ROYPOW TECHNOLOGY CO., LTD. has a policy of improving products continuously. All the information in this catalogue is provided for reference only. We reserve the right to make revisions as well as product alterations and improvements at any time without prior notice. Trademarks are the property of ROYPOW TECHNOLOGY CO., LTD. or their respective owners. Technical data and illustrations are not binding. We assume no liability for misprints.

Version: October 18, 2024, Residential Energy Storage System



ROYPOW (USA) Technology Co., Ltd.

Tel: +1 512 688 5555 (Texas Office)

Email: sales@roypowusa.com

Service Support: +1 626 269 0547

Email: service@roypowusa.com

Web: www.roypow.com Head Office: 5901 Triumph St, Commerce, CA 90040, USA

Florida Office: 277 Douglas Avenue, Unit 1004, Altamonte Springs, FL 32714, USA

Texas Office: 2350 Campbell Creek Blvd #100 Richardson, TX 75082, USA

Indiana Office: 5545 W Raymond St, Ste H Indianapolis, IN 46241, USA

Georgia Office: 1150 Cobb International PI NW Ste E, Kennesaw, GA 30152, USA

ROYPOW

US-standard

Residential Energy Storage System

Experience the Freedom of Energy Independence





ROYPOW For One-stop New Energy Solutions

- R&D, manufacturing and sales of motive power systems and energy storage systems as one-stop solutions
- Fully automatic production lines, a full range of test equipment and an advanced MES
- · Covering Low-Speed Vehicles' Batteries, Industrial Batteries, as well as Residential ESS, Commercial & Industrial ESS, and Mobile ESS
- Self-development of power electronics technologies, including PCS, BMS, and EMS



Quality Control Certificates:

- Environmental Management System: ISO 14001:2015
- ✓ Occupational Health and Safety Management System: ISO45001:2018
- 🗸 Quality Management System: ISO 9001:2015, IATF16949:2016
- ISO/IEC 27001:2022 ✓ Social Accountability Management System: SA8000:2014

Management System:

Information Security

✓ Hazardous Substance Process Management: IECQ QC 080000







R&D and Manufacturing Highlights

As a result of these investments, ROYPOW is capable of "end-to-end" integrated delivery, making our products out-perform the industry norms.

Fully Automatic **Production Lines** BMS, PCS, EMS All Designed in House

Global Sales and Service Network



Timely Delivery

Hassle-free

ROYPOW has comprehensively unfolded its overseas market layout to ensure the localization of R&D, manufacturing, marketing and service, becoming one of your most reliable and valuable partners.



Upgrading to New Technology, with Our Turnkey Solutions.

With years of dedication to new energy solutions, we are proud to offer customers professional solutions for:

- > Industrial Batteries > Low-speed Vehicle Batteries > Battery Systems for Emerging Applications > Battery Systems for Off-highway Applications
- Residential Energy Storage Systems
- > Mobile Energy Storage Systems







Advanced MES System

After-sales Service



Fast Response **Technical Support**

- Commercial & Industrial Energy Storage Systems
- > Chargers

ROYPOW Residential Energy Storage Solutions

Meet the high-performance, safe, and intelligent residential energy storage solutions. ROYPOW RESS combines the most advanced battery management system with super power supply capacity to provide uninterrupted, sustainable energy for your working and family usages all day and help reduce reliance on the grid, save electricity costs, and promote a better life.



The solutions include:





On-Grid / Off-Grid All-In-One RESS

Integrate an efficient, reliable inverter with high-safety, long-life LFP batteries into a compact system for continuous power supply. The all-in-one modular system offers both aesthetic appeal and functionality, enhancing home life and providing whole-home backup support.

Off-Grid ESS

Designed to enhance energy resilience and independence. Perfect for remote locations, forest vacation cottages, and areas with unstable grid connections and frequent outages, offering a consistent power supply without reliance on the utility grid. **ROYPOW Hybrid On-Grid & Off-Grid All-In-One RESS**

Intelligent Residential Energy Storage System

10/12/15 kW / 10 - 40 kWh







tor

RSD & AFCI

Three-Phase Available

via Parallel Connection



Smart App & Web Management



Floor & Wall Mounted



4/2 MPPTs/Input



Stacked Design for Easy Installation



Up to **6** in Parallel







Safety



LiFePO₄ batteries ensure premium electrical characteristics without any safety issues.



Enhanced safety with aerosol fire protection.



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



IP65 Rating, safe and reliable while using.



Comprehensive Visualization



Dynamic Power Flow &

Generation Report

Multi-terminal

Compatibility & Sharing

Everything at a glance and under control; the intuitive App / Web allows you to have full visibility into your self-powered home while providing real-time information on solar generation, battery power flow, and household consumption.



Core Value



Communication Control

🗐 WI-FI Power Carrier

Ð **Cloud Communication** Prediction Al Algorithm

Platform



Hardware [4] Power Generation / Transformation / Distribution

Battery management system (BMS)



ROYPOW Research Institute 30+ BMS R&D veteran researchers with 16+ years ESS BMS experiences

High SOC Accuracy Our SOC algorithm accuracy reaches 5%

Comprehensive Protection \checkmark

 $\mathbf{3}$ -level software protection, redundant hardware level protection



App & Web Management



Backup Function & Data Encryption



Working Mode Switch & Profit Calculation



Integrated After-sales Service

System Specification

Model	SUN10000S-U/A	SUN12000S-U/A	SUN15000S-U/A
Rated AC Output Power (W)	10000	12000	15000
Nominal Energy (kWh)		5 to 40	
Noise (dB)		≤29	
Operating Temperature Range	-2	0~55°C (-4 ~ 131°F), >45°C(113°F) deratir	ng
Dimensions (WxDxH, mm)	33.3 x 7.9 x (32.1+	-10.7*N) inch / [845 x 200 x (815+270*N	l) mm], N=2 to 8
Ingress Rating		Inverter: NEMA 4X Battery: IP65	
Mounting Options	Indoor/Out	door, Floor standing or Wall mounter	d (optional)
Compliance & Certificates			

UL9540, UL9540A, UL1973, IEEE 1547, IEEE 1547.1, UL1741, UL1741 CRD, UL1741SB, UL1699B, UL1998, UL991, CSA C22.2, FCC Part 15B, ICES-003, UN38.3, CEC Listing

Inverter Specification

Model	SUN10000S-U	SUN12000S-U	SUN15000S-U
Input - DC (PV)			
Max. Power (Wp)	14400	20000	24000
Max. DC Voltage (V)		550	
MPPT Voltage Range (V)		120~550	
MPPT Voltage Range (V, full load)	235~550	200~550	225~550
Start Voltage (V)		150	
Max. Input Current per MPPT (Imp, A)	15.5	27	27
Max. Short Circuit Current per MPPT (Isc, A	A) 20	40	40
Number of MPPT		4	
Number of PV String per MPPT	1	2	2
Input - DC (Battery)			
Compatible Battery		RBmax5.1H Series	
Voltage Range (V)		75-480	
Max. Charge / Discharge Power (W)	10000 / 10000	12000 / 12000	15000 / 15000
Max. Charge / Discharge Current (A)		75/75	
Input - AC (GEN)			
Max. AC Power (W)		19000	
Max. AC Current (A)		79.2	
Rated Voltage (V) / Frequency (Hz)		240, (L1/L2) / 60Hz	
AC (On grid)			
Rated Output Power @240V (W)	10000	12000	15000
Max. Output Apparent Power @240V (VA)	10000	12000	15000
Rated Output Current (A)	41.6	50	62.5
Rated Input Power @240V(W)		20000	
Rated Input Apparent Power @240V(VA)		20000	
Max. Input Current (A)		83.3	
Rated Grid Voltage (V)		120/240, (L1/L2/N)	
Rated Grid Frequency (Hz)		60	
THDI		<3%	
Power Factor		0.8 leading to 0.8 lagging	
Efficiency			
Max.Efficiency (PV to Grid)		98.0%	

AC (Back Up)							
Rated Output Power (W)	10000	12000	15000				
Rated Output Current (A)		79.2					
Rated Output Voltage		120/240V, L1/L2/N					
Rated Frequency (Hz)		60					
Back-up Switch Time		<10ms					
THDV		<3%					
Overload Capacity	105% <load≤115< td=""><td>%, 10min. 115%<load≤125%, 125%<i<="" 1min.="" td=""><td>Load, 0.3 Sec.</td></load≤125%,></td></load≤115<>	%, 10min. 115% <load≤125%, 125%<i<="" 1min.="" td=""><td>Load, 0.3 Sec.</td></load≤125%,>	Load, 0.3 Sec.				
Protections							
PV Switch / PV Rapid Shutdown / Ar AC Over / Under Voltage Prote	rc Fault Circuit Interrupter (AFCI) action / AC Over Current Protecti	/GFCI/Anti-islanding Protection /DC R ion / AC Short Circuit ProtectionInsulat	everse-polarity Protection / ion Resistor Detection				
DC/AC Surge Protection Device		TYPE 4					
Environmental							
Operating Temperature	-3	30 ~ 60°C(-22 ~ 140°F), derating above 4	5°C(113°F)				
Operating Humidity		0~95% RH					
Storage Conditions	-3	-30~60°C(-22 ~ 140°F), 0~95% non-condensing					
Enclosure Type		NEMA Type 4X					
Max Elevation	30	000m (>2000m derating) / 9842ft (>656	1ft derating)				
Noise (dB)		≤29					
General Data							
Mounting Option		Wall Mount, indoor or outdoo	r				
Coupling		DC-Coupling & AC-Coupling					
Тороlоду		Transformerless					
Cooling		Natural Convection					
Display		LCD + APP (WiFi)					
Communication Interface		RS485/CAN/WiFi					
Dimensions (WxDxH)		33.5 x 7.9 x 21.7 inch (850 x 200 x 550	Omm)				
Weight		55kg (121.3 lbs)					

AC (Back Up)							
Rated Output Power (W)	10000	12000	15000				
Rated Output Current (A)		79.2					
Rated Output Voltage		120/240V, L1/L2/N					
Rated Frequency (Hz)		60					
Back-up Switch Time		<10ms					
THDV		<3%					
Overload Capacity	105% <load≤115%< td=""><td>%, 10min. 115%<load≤125%, 125%<l<="" 1min.="" td=""><td>_oad, 0.3 Sec.</td></load≤125%,></td></load≤115%<>	%, 10min. 115% <load≤125%, 125%<l<="" 1min.="" td=""><td>_oad, 0.3 Sec.</td></load≤125%,>	_oad, 0.3 Sec.				
Protections							
PV Switch / PV Rapid Shutdown / Arc AC Over / Under Voltage Protec	Fault Circuit Interrupter (AFCI) / tion / AC Over Current Protectic	GFCI/Anti-islanding Protection /DC R On / AC Short Circuit ProtectionInsulati	everse-polarity Protection / ion Resistor Detection				
DC/AC Surge Protection Device		TYPE 4					
Environmental							
Operating Temperature	-30) ~ 60°C(-22 ~ 140°F), derating above 45	5°C(113°F)				
Operating Humidity		0~95% RH					
Storage Conditions	-30	0~60°C(-22 ~ 140°F), 0~95% non-conder	nsing				
Enclosure Type		NEMA Type 4X					
Max Elevation	300	00m (>2000m derating) / 9842ft (>656	Ift derating)				
Noise (dB)	≤29						
General Data							
Mounting Option		Wall Mount, indoor or outdoo	r				
Coupling		DC-Coupling & AC-Coupling					
Topology		Transformerless					
Cooling		Natural Convection					
Display		LCD + APP (WiFi)					
Communication Interface		RS485 / CAN / WiFi					
Dimensions (WxDxH)		33.5 x 7.9 x 21.7 inch (850 x 200 x 550	Omm)				
Weight		55kg (121.3 lbs)					

Battery Module Specification

Model	2*RBmax5.1H	3*RBmax5.1H	4*RBmax5.1H	5*RBmax5.1H	6*RBmax5.1H	7*RBmax5.1H	8*RBmax5.1H
Electric Data							
Nominal Energy (kWh)	10.24	15.36	20.48	25.6	30.72	35.84	40.96
Usable Energy (kWh)	9.58	14.37	19.16	23.95	28.74	33.53	38.32
Nominal Voltage (V)	102.4	153.6	204.8	256	307.2	358.4	409.6
Operating Voltage Range	(V) 89.6~113.6	134.4~170.4	179.2~227.2	224~284	268.8~340.8	313.6~397.6	358.4~454.4
Max. charge/discharge C	Current (A)		50/75				
General Data							
Battery Chemistry			LFP (LiFe	PO ₄)			
Weight (Kg)	233.7 lb (106 kg)	337.4 lb (153 kg)	441 lb (200 kg)	553.4 lb (251 kg)	657 lb (298 kg)	760.6 lb (345 kg)	864.3 lb (392 kg)
	Single tower			Double tower			
Dimensions (W×D×H) (mm)	33.3 x 7.9 x 31.7 in	33.3 x 7.9 x 42.4 in	33.3 x 7.9 x 53 in	33.3 x 7.9 x 42.4, 33.3 x 7.9 x 27 in	33.3 x 7.9 x 42.4, 33.3 x 7.9 x 37.6 in	33.3 x 7.9 x 53, 33.3 x 7.9 x 37.6 in	33.3 x 7.9 x 53, 33.3 x 7.9 x 53 in
	043 X 200 X 803 11111	845 X 200 X 1075 MM	11 845 x 200 x 1345 mm	845 x 200 x 1075, 845 x 200 x 685 mm	845 x 200 x 1075, 845 x 200 x 955 mm	845 x 200 x 1345, 845 x 200 x 955 mm	845 x 1200 x 1345, 845 x 1200 x 1345 mn
Operating Temperature		Charg	e: 0 to 55°C (32 to 13	51°F), -20 to 55°C (-4	4 to 131°F)		
Storage temperature	≤1 month: -20 to 45°C (-4 to 113°F), >1 month: 0 to 35°C (32 to 95°F)						
Relative Humidity	5~95%						
Max. Altitude	4000m (>2000m derating) / 13123ft (>6561ft derating)						
Protection Degree			IP 65 (NEM	/A Type 4X)			
Installation Location		Inde	oor/Outdoor, Floor	standing, Wall mo	ounted		
Communication			CAN,	RS485			



Empowering Sustainable Energy Storage for Homes

Easier Installation



>**6,000** Times Cycle Life

IP65 Ingress Rating





Advanced LiFePO₄ Technology Safe, Cobalt-free Battery Chemistry



Safe Protection Intelligent BMS & Built-in Fire Extinguishing System

High Compatibility Compatible with Inverters of Leading Brands

Modular and Stacked Design

Technical Specifications

Model	RBmax5.1L	2*RBmax5.1L2	3*RBmax5.1L2	4*RBmax5.1L2	5*RBmax5.1L2	6*RBmax5.1L2	7*RBmax5.1L2	8*RBmax5.1L2
Electric Data								
Nominal energy (kWł	ר) 5.12	10.24	15.36	20.48	25.6	30.72	35.84	40.96
Usable energy (kWh)	4.79	9.58	14.37	19.16	23.95	28.74	33.53	38.32
Max. continuous charge current (A)	50	100	150	200	200	200	200	200
Max. continuous discharge current (A)	100	200	200	200	200	200	200	200
Cell type				Lithium iron phos	sphate (LFP)			
Nominal voltage (V)				51.	2			
Operating voltage rar	nge (V)			44.8 ~	56.8			
General Data								
Weight (Kg / Ibs.)	48.5 Kg 106.9 lbs.	94.3 Kg 207.89 lbs.	140 Kg 308.64 lbs.	185.7 Kg 409.39 lbs.	234.3 Kg 516.54 lbs.	280 Kg 617.29 lbs.	325.7 Kg 718.04 lbs.	371.4 Kg 818.79 lbs.
Dimensions (W × D × H mm / inch)	650x240x460 mm 25.6 x 9.5 x 18.1 inch	650x240x790 mm 25.6x9.4x31.1 inch	650x240x1120 mm 25.6x9.4x44.1 inch	650x240x1450 mm 25.6x9.4x57.1 inch	650x240x790+ 650x240x1120 mm 25.6x9.4x31.1 inch+ 25.6x9.4x44.1 inch	650x240x1120 + 650x240x1120 mm 25.6x9.4x44.1 inch+ 25.6x9.4x44.1 inch	650x240x1120 + 650x240x1450 mm 25.6x9.4x44.1 inch+ 25.6x9.4x57.1 inch	650x240x1450 + 650x240x1450 mn 25.6x9.4x57.1 inch- 25.6x9.4x57.1 inch-
Operating temperature (°F/°C) [1]		Charge: 32 ~ 131°F (0 ~ 55°C), Discharge: 4 ~ 131°F (-20 ~ 55°C)						
Storage temperature	e (°F/°C) ≤1 month: -4 ~ 113°F (-20 ~ 45°C), >1 month: 32 ~ 95°F (0 ~ 35°C)							
Installation location	Indoor/Outdoor, Floor standing or Wall mounted							
Communication	CAN, RS485							
Relative humidity		0 ~ 95%						
Max. altitude (m / ft.)			4000 m /	[/] 13,123 ft (>2,000	m / >6,561.68 ft de	erating)		
Ingress rating				IPe	55			
Certification			IEC 62619, UL 1	1973, EN 61000-6-1,	EN 61000-6-3, FCC	Part 15, UN38.3		

[1] When the ambient temperature is too low or too high, the performance of battery may be limited. [2] All pictures shown are for reference only and data are based on ROYPOW standard test procedures. Actual performance may vary according to local conditions. Only authorized personnel are allowed to operate or make adjustments to the batteries. We reserve the right to make revisions as well as product alterations and improvements at any time without prior notice.





OFF-GRID INVERTER

120V / 240V Split Phase 6.5~39kW/8~48kW/10~60kW

Efficient and Reliable for On-demand Power



kW Max. PV Input

2 YEARS

Up to 6 Inverters Parallel Working

Three-Phase Available via Parallel Connection Up to **60** kW High Power

10_{ms UPS} Switch Time

5 Years Additional Cost for Extended Warranty



Long Design Life



Built-in Li-ion Battery BMS Communication

ROYPOW



Pure Sine Wave AC Power



Safety Protections

via LCD Display and Wi-Fi Easy Installation

Intelligent Management

and Setup Exclusive Li-ion Battery



 \bigcirc 1 ΡV Т $\nabla \neg \neg$ Battery

System Specification

Aodel R6500S-		R8000S-US	R10000S-US
PV Input			
Max. PV Input Power	10000 W	11000 W	11000 W
Max. DC Voltage	550 V	500 V	500 V
1PPT Voltage Range 150 V - 450 V		125 V - 425 V	125 V - 425 V
Max. Input Current	18 A / 18 A	22 A / 22 A	22 A / 22 A
Number of MPPT	2	2	2
Battery Input			
Battery Type	Lead-acid / LFP	Lead-acid / LFP	Lead-acid / LFP
Rated Voltage	48 V	48 V	48 V
Voltage Range	40 V - 60 V	40 V - 60 V	40 V - 60 V
Max. MPPT Charging Current	140 A	180 A	200 A
Max. Mains/GeneratorCharging Curre	nt 80 A	100 A	120 A
Max. Hybrid Charging Current	140 A	180 A	200 A
AC Input			
Input Voltage Range	65-140 VA	90-140 VA	90-140 VA
Frequency Range	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Bypass Overload Current	40 A	63 A	63 A
AC Output			
Rated Output Power	6500 W	8000 W	10000 W
Max. Peak Power	13000 W	16000 W	20000 W
Rated Output Voltage		120/240Vac (Split Phase/Single Phase)	
Load Capacity of Motors	4HP	5HP	6HP
Rated AC Frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Waveform	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
Switch Time	10 ms	10 ms	10 ms
Efficiency			
MPPT Tracking Efficiency	99.90%	99.9%	99.9%
Max. Efficiency (Battery)	93%	92%	92%
General Specifications			
Dimension (L x W x H) (2	584.6 x 410 x 133 mm 3.0 x 16.14 x 5.24 inch)	620 x 445 x 130 mm (24.41 x 17.52x 5.12 inch)	620 x 445 x 130 mm (24.41 x 17.52x 5.12 inch)
Weight	18.9 kg (41.66 lbs.)	27 kg (59.52 lbs.)	27 kg (59.52 lbs.)
Installation		Wall-Mounted	
Environmental Temperature Range		-10~55°C, >45°C derated (14~131°F, >113°F derated)	
Max. Altitude		>2,000m / >6,561.68 ft Derating	
Ingress Rating		IP20	
Cooling Mode		Fan	
Noise		<60dB	
Display Type		LCD Display	
Communication		Wi-Fi / RS485/CAN	
Certification		UL1741, FCC 15 Class B, UN38.3	

UL1741 FCC 15 Class B UN38.3







5.5 kW Max. PV Input Up to 6 Inverters Parallel Working

Generator Input

Up to 30 kW High Power

Safe

10_{ms UPS} Switch Time

5 Years Additional Cost for Extended Warranty

to software

Reliable

Long design life

Multiple safety approvals

Comprehensive security from hardware

High-quality pure sine wave AC power



Efficient

✓ Advanced MPPT technology with up to 99.9% efficiency

✓ Up to 22A PV input current



Intelligent

- ✓ Support Li-ion battery BMS communication
- Exclusive Li-ion battery BMS dual activation



ModelR5000S-UP-120VPV InputMax. PV Input Power5500 WMax. DC Voltage500 VMax. DC Voltage Range120 V-450 VMax. Input Current22 ANumber of MPPT1Battery Input1Battery InputLead-acid / LFPRated Voltage Range40V-60 VMax. MPPT Charging Current100 AMax. MPPT Charging Current100 AMax. Mybrid Charging Current100 AMax. Hybrid Charging Current50 HZ / 60 HZInput Voltage Range90-140 VAFrequency Range50 HZ / 60 HZBypass Overload Current63 A	
PV Input Max. PV Input Power 5500 W Max. DC Voltage 500 V MPPT Voltage Range 120 V-450 V Max. Input Current 22 A Number of MPPT 1 Battery Input 1 Battery Type Lead-acid / LFP Rated Voltage 48 V Voltage Range 40V-60 V Max. MPPT Charging Current 100 A Max. MADPT Charging Current 100 A Max. Hybrid Charging Current 100 A Max. Hybrid Charging Current 100 A Max. Hybrid Charging Current 60 A AC Input 50 Hz / 60 Hz Bypass Overload Current 63 A	
Max. PV Input Power5500 WMax. DC Voltage500 VMPPT Voltage Range120 V-450 VMax. Input Current22 ANumber of MPPT1Battery InputBattery InputLead-acid / LFPRated Voltage48 VVoltage Range40V-60 VMax. Mains/GeneratorCharging Current100 AMax. Hybrid Charging Current100 AMax. Hybrid Charging Current100 AMax. Hybrid Charging Current63 AAC Output63 A	
Max. DC Voltage500 VMPPT Voltage Range120 V-450 VMax. Input Current22 ANumber of MPPT1Battery Input1Battery InputLead-acid / LFPRated Voltage48 VVoltage Range40V-60 VMax. MPPT Charging Current100 AMax. Mains/GeneratorCharging Current40 AMax. Hybrid Charging Current100 AAC Input100 AFrequency Range90-140 VAFrequency Range50 Hz / 60 HzBypass Overload Current63 A	
MPPT Voltage Range120 V-450 VMax. Input Current22 ANumber of MPPT1Battery InputLead-acid / LFPRated Voltage48 VVoltage Range40V-60 VMax. MPPT Charging Current100 AMax. Mains/GeneratorCharging Current100 AMax. Hybrid Charging Current100 AMax. Hybrid Charging Current100 AAcl Input100 ASettery Range90-140 VAFrequency Range50 Hz / 60 HzBypass Overload Current63 A	
Max. Input Current22 ANumber of MPPT1Battery InputBattery InputBattery TypeLead-acid / LFPRated Voltage48 VVoltage Range40V-60 VMax. MPPT Charging Current100 AMax. Mins/GeneratorCharging Current40 AMax. Hybrid Charging Current100 AMax. Hybrid Charging Current50 HzInput Voltage Range90-140 VAFrequency Range50 Hz / 60 HzBypass Overload Current63 A	
Number of MPPT1Battery InputBattery TypeLead-acid / LFPRated Voltage48 VVoltage Range40V-60 VMax. MPPT Charging Current100 AMax. MPPT Charging Current40 AMax. Hybrid Charging Current100 AMax. Hybrid Charging Current90-140 VAFrequency Range90-140 VAFrequency Range50 Hz / 60 HzBypass Overload Current63 A	
Battery InputBattery TypeLead-acid / LFPRated Voltage48 VVoltage Range40V-60 VMax. MPPT Charging Current100 AMax. Mains/GeneratorCharging Current40 AMax. Hybrid Charging Current100 AMax. Hybrid Charging Current50 Hz / 60 HzInput Voltage Range90-140 VAFrequency Range50 Hz / 60 HzBypass Overload Current63 A	
Battery TypeLead-acid / LFPRated Voltage48 VVoltage Range40V-60 VMax. MPPT Charging Current100 AMax. Mains/GeneratorCharging Current40 AMax. Hybrid Charging Current100 AAC Input100 AInput Voltage Range90-140 VAFrequency Range50 Hz / 60 HzBypass Overload Current63 A	
Rated Voltage48 VVoltage Range40V-60 VMax. MPPT Charging Current100 AMax. Mains/GeneratorCharging Current40 AMax. Hybrid Charging Current100 AAC Input100 AInput Voltage Range90-140 VAFrequency Range50 Hz / 60 HzBypass Overload Current63 A	
Voltage Range40V-60 VMax. MPPT Charging Current100 AMax. Mains/GeneratorCharging Current40 AMax. Hybrid Charging Current100 AAC InputInput Voltage Range90-140 VAFrequency Range50 Hz / 60 HzBypass Overload Current63 A	
Max. MPPT Charging Current100 AMax. Mains/GeneratorCharging Current40 AMax. Hybrid Charging Current100 AAC InputInput Voltage Range90-140 VAFrequency Range50 Hz / 60 HzBypass Overload Current63 AAC Output	
Max. Mains/GeneratorCharging Current 40 A Max. Hybrid Charging Current 100 A AC Input 100 A Input Voltage Range 90-140 VA Frequency Range 50 Hz / 60 Hz Bypass Overload Current 63 A	
Max. Hybrid Charging Current 100 A AC Input Input Voltage Range 90-140 VA Frequency Range 50 Hz / 60 Hz Bypass Overload Current 63 A	
AC Input Input Voltage Range 90-140 VA Frequency Range 50 Hz / 60 Hz Bypass Overload Current 63 A AC Output	
Input Voltage Range 90-140 VA Frequency Range 50 Hz / 60 Hz Bypass Overload Current 63 A	
Frequency Range 50 Hz / 60 Hz Bypass Overload Current 63 A	
Bypass Overload Current 63 A	
AC Output	
Rated Output Power 5000 W	
Max. Peak Power 10000	
Rated Output Voltage 120 Vac ((L/N/PE Single Phase)	
Load Capacity of Motors 4HP	
Rated AC Frequency 50 Hz / 60 Hz	
Waveform Pure Sine Wave	
Switch Time 10 ms	
Efficiency	
MPPT Tracking Efficiency 99.90%	
Max. Efficiency (Battery) 92%	
General Specifications	
Dimension (L x W x H) 446.9 x 350 x 133 mm (17.59 x 13.78 x 5.24 inch)	
Weight 14 kg (30.86 lbs.)	
Installation Wall-Mounted	
Environmental Temperature Range -10~55°C,>45°C Derated (14~131°F, >113°F Derated)	
Max. Altitude >2,000 m / >6,561.68 ft Derating	
Ingress Rating IP20	
Cooling Mode Forced Air Cooling with Adjustable Air Speed	
Noise <60dB	
Display Type LCD Display	
Communication Wi-Fi / RS485	
Certification UL1741, FCC 15 Class B, UN38.3	

UL1741 FCC 15 Class B UN38.3

Versatile Off-Grid System

Ideal for powering homes, remote cabins, resorts, rural areas, and businesses in regions where the grid access is limited or unavailable. Go off the grid with peace of mind.





