

TECHNICAL DATA SHEET

TMS FLEX C

Product category	Energy storage system		
Product name	TMS flex C		
Type designation	TS HV 50/4-20	TS HV 50/5-20 TS HV 50/6-20 TS HV 50/7-20	TS HV 50/8-20 TS HV 50/9-20 TS HV 50/10-20
Energy content (at 100% DoD)	32 kWh	40 kWh / 48 kWh / 56 kWh	64 kWh / 72 kWh / 80 kWh
Nominal voltage	324 V \approx	405 V \approx / 486 V \approx / 567 V \approx	648 V \approx / 729 V \approx / 810 V \approx
Operating voltage	290 - 365 V \approx	363 - 457 V \approx / 436 - 548 V \approx / 508 - 639 V \approx	581 - 730 V \approx / 653 - 822 V \approx / 726 - 913 V \approx
Nominal/maximum charging/discharging current	100 A \approx		
Max. C-Rate	1C		
Overvoltage category	III		
Cell	Lithium NMC prismatic (Samsung SDI)		
Cell balancing	Dynamix Battery Optimizer		
Cycles expected @ 100% DoD 70% SoH 23°C +/-5°C 1C/1C	6000		
Cycles expected @ 100% DoD 70% SoH 23°C +/-5°C 0.5C/0.5C	8,000		
Efficiency (battery)	up to 98%		
Self-consumption (standby)	5 W (without battery inverter)		
Operating temperature	0°C to 50°C (derating at low temperatures)		
Ambient temperature	0°C to 50°C (optimal: 25°C +/-5°C)		
Ambient temperature for capacity guarantee	10°C to 45°C		
Humidity	0 to 80% (non-condensing)		
Cooling concept	Passive via fins and active via fans		
Altitude of installation site	< 2,000 m above sea level		
Max. noise emission (per fan running)	65 dB		
Weight	Total	Approx. 346 kg	Approx. 346 kg Approx. 482 kg Approx. 538 kg
	Battery module		56 kg
	APU		13 kg
	Cabinet	107 kg	130 kg
			150 kg
Dimensions (H x W x D)	Cabinet	1208 mm x 608 mm x 808 mm	1608 mm x 608 mm x 808 mm
	Cabinet with wall bracket	1208 mm x 608 mm x 990 mm	1608 mm x 608 mm x 990 mm
		2155/2090 mm	
Tilt height of cabinet forwards, backwards/sidewards		1426/1339 mm	1778/1705 mm
Certificates/standards	Cell	IEC 62619:2017, UL 1642, UN 38.3	
	Battery module	UN 38.3, IEC 62619:2017, IEC 62620:2014	
	Product	CE, UN 38.3, IEC 62619:2017, IEC 61010-1+A1:2016, IEC 61508:2010, IEC 61000-6-2:2016, IEC 61000-6-4:2019, IEC 61000-6-7:2015, 2006/66/EG (Battery Directive)	
Guarantee	10-year performance guarantee, 10-year system guarantee		
Recycling	TESVOLT offers a free take-back scheme for batteries from Germany		
Protection class	IP 20		
Degree of protection	I		
Pollution degree	PD 2		
IK class	IK 10		
Battery specification as per IEC 62620:2014	INP46/175/127/[1P22S]M/-20+60/90		

TESVOLT AG

Am Heideberg 31 | 06886 Lutherstadt Wittenberg
Deutschland | Germany
Phone +49 (0) 3491 8797 100
info@tesvolt.com | www.tesvolt.com



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 828877

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 delivery and business 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.
Registration in Sunny Portal powered by ennexOS from the manufacturer SMA ([Sunny Portal powered by ennexOS](https://www.sunnyportal.com)) is required to use the energy management system (EMS) Data Manager M.