

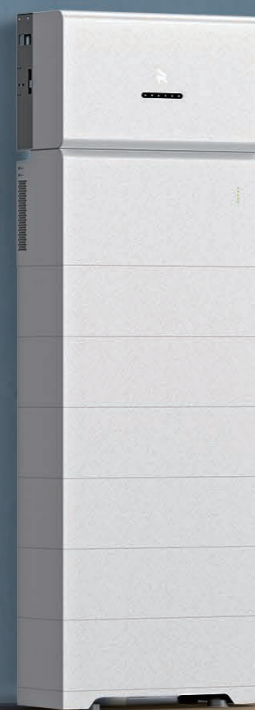


# Three-Phase All-In-One ESS

Three Phase

8 - 15 kW / 7.6 - 33 kWh

Expandable to 90 kW / 132 kWh



Compatible with AC-coupling

200% DC Oversizing

98.3% Efficiency

Intelligent Remote Monitoring

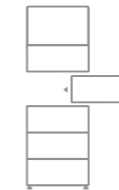


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## Battery Module



No Additional Wiring Required



Modular & Stackable Design



7.6 ~ 132 kWh Flexible Capacity Expansion

Note: [1] Parallel function is under development and available from Oct. 2024 versions.

**LFP**  
Safe, Cobalt-Free Battery

**IP65**  
Ingress Rating

## Battery System Specification

Model	2*RBmax3.8MH	3*RBmax3.8MH	4*RBmax3.8MH	5*RBmax3.8MH	6*RBmax3.8MH
Battery Module	RBmax3.8H (3.84 kWh, 76.8 V, 40kg)				
Number of Battery Modules	2	3	4	5	6
Nominal Energy (kWh)	7.68	11.52	15.36	19.2	23.04
Usable Energy (kWh)[1]	7.06	10.6	14.13	17.66	21.2
Rated Current (A)	45				
Nominal Power (kW)	6.9	10.3	13.8	15	15
Peak Output Power (kW)	8 for 10 sec.	12 for 10 sec.	16 for 10 sec.	17 for 10 sec.	17 for 10 sec.
Weight (kg)	100.4	140.4	180.4	220.4	260.4

Model	2*RBmax5.5MH	3*RBmax5.5MH	4*RBmax5.5MH	5*RBmax5.5MH	6*RBmax5.5MH
Battery Module	RBmax5.5H (5.5 kWh, 76.8 V, 45 kg)				
Number of Battery Modules	2	3	4	5	6
Nominal Energy (kWh)	11.06	16.59	22.12	27.65	33.18
Usable Energy (kWh)[1]	10.18	15.26	20.35	25.44	30.53
Rated Current (A)	50				
Nominal Power (kW)	7.6	11.5	15	15	15
Peak Output Power (kW)	8 for 10 sec.	12 for 10 sec.	16 for 10 sec.	17 for 10 sec.	17 for 10 sec.
Weight (kg)	110.4	155.4	200.4	245.4	290.4

### RBmax3.8MH & RBmax5.5MH Series

Operating Voltage Range (V)	550-950				
Dimensions (W x D x H, mm)	650 x 265 x 780	650 x 265 x 980	650 x 265 x 1180	650 x 265 x 1380	650 x 265 x 1580
Battery Nominal Voltage (V)	153.6	230.4	307.2	384	460.8
Battery Operating Voltage Range (V)	124.8~172.8	187.2~259.2	249.6~345.6	312~432	374.4~518.4
Battery Chemistry	Lithium Iron Phosphate (LiFePO <sub>4</sub> )				
Scalability	Max. 4 in parallel				
Operating Temperature	Charge: 0~ 50°C (32~122°F), Discharge: -20~50°C (-4~122°F) (>45°C(113°F) derating)				
Storage Temperature	≤1 month: -20~45°C (-4~113°F), >1 month: 0~35°C (32~95°F)				
Relative Humidity	5~95%				
Max. Altitude (m)	4000 (>2000m derating)				
Protection Degree	IP65				
Cooling Method	Natural Cooling				
Mounting Options	Indoor / Outdoor, Floor standing, Wall mounted				
DC Protection	Circuit Breaker, Fuse, DC-DC converter				
Protection Features	Over Voltage / Over Current / Short Circuit / Reverse Polarity				
Certifications	CE, VDE-AR-E 2510-50, EN IEC 62619, EN IEC 62477, EN IEC62040, RCM, CEC, UN38.3				

Battery Optimizer	RMH95050
Voltage Range(V)	550-950
Max. Charge / Discharge Current(A)	27
Communication	CAN, RS485
Scalability	Max. 4 in parallel
Dimensions (W x D x H, mm)	650 x 265 x 270
Weight (Kg)	15



### System Specification

Model	SUN8000T-E/A	SUN10000T-E/A	SUN12000T-E/A	SUN15000T-E/A
Rated AC Output Power (W)	8000	10000	12000	15000
Nominal Energy (kWh)		7.6 to 132.7		
Noise (dB)		<30		
Operating Temperature Range		-18~50 C, >45 C derating		
Dimensions (WxDxH, mm)		650 x 265 x (780+200*N (N=2 to 6)		
Ingress Rating		IP65		
Mounting Options	Indoor/Outdoor, Floor standing or Wall mounted (optional)			

## Hybrid Inverter

Lighter, Smaller, Quieter

- 200%** DC Oversizing
- 200%** Overload Capacity
- 98.3%** Max. Efficiency
- <10ms** Seamless Switch
- 30A** Max. PV Input Current
- 150%** Three-Phase Imbalance Output
- Up to **6 Units** Parallel Working
- Support **Half Wave** Load



### Hybrid Inverter Specification

Model	SUN8000T-E/I	SUN10000T-E/I	SUN12000T-E/I	SUN15000T-E/I
<b>Input - DC (PV)</b>				
Max. Power (Wp)	20000	20000	30000	30000
Max. DC Voltage (V)		1000		
MPPT Voltage Range (V)		160~950		
MPPT Voltage Range (V, full load)	200~850	240~850	240~850	280~850
Start Voltage (V)		180		
Max. Input Current (A)	30 / 20	30 / 20	30 / 30	30 / 30
Max. Short Current (A)	40 / 30	40 / 30	40 / 40	40 / 40
Number of MPPT		2		
Number of String per MPPT	2-1	2-1	2-2	2-2
<b>Input - DC (Battery)</b>				
Compatible Battery	RBmax MH Battery System			
Voltage Range (V)	550-950			
Max. Charge / Discharge Power (W)	11000 / 8800	11000 / 11000	15000 / 13200	15000 / 15000
Max. Charge / Discharge Current (A)	20 / 16	20 / 20	27 / 24	27 / 27
<b>AC (On grid)</b>				
Rated Output Power (W)	8000	10000	12000	15000
Max. Output Apparent Power (VA)	8800	11000	13200	15000
Max. Output Power (W)	8800	11000	13200	15000
Rated Input Apparent Power (VA)	22500			
Max. Input Current (A)	32			
Rated Grid Voltage (V)	380/400, 3W+N			
Rated Grid Frequency (Hz)	50 / 60			
Max. Output Current (A)	3*12.8	3*16	3*19.2	3*21.8
THDI(Rated power)	<3%			
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
<b>AC (Back Up)</b>				
Rated Output Power (W)	8000	10000	12000	15000
Rated Output Current (A)	3*12.8	3*16	3*19.2	3*21.8
Rated Bypass Power (VA)	22500			
Rated Bypass Current (A)	32			
Rated Output Voltage (V)	380/400, 3W+N			
Rated Frequency (Hz)	50 / 60			
THDV (@linear load)	< 2%			
Overload Capacity	120% for 10 min, 200% for 10 S			
THDV	<2 (R load), <5 (RCD load)			
Scalability	Max. 6 in parallel			
<b>Efficiency</b>				
Max.Efficiency	98.0%	98.0%	98.3%	98.3%
Euro.Efficiency	97.3%	97.3%	97.6%	97.6%
Max. Charge Efficiency (PV to Bus)	99%			
Max. Charge / Discharge Efficiency (Grid to Bus)	99%			
<b>Protection</b>				
DC Switch / GFCI / Anti-islanding Protection / DC Reverse-polarity Protection / AC Over/Under Voltage Protection / AC Over Current Protection / AC Short Circuit Protection / Insulation Resistor Detection / GFCI				
DC/AC Surge protection Device	Type II / Type III			
AFCI / RSD	Optional			
<b>General Data</b>				
Switch Time	< 10ms	Topology	Transformerless	
Generator Interface	Optional	Noise (dB)	<30	
PV Switch	Integated	Night Self Consumption (W)	<10	
PV Connection	MC4/H4	Cooling	Natural Convection	
AC Connection	Connector	Display	LED + APP (Bluetooth)	
Operating Temperature Range	-25~60°C (-13~140°F), >50°C (122°F) derating		Protection Degree	IP65
Relative Humidity	0~95%		Dimensions (WxDxH, mm)	650 x 265 x 390
Altitude (m)	4000		Net Weight (kg)	28
Communication Interface	RS485 / CAN / USB / (Wi-Fi / GPRS / 4G / Ethernet optional)			
<b>Standard Compliance</b>				
Grid Connection standards	VDE-AR-N 4105, EN 50549, AS4777.2, CEC, RCM	Safety	EN IEC62109-1/-2, EN 61000-6-1/-2/-3/-4, EN IEC 62040	