



/ STPS30-20 / STPS50-20



Sunny Tripower Storage X

powered by
ennexOS

Technical data - subject to changes

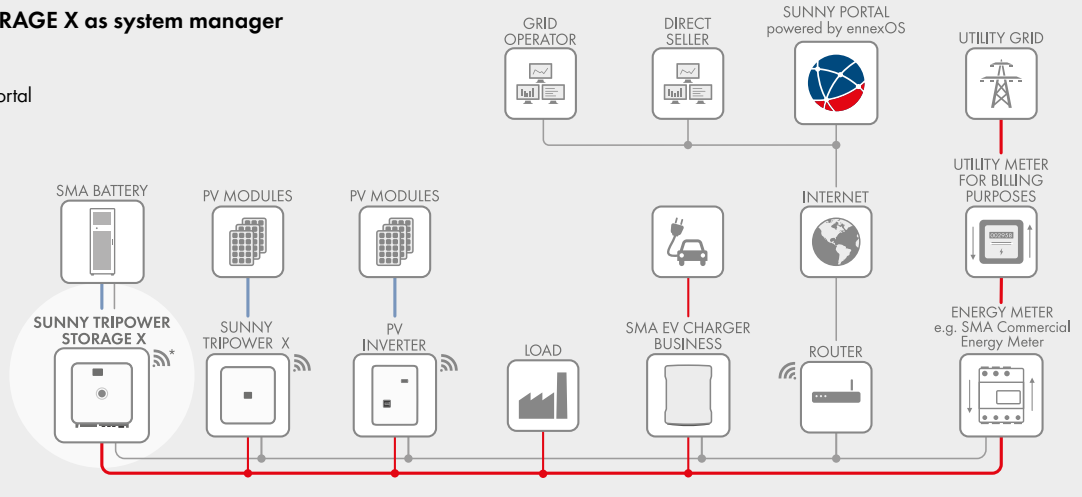
Technical data	Sunny Tripower Storage X 30	Sunny Tripower Storage X 50
Battery connection (DC)		
Max. DC power	30600 W	51000 W
DC voltage range	200 V to 980 V	
Max. usable input current ($I_{DC, max}$)	150 A	
Battery type	Li-ion	
Grid connection (AC)		
Rated power at nominal voltage	30000 W	50000 W
Max. apparent AC power	30000 VA	50000 VA
Max. reactive power	30000 var	50000 var
Nominal AC voltage	400 V, $\pm 15\%$	
AC voltage range	340 V to 477 V	
Rated grid frequency	50 Hz / 60 Hz	
Power frequency range	44 Hz to 66 Hz	
Max. output current	45.6 A per line conductor	75.5 A per line conductor
Power factor at rated power / adjustable displacement power factor	1 / 0 overexcited to 0 underexcited	
Feed-in line conductors / connection line conductors	3 (L1, L2, L3) / 5 (L1, L2, L3, N, PE)	
Efficiency		
Max. efficiency / European Efficiency	98.0% / 97.6%	98.0% / 97.2%
Protective devices		
Grid monitoring	●	
Overtemperature / battery deep discharge	● / ●	
AC short-circuit current capability / galvanically isolated	● / -	
All-pole-sensitive residual-current monitoring unit	●	
Protection class (according to IEC 62109-1)/overvoltage category (according to IEC 60664-1)	I / DC: II; AC: III	
General data		
Dimensions (W / H / D)	772 / 837.3 / 443.8 mm (30.4 / 33 / 17.5 inch)	
Weight	104 kg (229 lb)	
Operating temperature range	-25°C to $+60^{\circ}\text{C}$ (-13°F to $+140^{\circ}\text{F}$) with derating	
Noise emission, typical	69 dB(A)	
Self-consumption	25 W (if AC + DC are connected)	
Topology / cooling concept	Three-phase / active	
Degree of protection (according to IEC 60529 / UL 50E)	IP65 / NEMA 4X	
Climatic category (according to IEC 60721-3-4)	4K4 / 4Z4 / 4S2 / 4M3 / 4C2 / 4B2	
Max. permissible value for relative humidity (non-condensing)	95%	
Features / functions / accessories		
DC connection / AC connection	Terminal lug (up to 300 mm ²) / screw terminal (up to 150 mm ²)	
Communication / protocols	Modbus (SMA, Sunspec), SMA Speedwire, Webconnect	
LED display (Status / Fault / Communication)	● / ● / ●	
Energy management functions	Self-consumption optimization, peak load shaving, multi-use	
Web User Interface	●	
Retrofitting in systems with external inverters	●	
System monitoring	Sunny Portal powered by ennexOS	
Bus battery interface	Ethernet (Modbus)	
Backup / SPS	Under construction	
Warranty: 5 / 10 years	● / ○	

Technical data	Sunny Tripower Storage X 30	Sunny Tripower Storage X 50
System manager function		
Total number of supported devices when a Sunny Tripower Storage is the system manager ¹⁾		10
Total number of supported devices when a SMA Data Manager M is the system manager 1) 2)		50
Centralized commissioning of all devices in the system		•
Remote parameterization of SMA devices with Sunny Portal powered by ennexOS		•
Model type number	STPS30-20	STPS50-20

1) Supported devices: SMA EV Charger Business, PV inverter, Sunny Tripower and Energy Meter 2) In preparation

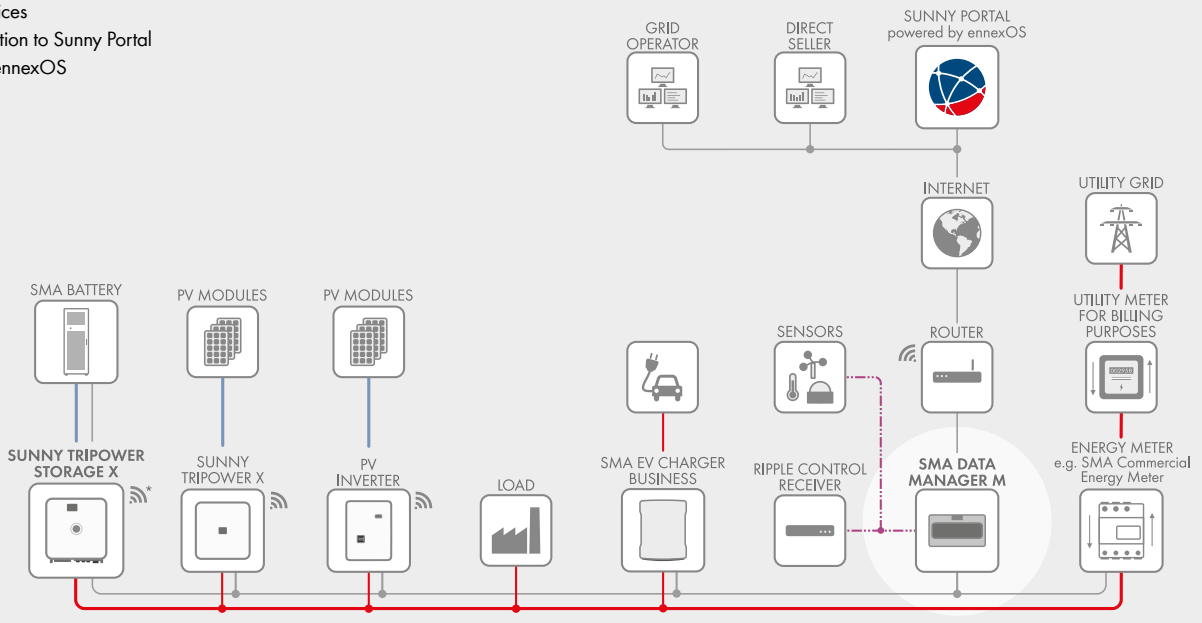
SUNNY TRIPOWER STORAGE X as system manager

- Up to 10 devices
- Direct connection to Sunny Portal powered by ennexOS



SUNNY TRIPOWER STORAGE X with SMA DATA MANAGER M as system manager

- Up to 50 devices
- Direct connection to Sunny Portal powered by ennexOS



Efficiency curve

