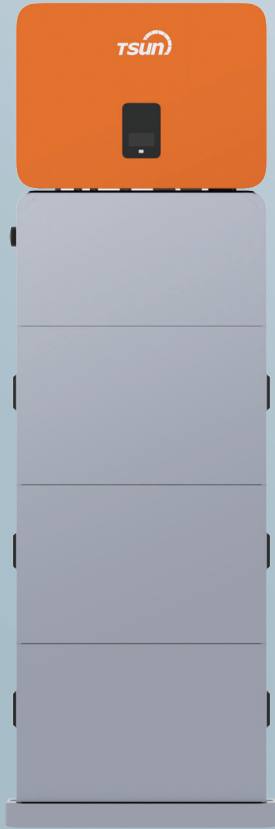


TSUN Hybrid Storage Unit Three Phase



TSOL-HSU4K-T/5K-T/6K-T/8K-T/10K-T/12K-T



Flexibility

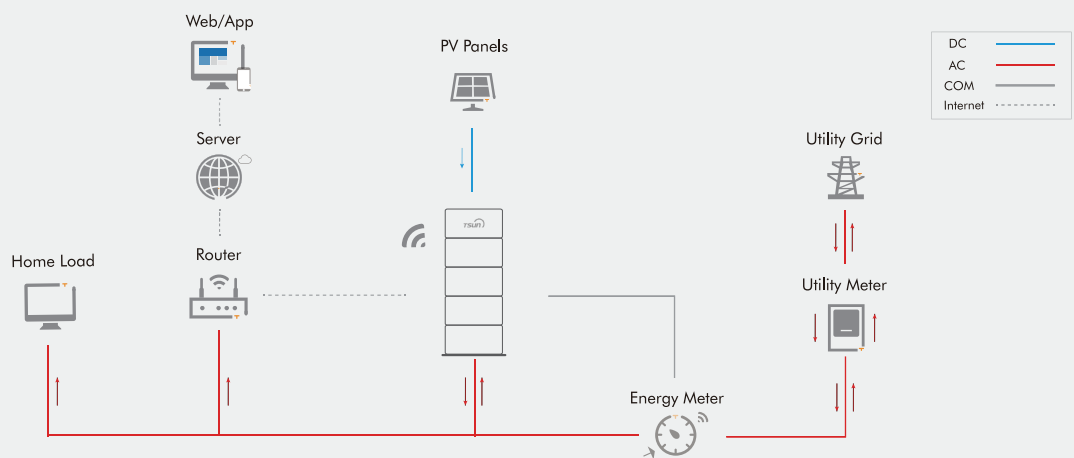
- ▣ Intergrated design with battery, extendable batteries optional.
- ▣ Multi operating modes optional.

Reliability

- ▣ IP65, suitable for indoor & outdoor usage.
- ▣ Natural convection, no air fans.
- ▣ High-frequency isolation between battery and inverter, much safer.
- ▣ Intelligent battery management system, longer life time.

Usability

- ▣ Higher charge & discharge efficiency.
- ▣ Multi monitoring modes optional.
- ▣ Emergency power supply.
- ▣ Precise reverse flow prevention, adjustable self-consumption ratio.



CE VDE 0126 VDE 4105 CEI 0-21 G98 G99 AS4777 IEC/EN 62477



TSUNESS Co., Ltd

E-mail: sales@tsun-ess.com

Web: www.tsun-ess.com

Tel: +86-512-6618 6028

Add: Chuangye Road, Jiashan, Zhejiang Province, China

Technical Data

Model	TSOL-HSU4K-T	TSOL-HSU5K-T	TSOL-HSU6K-T	TSOL-HSU8K-T	TSOL-HSU10K-T	TSOL-HSU12K-T
DC Input						
Max.PV Array Power[Wp]@STC	6400	8000	9600	12800	16000	19200
Max. DC Input Voltage [V]				1000		
MPPT Voltage Range [V]	150-850				200-850	
Start Voltage [V]				180		
Max. DC Input Current[A]				13/13		
Max. DC Short Circuit Current[A]				18/18		
Number of MPPT				2		
No. of Strings per MPPT				1/1		
Battery Data						
Battery Type	LiFePO4					
Battery Capacity per Kit [kWh]	5.12					
Battery Voltage per Kit [V]	102.4					
Max. Battery Quantities per System	3 (Up to 15.36 kWh)					
Max. Charging Power [W]	4000	5000	6000	8000	10000	12000
Max. Charging/ Discharging Current [A]	25/25					
AC Input & Output [On-grid]						
Rated Output Power[W]	4000	5000	6000	8000	10000	12000
Max. Output Power [VA]	4400	5500	6600	8800	11000	13200
Max. Output Current [A]	6.7	8.3	10	13.3	16.5	20
Max. Input Apparent Power[VA]	8000	10000	12000	16000	16500	16500
Rated Output Voltage [V]	230 / 400, 3L/ N/ PE					
Rated Grid Frequency [Hz]	50/60					
Power Factor [cos φ]	0.8 leading~0.8 lagging					
Total Harmonic Distortion [THDi]	<3%					
AC Output [Back-up Mode]						
Max. Apparent Output Power [W]	4400	5500	6600	8800	11000	13200
Peak Output Apparent Power per Phase [VA]	1600	2100	2600	3300	4000	5000
Rated Output Voltage [V]	230 / 400, 3L/ N/ PE					
Rated Output Frequency [Hz]	50/60					
Total Harmonic Distortion of Voltage	<3%					
Switch Time [ms]	<10					
Peak Output Apparent Power [VA]	8000VA, 60sec	10000VA, 60sec	12000VA, 60sec	16000VA, 60sec	20000VA, 60sec	20000VA, 60sec
Efficiency						
Max. Efficiency	98.1%			98.2%		
Euro Efficiency	97.3%			97.4%		
MPPT Efficiency	>99.9%			>99.9%		
Max. Battery Charging/ Discharging Efficiency	97.2% / 97.2%			97.3% / 97.3%		
Protection						
DC Switch	Integrated					
DC Reverse Polarity Protection	Integrated					
AC Short Circuit Protection	Integrated					
Overload Protection	Integrated					
Insulation Resistance Protection	Integrated					
DC Overvoltage/Undervoltage Protection	Integrated					
Surge Protection	Integrated					
Residual Current Protection	Integrated					
AC Overvoltage/Undervoltage Protection	Integrated					
AC Overfrequency/Underfrequency Protection	Integrated					
Over Temperature Protection	Integrated					
Anti-islanding protection	Integrated					
Interface						
PV Connection Type	MC4 Compatible					
Battery Connection Type	Quick Connector					
AC Connection Type	Terminal					
Display	LED+OLED					
Communication port	CAN *2/ RS485 *2					
Communication	Wi-Fi / 4G(Optional)					
General Data						
Topology	Transformerless					
Over Voltage Category	PV : II ; Main : III					
Ingress Protection	IP65					
Operating Temperature Range	-30 ~ +60°C					
Ambient Humidity	0 ~ 100%					
Altitude	4000m(>3000m power derating)					
Noise[dBA]	<25					
Cooling method	Natural Convection					