SunESS Power All-in-One

Safe and Reliable

Multi-level system alarm protection;
Long-life LFP cells pass stringent tests and operate reliably

Energy Optimization

Built-in energy optimizer module-level active equalization,
mixing old and new, easy upgrades

Flexible Expansion

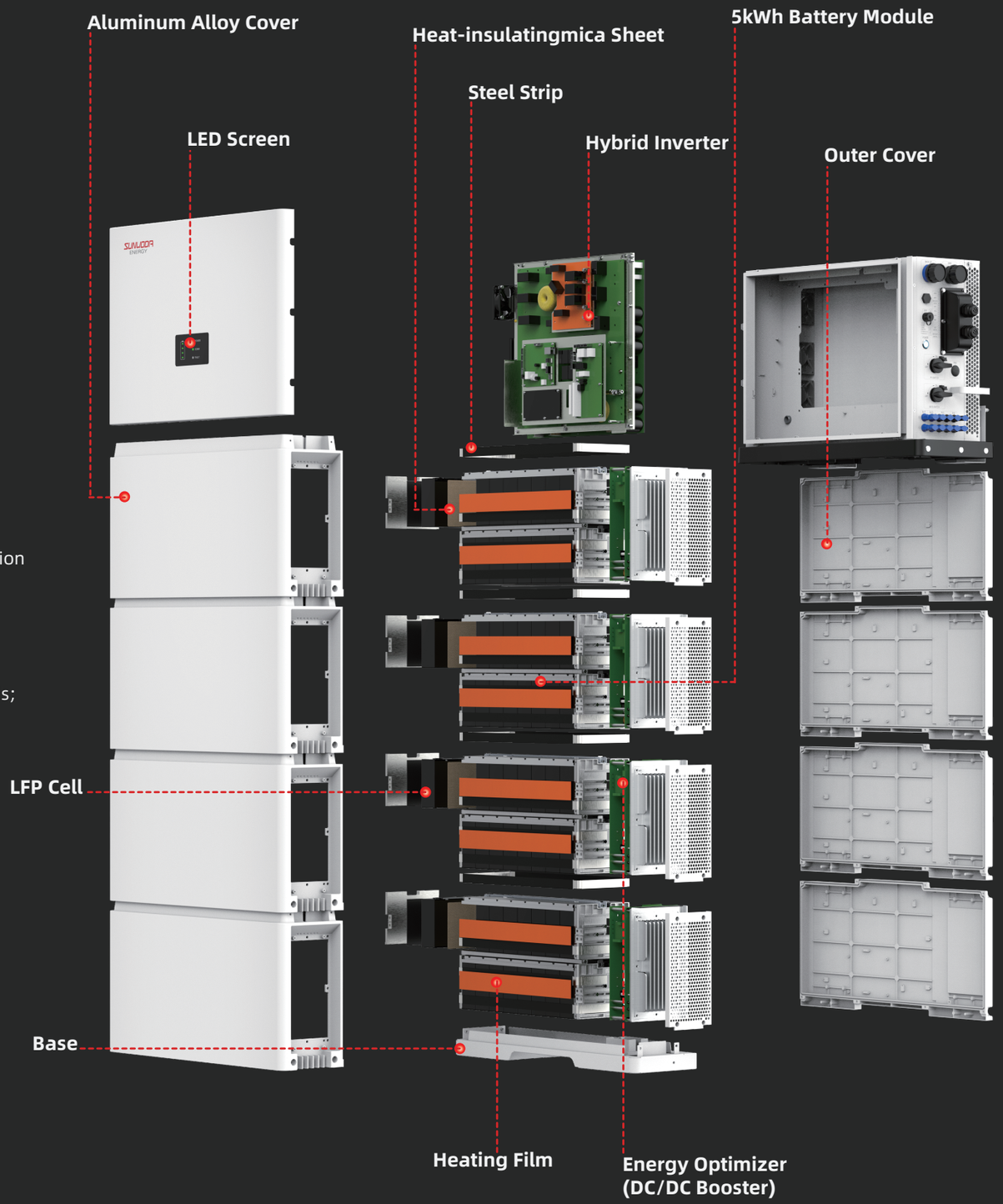
Modular design,
stacked wiring-free quick installation,
AC and DC expansion on-demand configuration

Excellent Performance

Support three-phase 100% unbalanced loads;
10ms ultra-fast switching between grid-connected and off-grid

Intelligent Application

Optimize energy usage strategies and support multiple application scenarios such as heat pumps and stock PV.



Highlights

All in One

Integrated Hybird inverter, battery pack and EMS form a powerful energy system

IP65

Rated for indoor and outdoor use

150%

Withstand 150% inrush current over 10 seconds； Support 150% oversized PV power.

5~15KW/5~40kWh

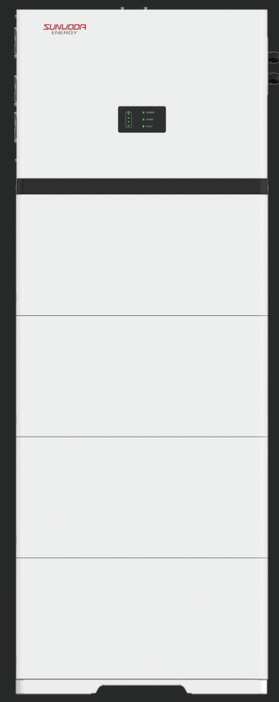
Supports parallel capacity expansion, DC combiner is not necessary

12 Years

Extendable to 12 years warranty

Remote Operation and Maintenance

Support cloud operation and maintenance, support WiFi, bluetooth, network cable and other communication methods

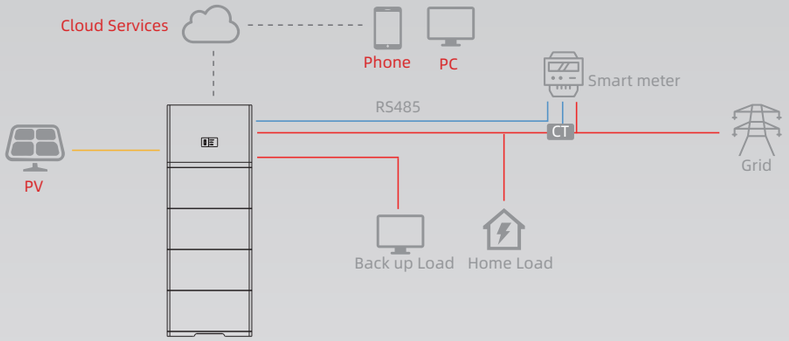


www.sunwodaenergy.com

SUNWODA ENERGY TECHNOLOGY CO., LTD.

Address: 15th Floor, Building B, Sunwoda Industrial Park, No. 18 Tangjianan Road, Guangming District, Shenzhen, China
E-mail: info@sunwoda.com Tel: +86 755 2267 0380

SunESS Power All-in-One



Case Sharing

Sunwoda Power All-in-One 15kW/20kWh
RESS Stackable All-in-One system
BESS for Residential Building

Sunwoda Power All-in-One 15kW/20kWh
RESS Stackable All-in-One system
BESS for Residential Building

Sunwoda Power All-in-One 8kW/10kWh
RESS Stackable All-in-One system
BESS for Residential Building

SunESS Power All-in-One

System Parameters								
Norminal Output Power	5~15kW							
Number of battery module	1	2	3	4	5	6	7	8
Battery nominal energy	5kWh	10kWh	15kWh	20kWh	25kWh	30kWh	35kWh	40kWh
Dimensions (W/H/D) mm	650/833/250	650/1148/250	650/1463/250	650/1778/250	650/1463/250 653/868/189	650/1463/250 653/1183/189	650/1778/250 653/1183/189	650/1778/250 653/1498/189
Total weight	96kg	148kg	200kg	252kg	200kg+117kg	200kg+169kg	252kg+169kg	252kg+221kg
Ambient Temperature	-4°F to 122°F(-20°C to 50°C)							
Relative humidity	5% to 95% (no condensation)							
Altitude	<4000m(>3000m derating)							
Cooling method	Air cooling							
Noise emission	<47dB							
Ingress protection	IP65							
Installation method	Stacked/Leaning against the wall							
Safety standards	EN 62109-1/EN 62109-2/EN 62477-1/EN 61000-6-1/EN61000-6-3							
Grid standards	EN 50549-1/VDE4105/VDE 0124//NC-RfG:2016/ElFS:2018/ToR Type A/ NA/EEA-NE7-CH2020							
Battery standards	IEC62619/CE/UN38.3/VDE 2510-50/FCC/UL1973							
Battery Module								
Battery Type	LiFePO4							
Nominal energy	5kWh							
Usable energy	4.5kWh							
Rated voltage	400V							
Voltage range	350~450V							
Rated charge/discharge power	2.5kW							
Peak output power	4.2kW/20s							
Weight	52kg							
Dimensions (W/H/D)	653/315/189mm							
Inverter Module	SW5KH3UT SW5KH3UT-BE	SW6KH3UT SW6KH3UT-BE	SW8KH3UT SW8KH3UT-BE	SW10KH3UT SW10KH3UT-BE	SW12KH3UT SW12KH3UT-BE	SW15KH3UT SW15KH3UT-BE		
PV Input Parameters								
Max. input power	8000W	9000W	12000W	15000W	22500W	22500W		
Max. input voltage	1000V							
MPPT voltage range	180~850V							
Start-up voltage	180V							
Max. input current per MPPT*	A: 15A	A: 15A	A: 15A / B: 30A	A: 15A / B: 30A	A: 15A / B: 30A	A: 15A/ B: 30A		
Max. short-circuit current per MPPT*	A: 19A	A: 19A	A: 19A / B: 38A	A: 19A / B: 38A	A: 19A / B: 38A	A: 19A/ B: 38A		
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	5~40kWh							
Rated battery voltage	400V							
Battery voltage range	350~450V							
Max. continuous charging current	23A			46A				
Max. continuous discharge current	23A			46A				
Max. discharge power	5000W	6000W	8000W	10000W	12000W	15000W		
Max. charging power	5000W	6000W	8000W	10000W	12000W	15000W		
Output parameters(On-grid)								
Rated output power	5000W	6000W	8000W	10000W	12000W	15000W		
Max. output apparent power	5000VA	6000VA	8000VA	10000VA	12000VA	15000VA		
Max. input apparent power	8000VA	9000VA	12000VA	15000VA	18000VA	22500VA		
Rated output voltage	220/380V 230/400V 3W/N/PE							
Rated output frequency	50Hz							
Max. output current	8.4A	10A	13.4A	16.7A	20A	25A		
Max. input current	12.2A	13.7A	18.2A	22.8A	27.4A	34.2A		
Power factor	0.8 leading to 0.8 lagging							
THDi	<3%							
Output parameters(Off-grid)								
Off-grid rated apparent power	5000VA	6000VA	8000VA	10000VA	12000VA	15000VA		
Max. output apparent power	5500VA	6600VA	8800VA	11000VA	13200VA	16500VA		
Max. output current	7.6A	10A	13.4A	16.7A	20A	25A		
Rated output voltage	220/380V 230/400V 3W/N/PE							
Rated output frequency	50Hz							
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	Integrated							
AC surge protection	Integrated							
Basic parameters								
Display	LED&APP							
BMS communication method	CAN							
Meter communication method	RS485							
Monitoring method	WiFi/bluetooth							
Topology	Transformerless							
Operating temperature range	- 30~60 ℃ (> 45℃derating)							
Weight	41kg							
Dimensions (W/H/D)	650/480/250mm							

* "A" corresponds to the silkscreen marking "PV2" on the inverter . "B" corresponds to the silkscreen marking "PV1" on the inverter.

SUNWODA ENERGY

All-in-One Residential ESS

SunESS Power