

All-in-one Hybrid Storage Unit

3.0K/3.6K/4.0K/4.6K/5.0K/6.0K

Flexibility

All-in-one design easier installation.
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.

Usability

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



VDE 0126

VDE 4105

CEI 0-21

G98

IEC/EN 62619

UN38.3

AS4777

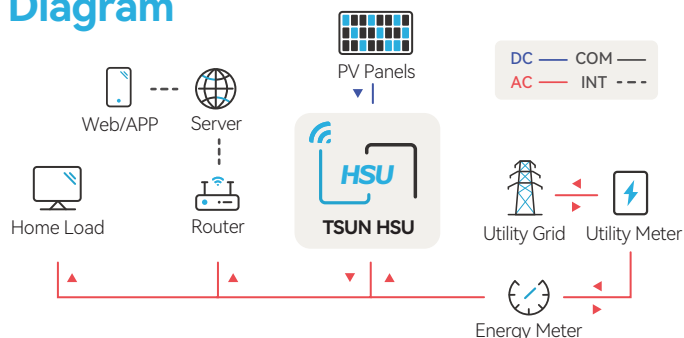
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Technical Data

Model	TSOL-HSU3.0K	TSOL-HSU3.6K	TSOL-HSU4.0K	TSOL-HSU4.6K	TSOL-HSU5.0K	TSOL-HSU6.0K
PV Input						
Max.PV Array Power[Wp]@STC	4500	5400	6000	6900	7500	9000
Max. DC Input Voltage [V]	550					
MPPT Voltage Range [V]	90 ~ 500					
Rated DC Voltage [V]	360					
Start Voltage [V]	100					
Max. DC Input Current [A]	14 / 14					
Max. DC Short Circuit Current [A]	16 / 16					
Quantity of MPPT	2					
Battery Data						
Battery Type	LiFePO4					
Battery Capacity per Kit [kWh]	5.12					
Battery Voltage per Kit [V]	51.2					
Max. Battery Quantities per System	4 (Up to 20.48 kWh)					
Max. Charging Power [W]	3000	3600	4000	4600	5000	6000
Max. Charging/ Discharging Current [A]	60/60	72/72	80/80	92/92	100/100	120/120
AC Input & Output [On-grid]						
Rated Output Power[W]	3000	3600	4000	4600	5000	6000
Max. Output Power [VA]	3300	3680	4400	4600	5500	6000
Rated Output Current [A]	13	16	17.4	20	21.7	26.1
Max. Output Current [A]	15	16.7	20	23	25	27.3
Rated Output Voltage [V]	220/230/240, L/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]						
Rated Output Power [W]	3000	3600	4000	4600	5000	6000
Max. Output Current [A]	15	16.7	20	23	25	27.3
Rated Output Voltage [V]	220 / 230 / 240, L/ N/ PE					
Rated Output Frequency [Hz]	50/60					
Total Harmonic Distortion of Voltage	<3%					
Switch Time [ms]	<20					
Peak Output Apparent Power [VA]**	3600VA, 60sec	4200VA, 60sec	4800VA, 60sec	5500VA, 60sec	6000VA, 60sec	7200VA, 60sec
Efficiency						
Max. Battery Charging/ Discharging Efficiency	95% / 95%					
Protection						
Battery Input Reverse Polarity Protection	Integrated					
AC Short Circuit Protection	Integrated					
Overload 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						
Battery Connection Type	Plug-in Connector					
AC Connection Type	Plug-in Connector					
Communication	Wi-Fi / 4G(Optional)					
General Data						
Topology	Transformerless					
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					
Dimensions[H*W*D][mm]	408x652x195 (Inverter)/388x652x195 (Battery)					
Weight[kg]	20 (Inverter)/50 (Battery)					
Standard Warranty[year]	Wi-Fi / 4G(Optional)					

Diagram



Ordering Information

Ordering NO.	Model	Description
04.09.01.001	TSOL-HSU-3.0K	Output 3.0kW,5.12kWh
04.09.01.002	TSOL-HSU-3.6K	Output 3.6kW,5.12kWh
04.09.01.003	TSOL-HSU-4.0K	Output 4.0kW,5.12kWh
04.09.01.004	TSOL-HSU-4.6K	Output 4.6kW,5.12kWh
04.09.01.005	TSOL-HSU-5.0K	Output 5.0kW,5.12kWh
04.09.01.006	TSOL-HSU-6.0K	Output 6.0kW,5.12kWh
04.09.02.001	Talent-HSU	Monitoring for HSU
04.10.01.001	TSOL-B100E-S	Storage battery,5.12kWh

For more information , visit / contact us at www.tsun-ess.com

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