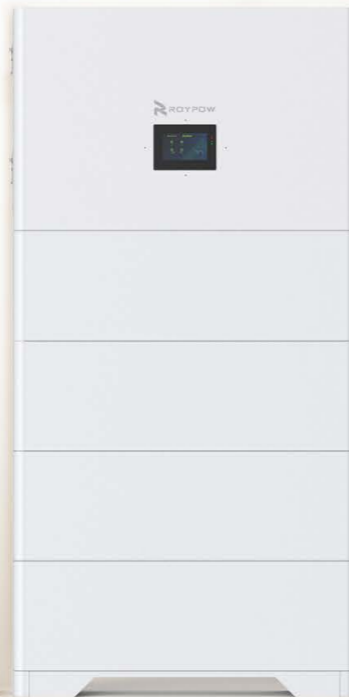




US-standard

ROYPOW SUN Series 10 kW / 15 kWh

Intelligent Residential Energy Storage System




98% Max. Efficiency
4 MPPTs
35 dB Max. Noise


20 kVA Max. AC Input
27 A Max. Current (Per MPPT)
6 Max. Systems in Parallel


Up to **90 kW** Parallel Working
10 Years Warranty


Split Phase Output 


Type 4X Type 4X Protection


Natural Cooling 

 Smart Load Function

 Modular & Integrated Design for Easy Installation

 Integrated RSD (Rapid Shut Down) & AFCI (Arc Fault Circuit Interrupters)

 Friendly Compatible with New Install or Existing PV System

 Smart Management with App & Web, Remote Off Upgrade



sales@roypowtech.com

www.roypowtech.com

Model SUN10000S-U/A

System Specification

Normal output power (W)	10,000		
Battery capacity range (kWh)	10.24 ~ 40.96	Battery type	Lithium iron phosphate (LFP)
Ingress rating	IP65 / Type 4X	Warranty (years)	5 / 10 (optional)

Inverter Model SUN10000S-U/I

PV Input

Max. input power (W)	4 x 3,600		
Max. input voltage (V)	600	MPPT voltage range (V)	120 ~ 550
Max. input current (A)	15.5 + 15.5 + 15.5 + 15.5		
Max. short current (A)	20 + 20 + 20 + 20		
No. of MPPT	4	No. of string per MPPT	2

Battery Input

Nominal voltage (V)	153.6		
Operation voltage range (V)	75 - 480	Battery charge method	Self-adaption to BMS

AC (Grid)

Max. output apparent power (VA)	10,000		
Max. input power (VA)	15,000		
Grid type	Split phase, L1 / L2 / N / PE	Nominal frequency (Hz)	60
Nominal voltage (V)	120 / 240	Frequency range (Hz)	55 - 65
Grid voltage range (V)	102 ~ 132 / 204 ~ 264		
THDI (rated power)	< 3%		
Max. output current (A)	41.6		
Max. input Current (A)	62.5		
PF	-0.8 ~ 0.8	Switch time (typical) (ms)	10

AC (Back Up)

Max. active power (W)	10,000		
Max. output current (A)	41.6		
Nominal frequency (Hz)	60	Nominal voltage (V)	120 / 240
THDV (100% R load)	< 2%		
Output parallel (Pcs)	6		
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%	DC / AC Sugar Protection	Type2 / Type 2

General Data

Dimensions (W × D × H)	33.3 × 7.9 × 21.7 inch, 845 × 200 × 550 mm		Operating temperature range	-13 ~ 140°F, -25 ~ 60°C (45°C derating)	
Ingress 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% (No condensation)	Max. altitude (m)	3,000 (> 2,000 derating)
Topology type	Transformerless	Night self consumption (W)	< 10	Cooling	Natural

Certification

Safety	UL 1741SA, UL 1699B, CSA 22.2	EMC	FCC Part 15 ClassB	Grid code	IEEE 1547, IEEE 2030.5
--------	-------------------------------	-----	--------------------	-----------	------------------------

Battery Model RBmax5.1H

Electric Data

Nominal energy ^[1] (kWh)	N ^[2] x 5.12	Usable energy (kWh)	N x 4.79	Operating voltage range (V)	102.4 ~ 409.6
-------------------------------------	-------------------------	---------------------	----------	-----------------------------	---------------

General Data

Dimensions (W × D × H)	33.3 x 9.4 x (10.4 + N x 10.6) inch, 845 x 240 x (265 + N x 270) mm (2 Pcs string)				
Weight	N x 105.8 lbs, N x 48 kg	Operating temperature	Charge: 32 ~ 131°F (0 ~ 55°C), Discharge: 4 ~ 131°F (-20 ~ 55°C)		
Relative humidity	0 ~ 95% (No condensation)	Storage temperature	4 ~ 113°F (-20 ~ 45°C)		
Ingress rating	IP65	Max. altitude (m)	4,000 (>2,000 derating)	Mounting options	Indoor / Outdoor, Floor or wall mount

Certification

Safety	IEC62619, UL 1973, UL9540A, UL9540	EMC	FCC Part 15 ClassB	Transportation	UN38.3
--------	------------------------------------	-----	--------------------	----------------	--------

[1] Under specific test conditions.

[2] N=2~8, depending on the number of batteries configured.