all components are designed to last 8,000 cycles or offer a 30-year lifespan.



HIGH PERFORMANCE

WITHOUT COMPROMISE

TESVOLT TS storage systems can store energy very quickly, and release it again just as quickly. With a continuous power rating of 1C, the storage system is optimized for professional use in commercial applications, agriculture and industry.

A POWERHOUSE FOR ALL PURPOSES

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

Whether it's used for emergency power, or coupled to the utility grid or off-grid, whether it's in the desert or the polar circle, with the TESVOLT TS storage system, TESVOLT is offering power storage technology for all types of use. The TESVOLT TS storage system is not only flexible, with a size and output that can be adapted to suit any need, it is also one of the most advanced and efficient storage systems. It is extremely robust and therefore well suited to the hardest tasks. Thanks to high-quality battery cells from the automobile industry and innovative technologies, such as the Active Battery Optimizer, our TESVOLT TS storage system is one of the most efficient and durable products on the market.



BATTERY MODULE

Every battery module has its own Active Battery Optimizer (ABO) that can be separated from the module in a few easy steps, for example, for servicing.

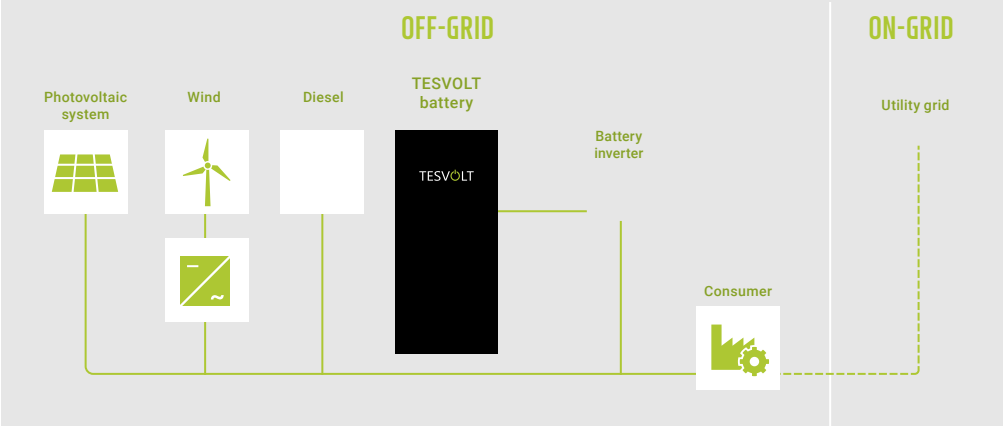


SAMSUNG SDI CELLS

Prismatic cells from Samsung SDI are extremely safe. For example, the NSD (Nail Safety Device) ensures that the cell will not catch fire even when penetrated with a metal nail.



- 1 Active Power Unit
- 2 Battery module
- 3 Overcharge Safety Device (OSD)
- 4 Vent
- 5 Fuse
- 6 Active Battery Optimizer



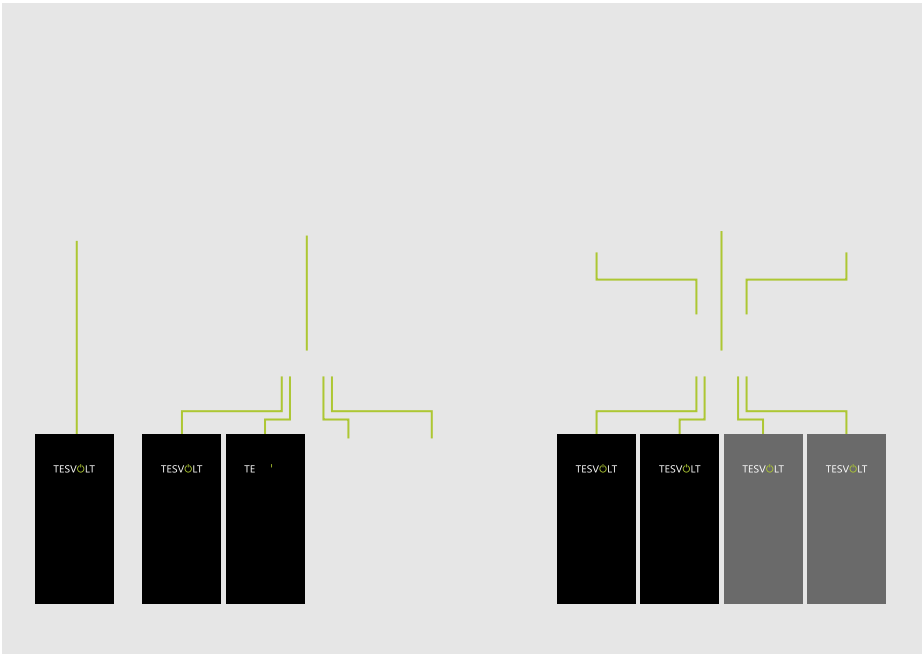
OFF-GRID OR ON-GRID

TESSVOLT TS storage systems can be integrated into stand-alone grids and can also be connected to the utility grid. They can be flexibly combined with any sort of energy generator, including photovoltaics, bio energy, wind power and diesel generators.

MODULAR SYSTEM PRINCIPLE

TESSVOLT TS storage systems can be flexibly adapted to suit any operating purpose:

- The desired energy is built up in 4.8 kWh increments. An Active Power Unit (APU) can monitor up to 16 battery modules.
- Three different racks are available as housing, each holding up to 5, 8 or 10 battery modules.
- 1-phase or 3-phase supply and the desired connected load determine the number of battery inverters required.



SYSTEM CONFIGURATIONS

Potential capacities depending on power output using SMA Sunny Island inverters:

Energy of System		3.3 kW	4.6 kW	6.0 kW*	9.9 kW	13.8 kW	18 kW	36 kW	54 kW	72 kW	90 kW	108 kW	126 kW	144 kW	162 kW	180 kW	198 kW	216 kW
3686.4 kWh																		
230.4 kWh																		
211.2 kWh																		
192.0 kWh																		
172.8 kWh																		
153.6 kWh																		
134.4 kWh																		
115.2 kWh																		
96.0 kWh																		
76.8 kWh																		
57.6 kWh																		
38.4 kWh																		
24.0 kWh																		
19.2 kWh																		
14.4 kWh																		
9.6 kWh																		
4.8 kWh																		
SMA Sunny Island	1 x 4.4 M	1 x 6.0 H	1 x 8.0 H	3 x 4.4 M	3 x 6.0 H	3 x 8.0 H	Over 18 kW of power, the use with multicluster boxes is permitted only in off-grid applications.											

* Locally applicable regulations and statutory standards require degrading to a maximum of 4.6 kW for grid-connected operation due to imbalance load specifications.