



TS-I HV 100 E

TS-I HV 80 E / 100 E

The allstar with the E-factor* for commercial and industrial use

* Excellent performance and efficiency combined with optimum energy density and minimal space requirements

TESVOLT
Free to go green.



APPLICATIONS

**BASIC FUNCTIONS –
USE THE PORTAL FOR FREE¹**

- **Self-consumption optimisation**
- **Zero feed-in**
- **Physical peak shaving**
- **Charging station control³**
- **Generation control**
- **Load control**

**PRO FUNCTIONS –
USE FUNCTIONS FOR A FEE²**

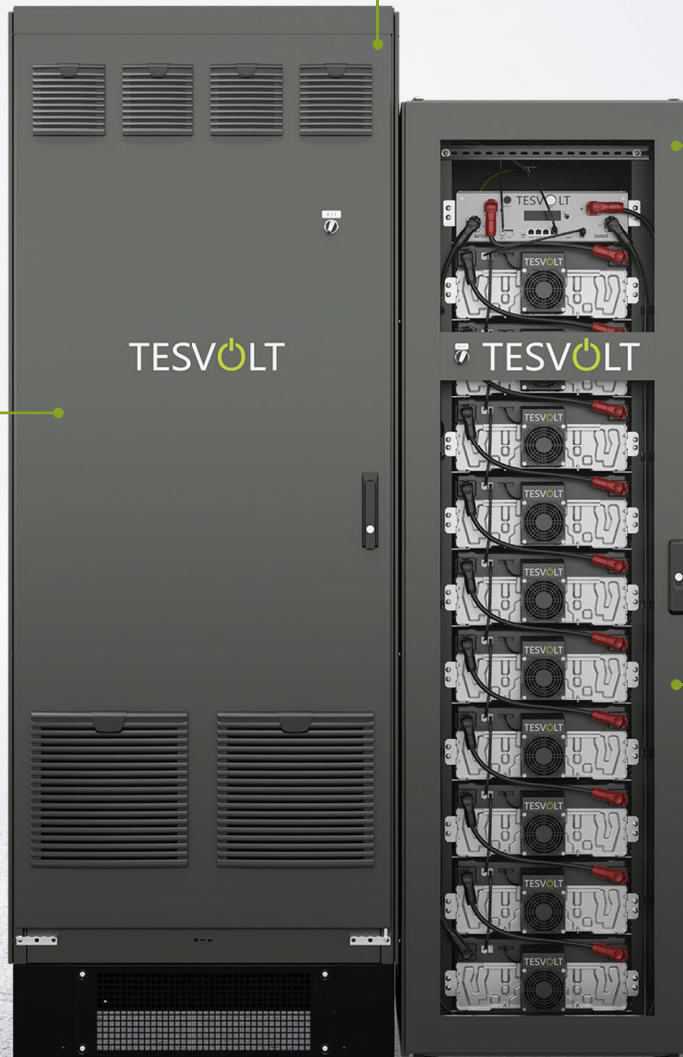
- **Off-grid**
- **Dynamic peak shaving**
- **Back-up power**
- **Time of Use**
- **Power quality**
- **Multi-use applications**
- **Micro-Grid⁴**
- **Charging station control³**
- **Semi-off-grid operation⁴**
- **Forecast-based charging**
- **Direct marketer interface⁴**



UNCOMPROMISINGLY

POWERFUL

TS-I HV 80 E/100 E storage systems can store energy very quickly, and release it again just as quickly. With a continuous power rating of 1C for charging and discharging, combined with active cooling, it provides high-performance operation optimised for continuous use in industrial and commercial applications.



TS-I HV 80 E

1 Our current terms of use apply.
2 Requires fee-based subscription according to the current price list.
3 With more than one charging station, additional costs are incurred for the project planning.
4 Project-based



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 capacity guarantee of 10 years on the battery modules. The storage system also offers multi-layer protection of each individual cell as well as functional safety at system level.



MAXIMUM ECONOMIC EFFICIENCY

The TS-I HV E series features extremely efficient battery storage systems with low costs per kilowatt hour of stored energy. This is due to the guaranteed 100% depth of discharge as well as the comparatively low investment costs with increased energy density and reduced space requirements at the same time.

THE ALLSTAR WITH EXTRA ENERGY

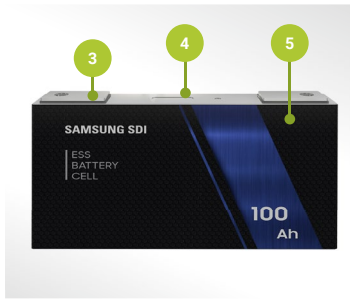
The TS-I HV E series fulfils the highest standards for performance and economic efficiency.

Are you interested in dynamic peak shaving, Time of Use or back-up power applications, either on-grid or off-grid? Then you're sure to like our TS-I HV E products. With output well into the megawatt hour range, they're equipped to handle the toughest jobs and, thanks to the active filter technology, they also improve the local power quality – sustainably and almost incidentally. High-quality battery cells from the automotive industry and innovative technologies such as the Dynamix Battery Optimizer make the TS-I HV E series one of the most durable products on the market.



BATTERY MODULE

Each battery module has its own DynamiX Battery Optimizer (DBO), allowing the fan to be actively operated by the balancing current.



SAMSUNG SDI CELL

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.

- 1 Active Power Unit
- 2 Battery module
- 3 Overcharge safety device
- 4 Vent

- 5 Fuse
- 6 DynamiX Battery Optimizer
- 7 Fan



TS-I HV 100 E

TESVOLT PCS BENEFITS

- **Black start-capable:** the battery inverter can be operated off-grid or supply back-up power in the event of a blackout.
- **Active filter:** stabilise your voltage and frequency while reducing load imbalance, reactive power and harmonics in your local electricity grid.
- **Modular principle:** the TESVOLT PCS consists of up to four IPU inverter modules (of up to 85 kW each, can be upgraded at any time).
- **Control rate:** response time to power requirements in the utility grid in milliseconds
- **Maximum power density:** potential for up to 340 kW with a footprint of just 0.54 m²

TESVOLT ENERGY MANAGER* BENEFITS

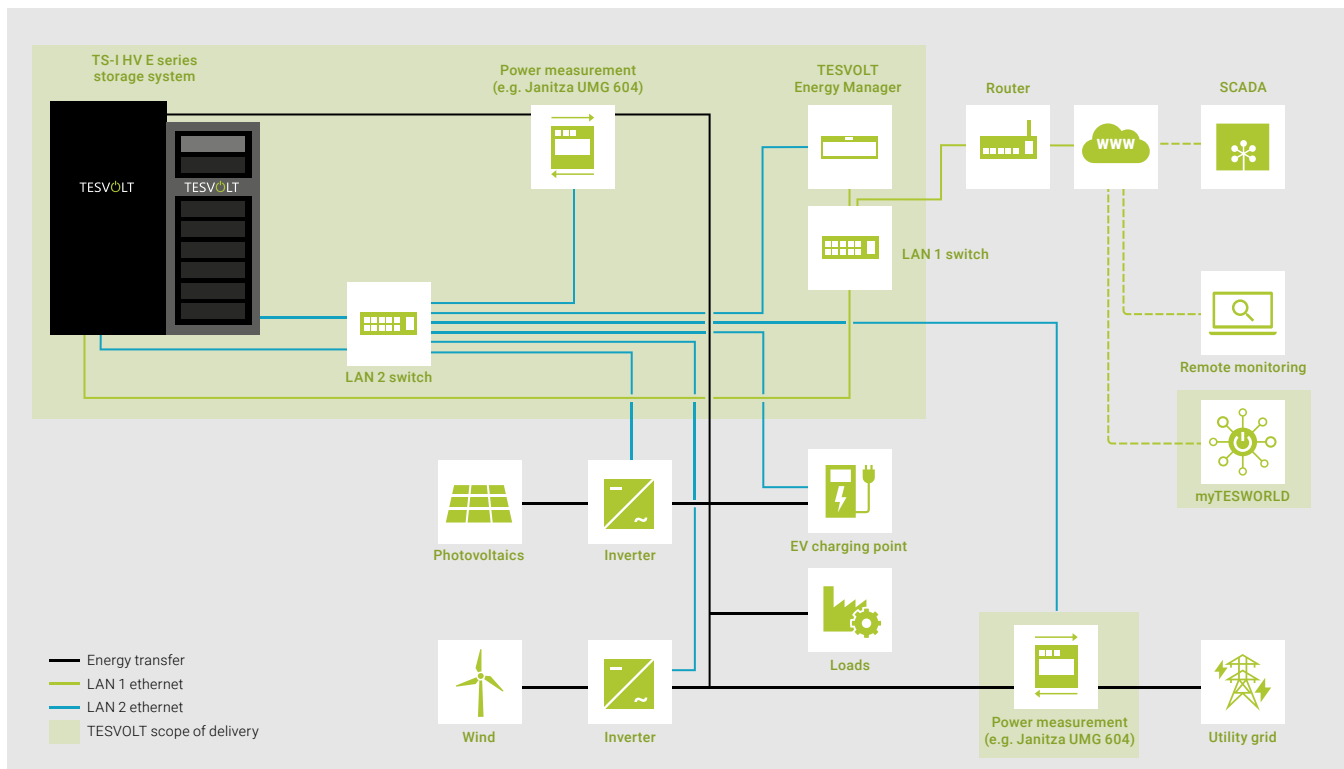
- **Universally applicable:** off-grid, back-up power, peak shaving, self-consumption optimisation, multi-use, power quality, Time of Use, forecast-based charging, load control, generation control during utility grid operation, ancillary services (e.g. POR)
- **Multi-use applications:** combine various applications such as self-consumption optimisation, peak shaving, Time of Use, back-up power, etc.
- **myTESWORLD:** control and monitor your battery storage system's function and savings at any time.
- **Long-term flexibility:** add new functions whenever you want.



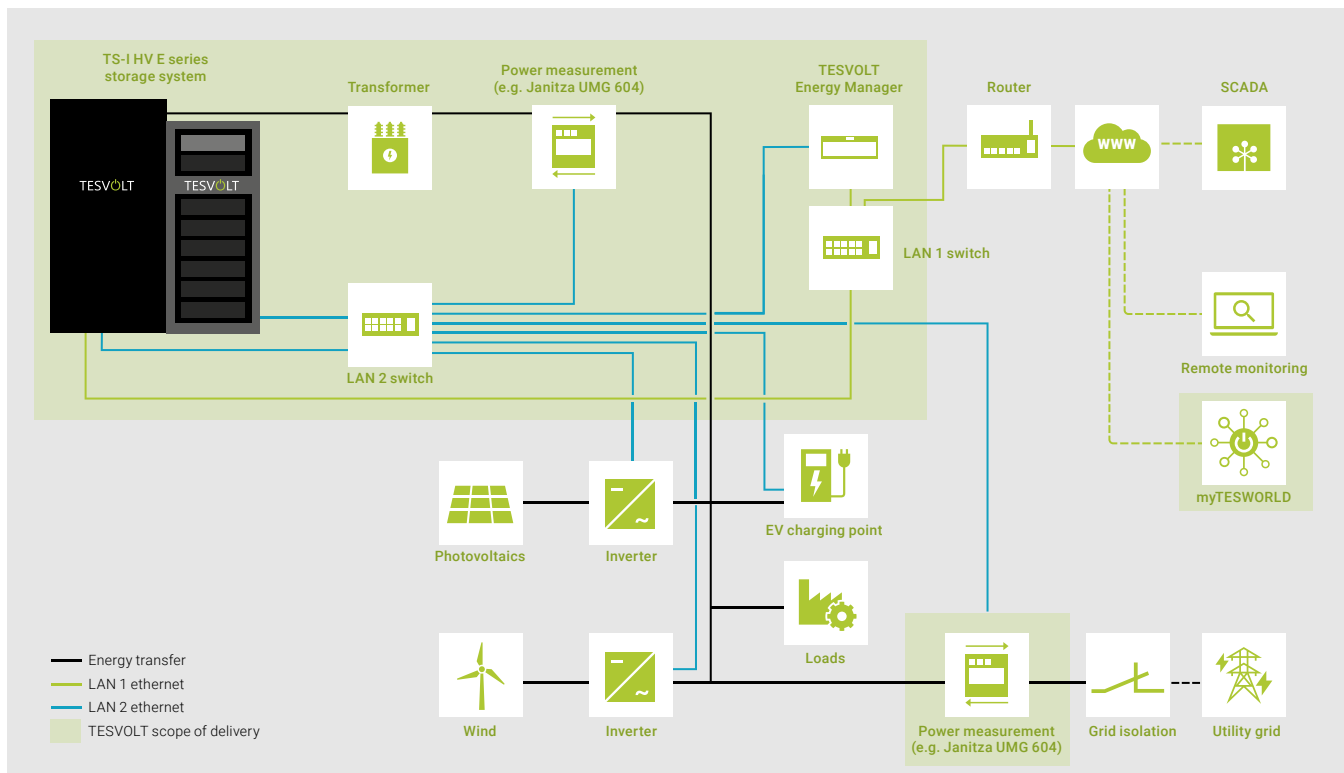
TESVOLT PCS with four inverter modules (IPUs)

Not all functions are available in all countries. For further information, please contact your area manager. Please also observe our compatibility list in the downloads section of our homepage.

SYSTEM SETUP FOR ON-GRID



SYSTEM SETUP FOR OFF-GRID/BACK-UP POWER



ABOUT TESVOLT

Daniel Hannemann and Simon Schandert established TESVOLT in the summer of 2014 with a vision to bring affordable, clean energy to every corner of the world.

Their aim was to develop and manufacture battery systems that store power from renewable energy sources as efficiently as possible. Given that the biggest energy consumers in many countries are commerce and industry, the company focused on storage systems with a large capacity from the very beginning. Today, TESVOLT produces its solutions for commercial storage systems in series and supplies them all around the world.



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This data sheet is strictly informational and is not legally binding. The exact specifications and/or product features (particularly in case of further development of the product) may differ somewhat from the information provided here. Subject to errors and changes. Please read the safety and installation instructions carefully and completely before using the product.

In case of purchase, the currently valid guarantee policies and the general terms and conditions of TESVOLT AG apply. Registration in the manufacturer's myTESWORLD portal [<https://mytesworld.tesvolt.com>] is required to use the energy management system (EMS) TESVOLT Energy Manager.

Your certified TESVOLT specialist partner