

KEY FACTS

UNCOMPROMISINGLY POWERFUL

	TESVOLT TS	COMPETITORS
Lifespan	up to 30 years	up to 20 years
DOD	100%	80% to 90%, rarely 100%
Number of Full Cycles	8,000	6,000 to 14,000
C-Rate*	1.0 C (4.0 C max. 20 sec.)	0.3 C to 0.5 C
Guaranteed cycles	6,500	2,500 to 4,000
Operating Temperature	- 10°C to + 50°C	often + 5°C to + 35°C
Retrofitting	unlimited	within 1 year
Expansion	flexible to MWh	often limited
Cell Technology	lithium NMC	lithium NMC, LFP
Cell Type	prismatic	round cells, pouch bag
Cell Type: the difference	Highest safety standard - best synergy of robust housing and ideal heat dissipation for optimum performance	Pouch bag: integration of security mechanisms difficult up to impossible, no robust housing Round cells: low heat dissipation reduce lifespan
Battery Cell Manufacturer	SAMSUNG SDI	Panasonic, LG, Sony, BYD
Cooling	passive	often active (power consumption)
Battery Management System	Active Battery Optimizer balancing at module and cell level therefore no loss of energy	passive energy is used up over resistors
Standby Consumption	1 watt per hour	20-40 watts per hour (often without information)
Balancing Current	5 A	0.05 A
Efficiency TS-Rack	< 98%	85-92%
Transparency	Voltage, SoH and SoC of each cell	no
AC/DC System	yes	yes
Islanding (Off-Grid)	yes	rare, often limited
48 volt & high-volt	unique	-
Loading and Discharging Currents per Sunny Island Cluster	up to 900 A	10-300 A
Special Feature	unique modular system in 4.8 kWh increments	limited
Assembly	quick and easy	
Guarantee	10-year performance guarantee 5-year product guarantee	10-12-year performance guarantee 2-10 year product guarantee
Manufactured	made in Germany	China, Japan, USA, Germany

* C-rate: Maximum allowed charging and discharging currents [C-rate x energy (kWh) = kW charging power]. Therefore there are no restrictions on either energy content (kWh) or power (kW). Uncompromisingly powerful. [06.04.2017]