

## Model

## SUN10000S-U/A

### System specification

Nominal output power	10,000 W		
Energy capacity	15.3 kWh	Battery type	Lithium iron phosphate (LFP)
Ingress protection rating	IP65	Warranty	5 / 10 years (optional)

### Inverter model

## SUN10000S-U/I

#### PV input

Max. input power	4 * 3,600 W				
Max. input voltage	600 V	MPPT voltage range	120 V ~ 550 V	Start operation voltage	150 V
Max. input current	15 A + 15 A + 15 A + 15 A				
Max. short current	20 A + 20 A + 20 A + 20 A				
No. of MPPT	4	No. of string per MPPT	2		

#### Battery input

Nominal voltage	153.6 V		
Operation voltage range	75 V - 550 V	Battery charge method	Self-adaption to BMS

#### AC (grid)

Max. apparent power	10,000 VA				
Max. input power	15,000 VA				
Grid type	Split phase, L1 / L2 / N / PE	Nominal frequency	60 Hz	Grid voltage range	102 V ~ 132 V / 204 V ~ 264 V
Nominal voltage	120 V / 240 V	Frequency range	55 Hz - 65 Hz	THDI (rated power)	< 3%
Max. output current	45.5 A				
Max. input Current	91.6 A				
PF	-0.8 ~ 0.8	Switch time (typical)	10 ms		

#### AC (back up)

Max. active power	10,000 W		
Max. output current	44 A		
Nominal frequency	60 Hz	Nominal voltage	120 V / 240 V
THDV (100% R load)	< 2%	Output parallel	6 Pcs
Over load	105% < Load ≤ 125%, 10 min	125% < Load ≤ 150%, 1 min	Load > 150%, 10 S

#### Efficiency

Max. efficiency (BAT to AC)	96%	Max. efficiency (PV to AC)	98%
CEC efficiency	97%		

#### General data

Dimension (W x D x H)	33.3 x 9.4 x 21.7 inch (845 x 240 x 550 mm)	Operating temperature range	-13°F ~ 140°F (-25°C ~ 60°C) (45°C derating)		
Electronics ingress protection rating	IP65 / Type 4X	Noise	< 35 dB		
HMI	APP / LCD	COM	RS485 / CAN / WiFi / 4G (Optional)		
Net weight	110.2 lbs (50 kg)	Relative humidity	0% ~ 95%	Max. altitude	3,000 m (> 2,000 m derating)
Topology type	Transformerless	Night self consumption	< 1 W	Cooling	Natural

#### Certification

Safety	UL 1741SA, UL 1699B, CSA 22.2	EMC	FCC Part 15 Class	Grid code	IEEE 1547, IEEE 2030.5
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## Battery model

## RBmax5.1H

#### Electric data

Usable energy	3 * 4.7 kWh	Nominal energy <sup>[1]</sup>	3 * 5.1 kWh	Operating voltage range	134.4 V ~ 170.4 V
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#### General data

Dimensions (W x D x H)	32.2 x 9.4 x 42.3 inch (845 x 240 x 1,075 mm)				
Operating temperature	32°F ~ 122°F (0°C ~ 50°C) (charge), -4°F ~ 122°F (-20°C ~ 50°C) (discharge)				
Relative humidity	0 ~ 95%	Storage temperature	-4°F ~ 122°F (-20°C ~ 50°C)	Max. altitude	3,000 m (> 2,000 m derating)
Protection degree	IP65	Installation	Ground-mounted, wall-mounted		

#### Certification

UL 1642, UL 1973	FCC	UN38.3
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[1] Test method: under STC condition, discharge to 2.5 V with a constant current of 0.5 c, rest 30 minutes; charge to 3.65 V with a constant current of 0.5 c, rest 5 minutes, then charge to 3.65 V with a constant current of 0.05 c and rest 30 minutes. Discharge with a constant current of 0.5 c till the voltage is 2.5 V.  
Information may be subject to change without notice during product improving. For the latest product specs, please refer to RoyPow website: [www.roypowtech.com](http://www.roypowtech.com).

## Model

# SUN15000S-U/A

System specification			
Nominal output power	15,000 W		
Energy capacity	20.4 kWh	Battery type	Lithium iron phosphate (LFP)
Ingress protection rating	IP65	Warranty	5 / 10 years (optional)

## Inverter model

# SUN15000S-U/I

PV input					
Max. input power	4 * 7,200 W				
Max. input voltage	600 V	MPPT voltage range	120 V ~ 550 V	Start operation voltage	150 V
Max. input current	27 A + 27 A + 27 A + 27 A				
Max. short current	40 A + 40 A + 40 A + 40 A				
No. of MPPT	4	No. of string per MPPT	2		

## Battery input

Nominal voltage	204.8 V		
Operation voltage range	75 V - 550 V	Battery charge method	Self-adaption to BMS

## AC (grid)

Max. apparent power	15,000 VA				
Max. input power	22,000 VA				
Grid type	Split phase, L1 / L2 / N / PE	Nominal frequency	60 Hz	Grid voltage range	102 V ~ 132 V / 204 V ~ 264 V
Nominal voltage	120 V / 240 V	Frequency range	55 Hz - 65 Hz	THDI (rated power)	< 3%
Max. output current	68.2 A				
Max. input Current	91.6 A				
PF	-0.8 ~ 0.8	Switch time (typical)	10 ms		

## AC (back up)

Max. active power	15,000 W		
Max. output current	65.6 A		
Nominal frequency	60 Hz	Nominal voltage	120 V / 240 V
THDV (100% R load)	< 2%	Output parallel	6 Pcs
Over load	105% < Load ≤ 125%, 10 min	125% < Load ≤ 150%, 1 min	Load > 150%, 10 S

## Efficiency

Max. efficiency (BAT to AC)	96%	Max. efficiency (PV to AC)	98%
CEC efficiency	97%		

## General data

Dimension (W x D x H)	33.3 x 9.4 x 21.7 inch (845 x 240 x 550 mm)	Operating temperature range	-13°F ~ 140°F (-25°C ~ 60°C) (45°C derating)		
Electronics ingress protection rating	IP65 / Type 4X	Noise	< 35 dB		
HMI	APP / LCD	COM	RS485 / CAN / WiFi / 4G (Optional)		
Net weight	110.2 lbs (50 kg)	Relative humidity	0% ~ 95%	Max. altitude	3,000 m (> 2,000 m derating)
Topology type	Transformerless	Night self consumption	< 1 W	Cooling	Natural

## Certification

Safety	UL 1741SA, UL 1699B, CSA 22.2	EMC	FCC Part 15 Class	Grid code	IEEE 1547, IEEE 2030.5
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## Battery model

# RBmax5.1H

## Electric data

Usable energy	4 * 4.7 kWh	Nominal energy [1]	4 * 5.1 kWh	Operating voltage range	179.2 V ~ 227.2 V
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## General data

Dimensions (W x D x H)	32.2 x 9.4 x 53.0 inch (845 x 240 x 1,345 mm)				
Operating temperature	32°F ~ 122°F (0°C ~ 50°C) (charge), -4°F ~ 122°F (-20°C ~ 50°C) (discharge)				
Relative humidity	0 ~ 95%	Storage temperature	-4°F ~ 122°F (-20°C ~ 50°C)	Max. altitude	3,000 m (> 2,000 m derating)
Protection degree	IP65	Installation	Ground-mounted, wall-mounted		

## Certification

UL1642, UL 1973	FCC	UN38.3
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[1] Test method: under STC condition, discharge to 2.5 V with a constant current of 0.5 c, rest 30 minutes; charge to 3.65 V with a constant current of 0.5 c, rest 5 minutes, then charge to 3.65 V with a constant current of 0.05 c and rest 30 minutes. Discharge with a constant current of 0.5 c till the voltage is 2.5 V.

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## Model

## SUN15000S-U/A

### System specification

Nominal output power	15,000 W		
Energy capacity	30.6 kWh	Battery type	Lithium iron phosphate (LFP)
Ingress protection rating	IP65	Warranty	5 / 10 years (optional)

### Inverter model

## SUN15000S-U/I

#### PV input

Max. input power	4 * 7,200 W				
Max. input voltage	600 V	MPPT voltage range	120 V ~ 550 V	Start operation voltage	150 V
Max. input current	27 A + 27 A + 27 A + 27 A				
Max. short current	40 A + 40 A + 40 A + 40 A				
No. of MPPT	4	No. of string per MPPT	2		

#### Battery input

Nominal voltage	307.2 V		
Operation voltage range	75 V - 550 V	Battery charge method	Self-adaption to BMS

#### AC (grid)

Max. apparent power	15,000 VA				
Max. input power	22,000 VA				
Grid type	Split phase, L1 / L2 / N / PE	Nominal frequency	60 Hz	Grid voltage range	102 V ~ 132 V / 204 V ~ 264 V
Nominal voltage	120 V / 240 V	Frequency range	55 Hz - 65 Hz	THDI (rated power)	< 3%
Max. output current	68.2 A				
Max. input Current	91.6 A				
PF	-0.8 ~ 0.8	Switch time (typical)	10 ms		

#### AC (back up)

Max. active power	15,000 W		
Max. output current	65.6 A		
Nominal frequency	60 Hz	Nominal voltage	120 V / 240 V
THDV (100% R load)	< 2%	Output parallel	6 Pcs
Over load	105% < Load ≤ 125%, 10 min	125% < Load ≤ 150%, 1 min	Load > 150%, 10 S

#### Efficiency

Max. efficiency (BAT to AC)	96%	Max. efficiency (PV to AC)	98%
CEC efficiency	97%		

#### General data

Dimension (W × D × H)	33.3 × 9.4 × 21.7 inch (845 × 240 × 550 mm)	Operating temperature range	-13°F ~ 140°F (-25°C ~ 60°C) (45°C derating)		
Electronics ingress protection rating	IP65 / Type 4X	Noise	< 35 dB		
HMI	APP / LCD	COM	RS485 / CAN / WiFi / 4G (Optional)		
Net weight	110.2 lbs (50 kg)	Relative humidity	0% ~ 95%	Max. altitude	3,000 m (> 2,000 m derating)
Topology type	Transformerless	Night self consumption	< 1 W	Cooling	Natural

#### Certification

Safety	UL 1741SA, UL 1699B, CSA 22.2	EMC	FCC Part 15 Class	Grid code	IEEE 1547, IEEE 2030.5
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## Battery model

## RBmax5.1H

#### Electric data

Usable energy	6 * 4.7 kWh	Nominal energy [1]	6 * 5.1 kWh	Operating voltage range	268.8 V ~ 340.8 V
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#### General data

Dimensions (W × D × H)	32.2 × 9.4 × 42.3 inch, 32.2 × 9.4 × 42.3 inch (845 × 240 × 1,075 mm, 845 × 240 × 1,075 mm)				
Operating temperature	32°F ~ 122°F (0°C ~ 50°C) (charge), -4°F ~ 122°F (-20°C ~ 50°C) (discharge)				
Relative humidity	0 ~ 95%	Storage temperature	-4°F ~ 122°F (-20°C ~ 50°C)	Max. altitude	3,000 m (> 2,000 m derating)
Protection degree	IP65	Installation	Ground-mounted, wall-mounted		

#### Certification

UL1642, UL 1973	FCC	UN38.3
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[1] Test method: under STC condition, discharge to 2.5 V with a constant current of 0.5 c, rest 30 minutes; charge to 3.65 V with a constant current of 0.5 c, rest 5 minutes, then charge to 3.65 V with a constant current of 0.05 c and rest 30 minutes. Discharge with a constant current of 0.5 c till the voltage is 2.5 V.  
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# Model

RBmax5.1L

2 \* RBmax5.1L

3 \* RBmax5.1L

4 \* RBmax5.1L

## Electric data

Nominal energy	5.1 kWh	10.2 kWh	15.3 kWh	20.4 kWh
Usable energy <sup>[1]</sup>	4.7 kWh	9.5 kWh	14.2 kWh	19 kWh

Cell type Lithium iron phosphate (LFP)

Nominal voltage 51.2 V

Operating voltage range 44.8 V ~ 56.8 V

Max. continuous charge current 50 A 100 A 100 A 100 A<sup>[2]</sup>

Max. continuous discharge current 100 A 100 A<sup>[3]</sup> 100 A<sup>[3]</sup> 100 A<sup>[3]</sup>

## General data

Weight 110.2 lbs / 50 kg 211.6 lbs / 96 kg 313.0 lbs / 142 kg 414.4 lbs / 188 kg

Dimensions (W x D x H) 25.6 x 9.4 x 18.7 inch (650 x 240 x 475 mm) 25.6 x 9.4 x 31.6 inch (650 x 240 x 805 mm) 25.6 x 9.4 x 44.6 inch (650 x 240 x 1,135 mm) 25.6 x 9.4 x 57.6 inch (650 x 240 x 1,465 mm)

Operating temperature 32°F ~ 122°F (0°C ~ 50°C) (charge), -4°F ~ 122°F (-20 °C ~ 50 °C) (discharge)

Storage temperature -4°F ~ 122°F (-20 °C ~ 50 °C)

Relative humidity 0 ~ 95%

Max. altitude 3,000 m (> 2,000 m derating )

Ingress protection rating IP65

Installation Ground-mounted, wall-mounted Communication CAN, RS485

## Certification

UL1642 (EU), UL 1973 (US)

FCC

UN38.3

## Warranty

5 / 10 years (optional)

[1] Test method: under STC condition, discharge to 2.5 V with a constant current of 0.5 c, rest 30 minutes; charge to 3.65 V with a constant current of 0.5 c, rest 5 minutes, then charge to 3.65 V with a constant current of 0.05 c and rest 30 minutes. Discharge with a constant current of 0.5 c till the voltage is 2.5 V.

[2] [3] Optional high-performance version, supporting the maximum continuous current of 200 A application conditions.

Heating function (optional) is available for cold regions.

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