

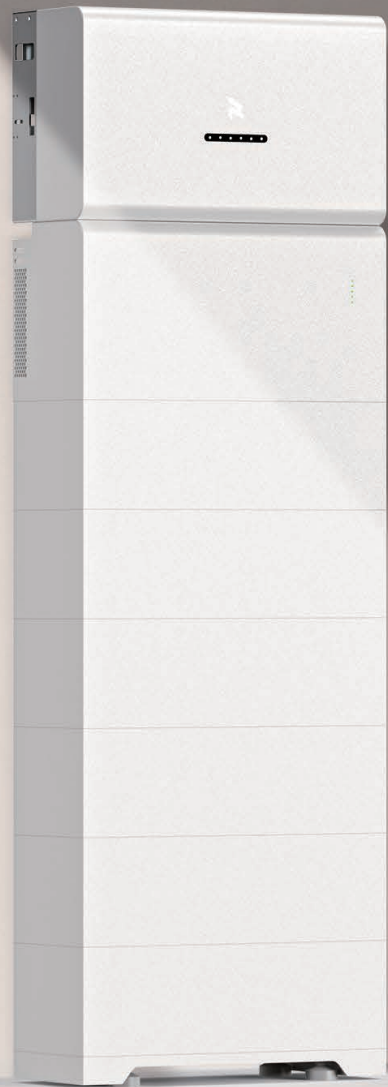
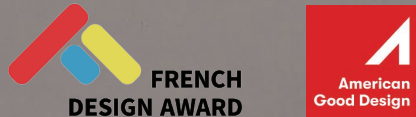


8-30kW / 7.6-132kWh

PowerHome

All-In-One ESS

- ✓ Three-phase
- ✓ 8 / 10 / 12 / 15 / 20 / 25 / 30kW
- ✓ 7.6 to 132kWh



Compatible with
AC-coupling

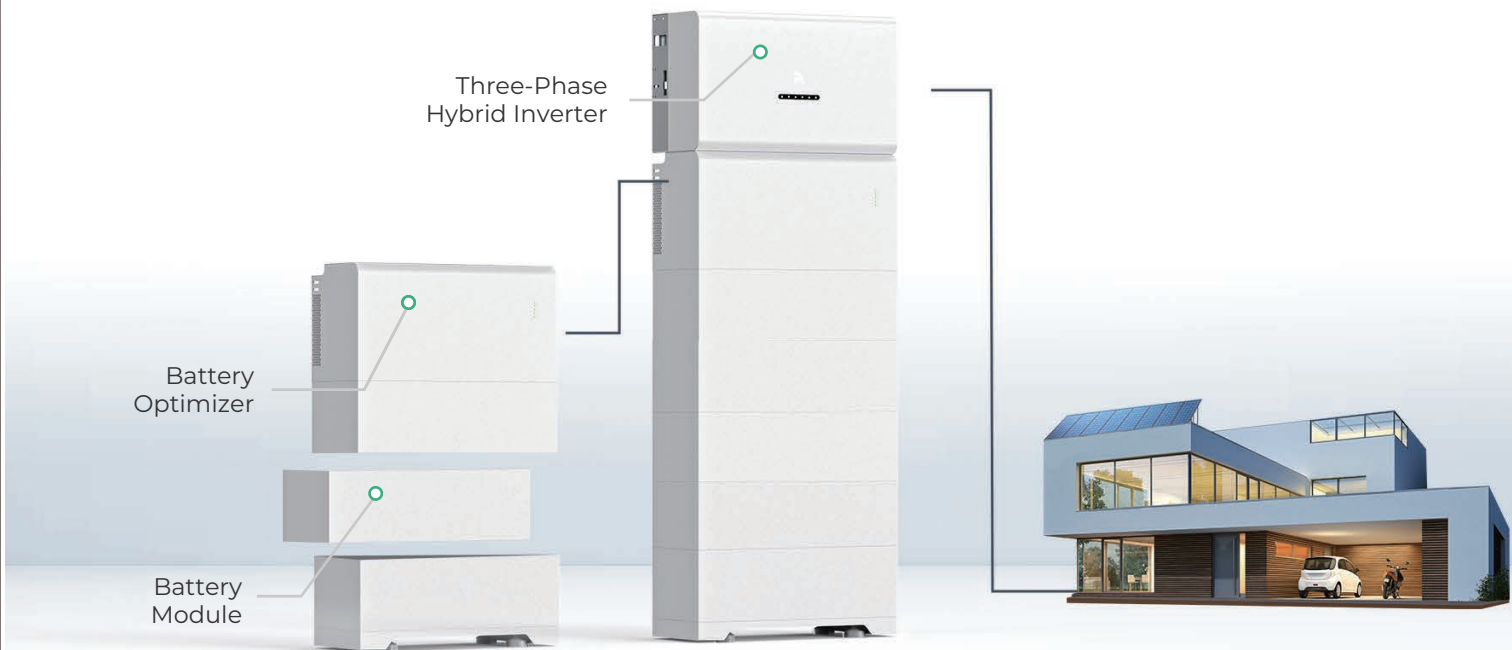
Up to **6**
in parallel

Generator
Energy Storage

Intelligent
Remote Monitoring



✉ sales@roypow.com
🌐 www.roypow.com



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)	<29			
Operating Temperature Range	-18~50°C, >45°C derating			
Dimensions (WxDxH)	650 x 265 x (780 + 200*N (N=2 to 6)) mm			
Ingress Rating	IP65			
Mounting Options	Indoor/Outdoor, Floor standing			

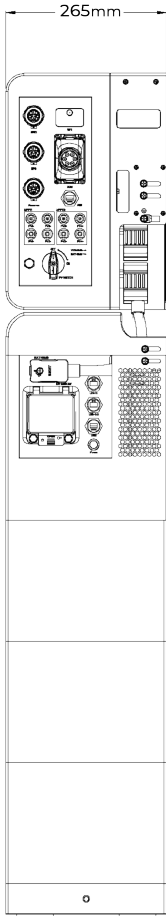
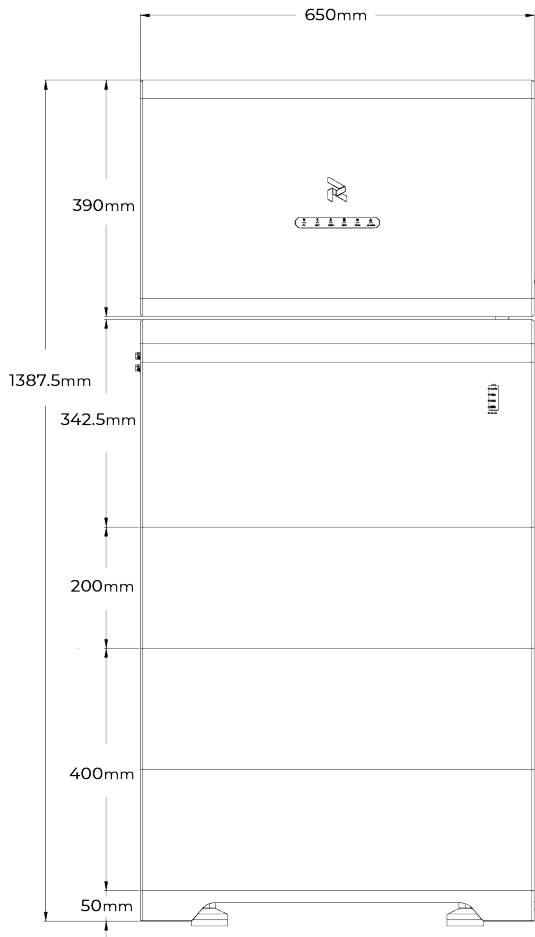
Model	SUN20000T-E/A	SUN25000T-E/A	SUN30000T-E/A
Rated AC Output Power (W)	20000	25000	30000
Nominal Energy (kWh)	Up to 132		
Noise (dB)	<60		
Operating Temperature Range	-18~50°C, >45°C derating		
Dimensions (WxDxH)	650 x 265 x (890+200*N (N=2 to 6, single tower) mm		
Ingress Rating	IP65		
Mounting Options	Indoor/outdoor, floor standing		

8 / 10 / 12 / 15kW

Hybrid Inverter

Three Phase / 2 MPPTs / Hybrid Inverter / HV

- 200%
DC Oversizing
- 200%
Overload Capacity
- Up to 6 Units
Parallel Working
- 30_A Max. PV
Input Current
- 98.3%
Max. Efficiency
- <10_{ms}
Seamless Switch
- 150% Three-Phase
Imbalance Output
- Support
Half Wave Load
- Compatible with
AC Coupling
- Generator
Energy Storage



Lighter, Smaller, Quieter



Hybrid Inverter Specification

Model	SUN8000T-E/I	SUN10000T-E/I	SUN12000T-E/I	SUN15000T-E/I
Input - DC (PV)				
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
Input - DC (Battery)				
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
AC (On grid)				
Rated Output Power (W)	8000	10000	12000	15000
Rated Output Apparent Power (VA)	8800	11000	13200	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)	3*32			
Rated Grid Voltage (V)	220/380, 230/400, 3W+N+PE			
Rated Grid Frequency (Hz)	50 / 60			
Rated Output Current (A)	3*12.8	3*16	3*19.2	3*21.8
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)			
AC (Back Up)				
Rated Output Power (W)	8000	10000	12000	15000
Rated Output Apparent Power (VA)	8800	11000	13200	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)	3*32			
Rated Output Voltage (V)	220/380, 230/400, 3W+N+PE			
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			
Efficiency				
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)	98%			
Protection				
GFCI / Anti-islanding Protection / DC Reverse-polarity Protection / AC Over/Under Voltage Protection / AC Over Current Protection / AC Short Circuit Protection / Insulation Resistor Detection				
DC/AC Surge protection Device	Type II / Type III			
AFCI / RSD	Optional			
General Data				
Switch Time	< 10ms	Topology	Transformerless	
Generator Interface	Optional	Noise (dB)	<29	
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, >45°C derating	Protection Degree	IP65	
Relative Humidity	0~95%	Dimensions (WxDxH)	650 x 265 x 390mm	
Altitude	4000 m	Net Weight	30 kg	
Communication Interface	RS485 / CAN / USB / (Wi-Fi / GPRS / 4G / Ethernet optional)			
Standard Compliance				
VDE-AR-N 4105, EN 50549, TOR & R25, AS/NZS 4777.2, CEC, EN 62109-1/-2, EN 61000-6-1/-2/-3/-4, RCM, CE-RED				

20 / 25 / 30kW



Hybrid Inverter

Three Phase / 3 MPPTs / Hybrid Inverter / HV

150%

Overload Capacity

Up to 6

Units

Parallel Working

30A

Max. PV

Input Current

98.8%

Max. Efficiency

<10ms

Seamless Switch

100%

Three-Phase

Imbalance Output

Support

Half Wave

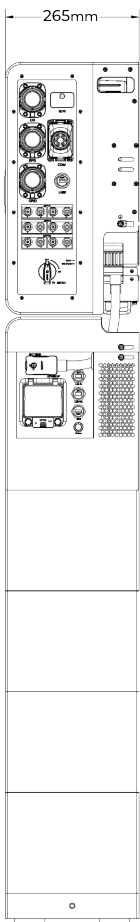
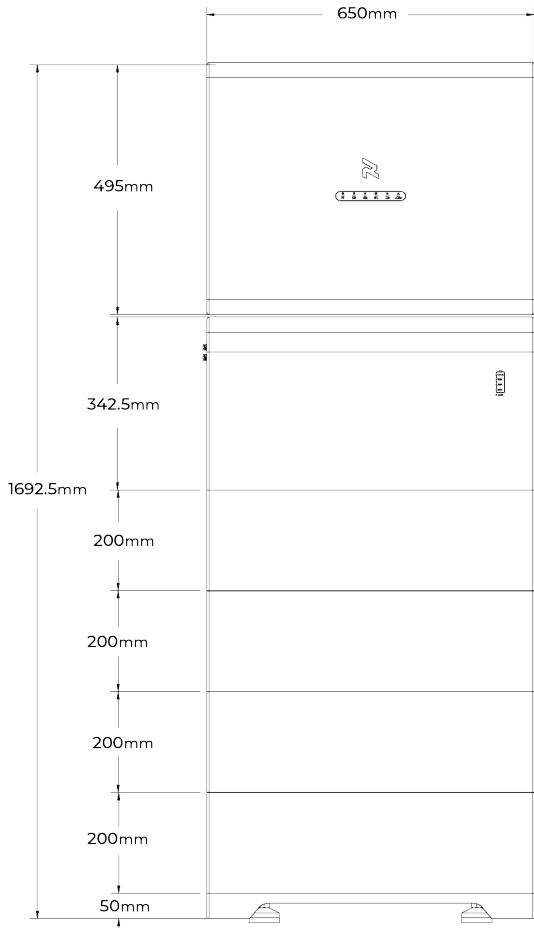
Load

Compatible with

AC Coupling

Generator

Energy Storage



Reliable, Efficient, Powerful

Hybrid Inverter Specification

Model	SUN20000T-E/I	SUN25000T-E/I	SUN30000T-E/I
Input - DC (PV)			
Max. Power (Wp)	30000	45000	45000
Max. DC Voltage (V)		1000	
MPPT Voltage Range (V)		160~950	
MPPT Voltage Range (V, full load)	340~800	270~800	340~800
Start Voltage (V)		180	
Max. Input Current (A)	30-30	30-30-30	30-30-30
Max. Short Current (A)	40-40	40-40-40	40-40 / 40
Number of MPPT	2	3	3
Number of String per MPPT	2-2	2-2-2	2-2-2
Input - DC (Battery)			
Compatible Battery		(2~6)*RBmax5.5MH	
Number of Battery Input		2	
Voltage Range (V)		550-950	
Max. Charge / Discharge Power (W)	22000/22000	27500 / 27500	30000 / 30000
Max. Charge / Discharge Current (A)		50 / 50	
AC (On grid)			
Rated Output Power (W)	20000	25000	30000
Max. Output Apparent Power (VA)	22000	27500	30000
Max. Output Power (W)	22000	27500	30000
Rated Input Apparent Power (VA)		45000	
Max. Input Current (A)		3*65	
Rated Grid Voltage (V)		220/380, 230/400, 3W+N+PE	
Rated Grid Frequency (Hz)		50 / 60	
Max. Output Current (A)	3*28.9	3*36.3	3*43.5
THDI(Rated power)		<3%	
Power Factor		~1 (Adjustable from 0.8 leading to 0.8 lagging)	
AC (Back Up)			
Rated Output Power (W)	20000	25000	30000
Rated Output Current (A)	3*28.9	3*36.3	3*43.5
Rated Bypass Power (VA)		37950	
Rated Bypass Current (A)		3*55	
Rated Output Voltage (V)		220/380, 230/400, 3W+N+PE	
Rated Frequency (Hz)		50 / 60	
THDV (@linear load)		< 2%	
Overload Capacity		120%@10min /150% @200ms	
THDV		<2% (R load), <5% (RCD load)	
Scalability		Max. 6 in parallel	
Efficiency			
Max.Efficiency (PV to Grid)		98.8%	
Euro.Efficiency (PV to Grid)	97.2%	97.9%	97.9%
Max. Charge Efficiency (PV to Bus)		98%	
Max. Charge / Discharge Efficiency (Grid to Bus)		98%	
Protection			
GFCI / Anti-islanding Protection / DC Reverse-polarity Protection / AC Over/Under Voltage Protection / AC Over Current Protection / AC Short Circuit Protection / Insulation Resistor Detection			
DC/AC Surge protection Device		Type II / Type III	
AFCI / RSD		Optional	
General Data			
Switch Time	< 10ms	Topology	Transformerless
Generator Interface	Optional	Noise (dB)	<60
PV Switch	Integated	Night Self Consumption (W)	<15
PV Connection	MC4/H4	Cooling	Smart Fan
AC Connection	Connector	Display	LED + APP (Bluetooth)
Operating Temperature Range	-25~60°C, >45°C derating	Protection Degree	IP65
Relative Humidity	0~95%	Dimensions (WxDxH)	650 x 265 x 500mm
Altitude	4000 m	Net Weight	43 kg
Communication Interface	RS485 / CAN / USB / (Wi-Fi / GPRS / 4G / Ethernet optional)		
Standard Compliance			
Cerfications	EN 62109-1/-2, EN 61000-6-1/-2/-3/-4		



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	45	45	45	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	100.4 kg	140.4 kg	180.4 kg	220.4 kg	260.4 kg

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	50	50	50	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	110.4 kg	155.4 kg	200.4 kg	245.4 kg	290.4 kg

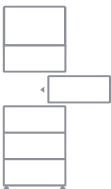
RBmax3.8MH & RBmax5.5MH Series					
Operating Voltage Range (V)	550-950				
Dimensions (W x D x H)	650 x 265 x 780 mm	650 x 265 x 980 mm	650 x 265 x 1180 mm	650 x 265 x 1380 mm	650 x 265 x 1580 mm
Battery Nominal Voltage (V)	153.6	230.4	307.2	384	460.8
Battery Operating Voltage Range (V)	124.8~172.8	187.2~259.2	249.6~345.6	312~432	374.4~518.4
Battery Chemistry	Lithium Iron Phosphate (LiFePO ₄)				
Scalability	Max. 4 in parallel				
Operating Temperature	Charge: 0~50°C, Discharge: -18~50°C (>45°C derating)				
Storage Temperature	≤1 month: -20~45°C, >1 month: 0~35°C				
Relative Humidity	5~95%				
Max. Altitude (m)	4000 m (>2,000 m derating)				
Protection Degree	IP65				
Cooling Method	Natural Convection				
Mounting Options	Indoor / Outdoor, Floor standing				
DC Protection	Circuit Breaker, Fuse, DC-DC converter				
Protection Features	Over Voltage / Over Current / Short Circuit / Reverse Polarity				
Certifications	CE, IEC 62619, EN 62477, EN IEC62040, UN38.3, VDE2510-50, RCM, CEC				

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)	650 x 265 x 270mm
Weight	15 kg

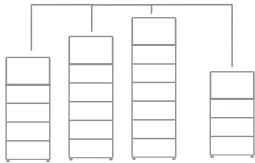
Battery



No Additional
Wiring Required



Modular &
Stackable Design



7.6 ~ 132 kWh
Flexible Capacity Expansion

LFP

Safe, Cobalt-Free Battery

IP65

Ingress Rating