



TESVOLT  
*Free to go green.*

## TESVOLT TAYTAN

*The future of storage system technology  
with digital security, made in Germany.*



### Security

Data security – **Infineon cybersecurity** chip technology.  
Energy security – ready for **energy trading**.  
Service security – **over-the-air updates & digital services**.



### Efficiency

Up to **15,000 cycles** ensure high energy throughput and **optimum economic efficiency** with a guarantee of up to **12 years**.



### Flexibility

3–10 battery modules per battery string and up to 4 strings per inverter.  
**Can be expanded at module level** without additional hardware.



### Power

**1C charging and discharging current** (75 A) with high efficiency and innovative **passive cooling** for **power-intensive applications** like back-up power and charging station infrastructure.



## Technical Data Sheet

# TESVOLT TAYTAN

### Technical data TESVOLT TAYTAN

Product name		TESVOLT TAYTAN							
Type designation		TAYTAN/ 03-40	TAYTAN/ 04-40	TAYTAN/ 05-40	TAYTAN/ 06-40	TAYTAN/ 07-40	TAYTAN/ 08-40	TAYTAN/ 09-40	TAYTAN/ 10-40
<b>DC output</b>									
Energy content (at 100% DoD) @ 25 °C, 0.3C		18.75 kWh	25.00 kWh	31.25 kWh	37.50 kWh	43.75 kWh	50.00 kWh	56.25 kWh	62.50 kWh
Nominal output (battery)		18.75 kW	25.00 kW	31.25 kW	37.50 kW	43.75 kW	50.00 kW	56.25 kW	62.50 kW
Nominal voltage		249 V $\approx$	332 V $\approx$	416 V $\approx$	499 V $\approx$	582 V $\approx$	665 V $\approx$	748 V $\approx$	832 V $\approx$
Operating voltage in V $\approx$		223...276	297...369	371...461	445...553	519...646	593...738	667...830	741...923
Rated capacity		75 Ah							
Nominal/maximum charging current		75 A $\approx$ / 88 A $\approx$ for 5s @16 °C ≤ T ≤ 50 °C							
Nominal/maximum discharging current		75 A $\approx$ / 88 A $\approx$ for 5s @1 °C ≤ T ≤ 50 °C							
Nominal output / C-rate	SMA SI X 30	-	-	30 kW / 1.00C	30 kW / 0.84C	30 kW / 0.72C	30 kW / 0.63C	30 kW / 0.56C	30 kW / 0.50C
	SMA SI X 50	-	-	-	-	-	-	50 kW / 0.93C	50 kW / 0.80C
<b>Efficiency</b>									
Round-trip efficiency / max. efficiency (battery)		In development							
Self-consumption (standby)		In development							
<b>Operating conditions</b>									
Permitted operating temperature		-20...50 °C							
Permitted ambient temperature		-20...50 °C							
Recommended ambient temperature		15...30 °C							
Humidity		5...95% (non-condensing)							
Installation site		Indoor and covered outdoor area							
Altitude of installation site		≤ 3000 m above sea level							
Cooling concept		Passive cooling							
Weight	Total	216 kg	278 kg	340 kg	402 kg	464 kg	526 kg	588 kg	650 kg
	Module	62 kg							
	BMU	18.5 kg							
	Base	11.5 kg							
Dimensions (H x W x D)		791 x 754	950 x 754	1110x754	1270x754	1430x754	1589x754	1750x754	1909x754
Without wall clearance		x 465 mm	x 465 mm	x 465 mm	x 465 mm	x 465 mm	x 465 mm	x 465 mm	x 465 mm
Degree of protection		IP 55							
IK rating		In development							
Protection class / overvoltage category		I / II							
Pollution degree		In development							
<b>General data</b>									
Warranty		Up to 12 years warranty (performance)							
Guaranteed energy throughput @100% DoD   65% SoH   -20...50 °C   1C/1C		35.8 MWh per module							
Cycles expected @100% DoD   65% SoH   -20...50 °C   0.5C/0.5C		15.000							
Expandability in the string / with additional strings		Up to 2 years / unlimited							
Battery type		Rechargeable industrial lithium-ion battery							
Cell		Lithium iron phosphate (LFP)							
Certification/standards	Battery cell	UN 38.3 / IEC 62619 / UL 1973 / UL 9540A							
	Module	UN38.3 / IEC 62619							
	System	IEC 63056:2020 / IEC 62619:2022 / VDE-AR-E 2510-50:2017 / IEC 61010-1:2020 / EN 61508: 2010 Part 1-7 - SIL 2							

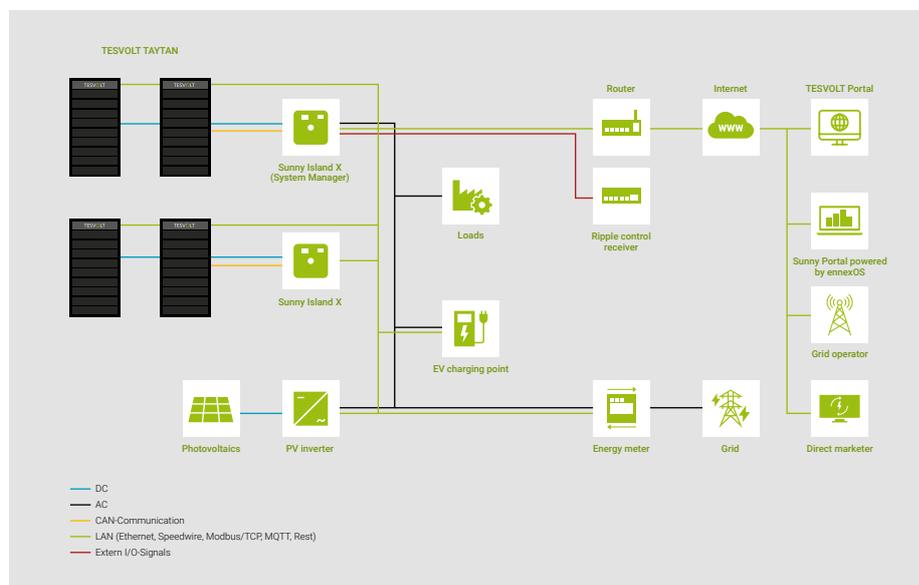
# Technical Data Sheet

# TESVOLT TAYTAN

## Technical data battery inverter Sunny Island X

Product name	Sunny Island X 30 (SI X 30)	Sunny Island X 50 (SI X 50)
Type designation	SI30-20	SI50-20
<b>Power supply (AC)</b>		
Nominal power (AC)	30 kW	50 kW
Max. AC apparent power	30 kVA	50 kVA
Max. output current	45.6 A per phase	75.5 A per phase
AC nominal voltage / AC voltage range	400 V / 187...528 V	
Rated grid frequency / grid frequency range	50 Hz or 60 Hz / 44...66 Hz	
Power factor at rated power / adjustable displacement power factor	1 / 0 overexcited to 0 underexcited	
Connection line conductors	5 (L1, L2, L3, N, PE)	
<b>Efficiency</b>		
Max. efficiency / European efficiency	98.0% / 97.6%	98.0% / 97.2%
Self-consumption (standby)	25 W	
<b>Mechanical data</b>		
Dimensions (H x W x D)	837.3 x 772 x 443.8 mm	
Weight	104 kg	
Noise emission, typical	69 dB (A)	
Operating temperature range	-25 °C to 60 °C (with derating from 45 °C)	
Degree of protection	IP 65 / NEMA 4X	
Protection class / overvoltage category	I / DC: II, AC: III	
Permitted maximum value for relative humidity	95% (non-condensing)	
Topology / cooling concept	3-phase / aktiv	
<b>General data</b>		
Warranty	5 + 5* years SMA warranty (*after successful SMA product registration)	
Energy management functions (integrated)	Self-consumption optimisation, peak load shaving, multi-use, zero feed-in	
Number of supported devices	11 (system manager function) / 50 (Data Manager M)	
Additional information	<a href="#">SMA website</a>	

## System configuration



## Technical Data Sheet

# TESVOLT TAYTAN

### System configuration TESVOLT TAYTAN with Sunny Island X

Total number of strings	Unit	Number of battery modules per string*								
		5	6	7	8	9	10			
12	kWh	375	450	525	600	675	750			
11		343	412	481	550	618	687			
10		312	375	437	500	562	625			
9		281	337	393	450	506	562			
8		250	300	350	400	450	500			
7		218	262	306	350	393	437			
6		187	225	262	300	337	375			
5		156	187	218	250	281	312			
4		125	150	175	200	225	250			
3		93	112	131	150	168	187			
2		62	75	87	100	112	125			
1		31	37	43	50	56	62			
<b>Output [kW]</b>								30	60	90
<b>Number of Sunny Island X 30</b>								1	2	3

Total number of strings	Unit	Number of battery modules per string*						
		9	10					
20	kWh	1125	1250					
19		1068	1187					
18		1012	1125					
17		956	1062					
16		900	1000					
15		843	937					
14		787	875					
13		731	812					
12		675	750					
11		618	687					
10		562	625					
9		506	562					
8		450	500					
7		393	437					
6		337	375					
5		281	312					
4		225	250					
3		168	187					
2		112	125					
1		56	62					
<b>Output [kW]</b>				50	100	150	200	250
<b>Number of Sunny Island X 50</b>				1	2	3	4	5

\*Mixing the number of battery modules when connecting strings in parallel is not permitted.