

Max. 12 years warranty

# SunESS Power



## All-in-One

- Modular, Compact and Simple
- Easy Installation(30 Minutes Max)
- Flexible Battery Expansion (5kWh-40kWh)



## Safe and reliable

- Short circuit protection
- Optional Arc-fault prevention (AFCI)
- Optional rapid shut-down (RSD)



Withstand 150% inrush current over 10 seconds



Support 150% oversized PV power



Support 100% 3 phase Unbalanced load



Ultra-fast switching (10ms) from On-grid to Off-grid state



Max. 12 years' warranty



Support diesel generator+ heat Pump (optional)

Battery performance parameters						
Battery Type	LiFePO4					
Battery capacity	10kWh	15kWh	20kWh	20kWh	25kWh	30kWh
Usable Capacity	9kWh	13.5kWh	18kWh	18kWh	22.5kWh	27kWh
Battery module voltage range	350~450V					
Max. charge and discharge power	5kW	7.5kW	8kW	10kW	12kW	15kW
General parameters						
Dimensions (W/H/D) mm	650x1190x250	650x1505x250	650x1820x250	650x1820x250	650x1505x250 650x910x250	650x1505x250 650x1225x250
Storage temperature	-30~+60℃					
Operating temperature	-10~+50℃					
Relative humidity	10%~95%					
Altitude	<4000m					
Cooling method	Air cooling					
Ingress protection	IP65					
Noise	<30dB					
Installation method	Stacked/Leaning against the wall					
Number of battery modules	2	3	4	4	3+2	3+3
Rated battery capacity	10kWh	15kWh	20kWh	20kWh	25kWh	30kWh
Max. charge and discharge power	5kW	7.5kW	10kW	10kW	12.5kW	15kW
Peak charge and discharge power (10s)	7kW	10.5kW	14kW	14kW	17.5kW	21kW
Total weight	146.7kg	198.4kg	250.1kg	250.1kg	198.4kg+116.7kg	198.4kg+168.4kg
Overall width	650mm					
Total depth	250mm					

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PV Input Parameters	SW5KH3UT	SW6KH3UT	SW8KH3UT	SW10KH3UT	SW12KH3UT	SW15KH3UT
Max. input power (W)	8000	9000	12000	15000	22500	22500
Max. input voltage (V)				1000		
MPPT voltage range (V)			180~850			
Start-up voltage (V)			180V			
Max. input current per MPPT (A)		A: 15			A: 15 / B: 30	
Max. short-circuit current per MPPT (A)		A: 19			A: 19 / B: 38	
Number of MPPTs			2			
Number of input strings per MPPT	A: 1	A: 1	A: 1	A: 1/ B: 2	A: 1/ B: 2	A: 1 / B: 2
<b>Battery Input Parameters</b>						
Support battery capacity (kwh)	5~40	5~40	15~40	20~40	30~40	30~40
Rated battery voltage (V)			400			
Battery voltage range (V)			350~450			
Max. continuous charging current (A)		23			46	
Max. continuous discharge current (A)		23			46	
Max. discharge power (W)	5000	6000	8000	10000	12000	15000
Max. charging power (W)	5000	6000	8000	10000	12000	15000
<b>Output parameters(On-grid)</b>						
Rated output power (W)	5000	6000	8000	10000	12000	15000
Max. output apparent power (VA)	5500	6600	8800	11000	13200	16500
Max. input apparent power (VA)	8000	9000	12000	15000	18000	22500
Rated output voltage (V)			220/380 & 230/400	3W/N/PE		
Rated output frequency (Hz)			50/60			
Max. output current (A)	8.4	10	13.4	16.7	20	25
Max. input current (A)	12.2	13.7	18.2	22.8	27.4	34.2
Power factor			0.8 leading to 0.8 lagging			
THDi			3%			
<b>Output parameters(Off-grid)</b>						
Off-grid rated apparent power (VA)	5000	6000	8000	10000	12000	15000
Max. output apparent power (VA)	5500	6600	8800	11000	13200	16500
Max. output current (A)	7.6	10	13.4	16.7	20	25
Rated output voltage (V)			220/380 & 230/400			
Rated output frequency (Hz)			50/60			
THDv (@Linear Load)			<3%			
<b>Efficiency</b>						
Max. efficiency	97.8%	97.8%	97.8%	97.8%	97.8%	97.8%
Battery side ↔ AC side maximum efficiency	97%	97%	97%	97%	97%	97%
Euro. Efficiency	97%	97%	97%	97%	97%	97%
<b>Protection</b>						
Input DC switch			Integrated			
Insulation Resistance Detection			Integrated			
Residual current monitoring			Integrated			
Input reverse polarity protection			Yes			
Anti-Islanding Protection			Yes			
Over current protection			Yes			
AC short circuit protection			Yes			
AC Over voltage protection			Yes			
AFCI(Arc Fault Circuit Interrupter) Protection			Optional			
Dry contact remote scheduling			Yes			
DC Surge Protection	Type II	Type II	Type II	Type II	Type II	Type II
AC surge protection	Type II	Type II	Type II	Type II	Type II	Type II
<b>Basic parameters</b>						
Operating temperature range (°C)			-10~50°C			
Relative humidity			0~100%			
Max. operating altitude (m)			<4000m			
Cooling method			Air Cooling (≤47dB)			
Display			LED&APP			
BMS communication method	RS485;CAN	RS485;CAN	RS485;CAN	RS485;CAN	RS485;CAN	RS485;CAN
Meter communication method	RS485	RS485	RS485	RS485	RS485	RS485
Monitoring method	4G/Wifi	4G/Wifi	4G/Wifi	4G/Wifi	4G/Wifi	4G/Wifi
Weight (kg)	40	40	40	40	40	40
Dimensions (W/H/D)mm	650×480×250	650×480×250	650×480×250	650×480×250	650×480×250	650×480×250
Topology			Transformerless			
Degree of protection			IP65			
Model classification			One machine/All in One Unit			
Installation method			Stacked in one piece			