

Max. 12 years warranty

SunESS Power All-in-One



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 650x910x190	650x1505x250 650x1225x190
Operating temperature	Discharging:-4°F to 122°F (-20°C to 50°C), Charging:14°F to 122°F (-10°C to 50°C)					
Relative humidity	10%~95%					
Altitude	<4000m(>3000m derating)					
Cooling method	Air cooling					
Ingress protection	IP65					
Noise	<47dB					
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	150kg	202kg	254kg	254kg	202kg+119kg	202kg+171kg
Accreditation	EN 62109-1/EN 62109-2/EN 62477-1.VDE4105/VDE 0124/EN 61000-6-1/EN61000-6-3/EN 50549-1/NC-RfG:2016/EIFS:2018					

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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	A: 15 / B: 30	A: 15 / B: 30	A: 15 / B: 30	A: 15 / B: 30
Max. short-circuit current per MPPT (A)	A: 19	A: 19	A: 19 / B: 38	A: 19 / B: 38	A: 19 / B: 38	A: 19 / B: 38
Number of MPPTs	1	1	2	2	2	2
Number of input strings per MPPT	A: 1	A: 1	A: 1/ B: 2	A: 1/ B: 2	A: 1/ B: 2	A: 1 / B: 2
Battery Input Parameters						
Support battery capacity (kwh)	5~40					
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
Output parameters(On-grid)						
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)	230/400 3W/N/PE					
Rated output frequency (Hz)	50					
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%					
Output parameters(Off-grid)						
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)	230/400 3W/N/PE					
Rated output frequency (Hz)	50					
THDv (@Linear Load)	<3%					
Efficiency						
Max. efficiency	97.4%	97.4%	97.8%	97.8%	97.8%	97.8%
Euro. Efficiency	96.5%	96.5%	96.8%	96.8%	97%	97%
Protection						
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
Basic parameters						
Operating temperature range (°C)	-30~60 °C					
Relative humidity	0~95%					
Max. operating altitude (m)	<4000m(>3000m derating)					
Cooling method	Air Cooling (≤47dB)					
Display	LED&APP					
BMS communication method	CAN					
Meter communication method	RS485					
Monitoring method	4G/Wifi					
Weight (kg)	41					
Dimensions (W/H/D)mm	650x480x250					
Topology	Transformerless					
Degree of protection	IP65					
Model classification	All in One Unit					
Installation method	Stacked/Stacked in one piece					

Hybrid Inverter