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Version: February 24, 2025, Off-Grid Energy Storage System



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US-standard

# Off-Grid Energy Storage System

Experience the Freedom of Energy Independence



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Scan it!

# 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



**750+** Employees  
**190+** R&D People  
**105,000 m<sup>2</sup>** Headquarters Floor Area  
**2,500 m<sup>2</sup>** Testing Center  
**231** Patents

### Quality Control Certificates:

- ✓ Environmental Management System: ISO 14001:2015
- ✓ Occupational Health and Safety Management System: ISO 45001:2018
- ✓ Quality Management System: ISO 9001:2015, IATF16949:2016
- ✓ Information Security Management System: ISO/IEC 27001:2022
- ✓ Social Accountability Management System: SA8000:2014
- ✓ Hazardous Substance Process Management: IECQ QC 080000



### Product Certifications:

UL 1973, UL 9540A, UL 9540, UL 2580, UL 2271, UL 1741  
 IEC 62619  
 EN 62477, EN 62040, (EU) 2023/1542, EN 62109-1, EN 62109-2

**UL** **EMC** FCC, IEC/EN 61000-6, BS EN IEC 61000-6  
**GRID** **Function Safety** IEC 60730, ISO 13849-1  
**CB** **Transport** UN 38.3  
**CE** **RoHS** RoHS Directive 2011/65/EU & (EU) 2015/863

### R&D and Manufacturing Highlights

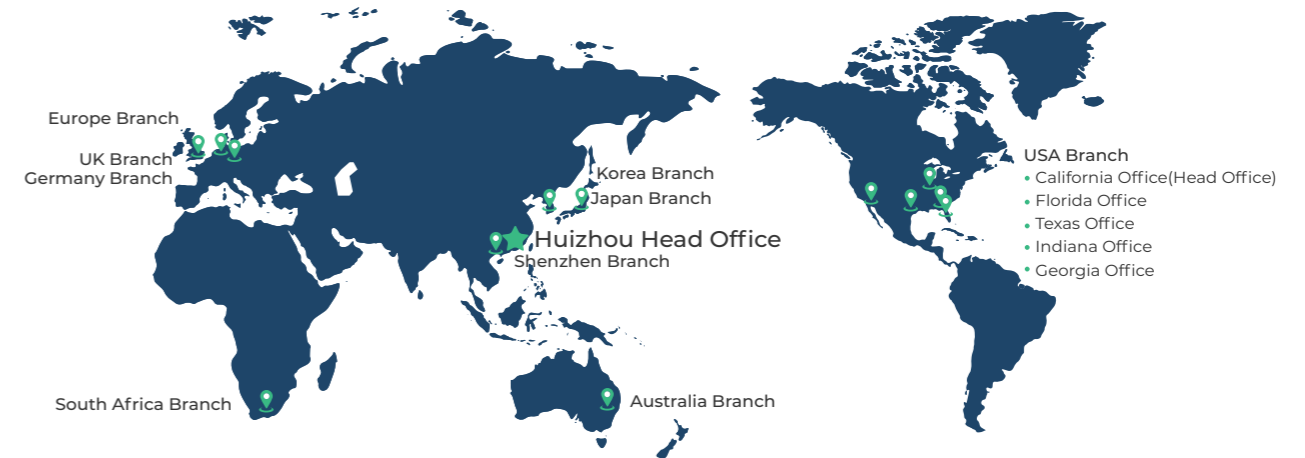
As a result of these investments, ROYPOW is capable of "end-to-end" integrated delivery, making our products out-perform the industry norms.

- Fully Automatic Production Lines
- BMS, PCS, EMS All Designed in House
- All-round Testing
- Advanced MES System

### Global Sales and Service Network

- Timely Delivery
- Hassle-free After-sales Service
- Fast Response Technical Support

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:

- Low-speed Vehicle Batteries
- Battery Systems for Off-highway Applications
- Residential Energy Storage Systems
- Mobile Energy Storage Systems
- Industrial Batteries
- Battery Systems for Emerging Applications
- Commercial & Industrial Energy Storage Systems
- Motors, Controllers and Chargers



# Versatile Off-Grid System

Ideal for powering homes, remote cabins, rural areas as well as the regions where the grid access is limited, unavailable, or unreliable. Go off the grid with peace of mind.



Emergency Backup



Tiny House / Cabin



Remote  
Off-Grid Regions



Home Backup



Movable House



Sheds and  
Small Buildings



Barns



*Empowering Your Home  
with Sustainable Energy Solutions*



# Off-Grid Residential Energy Storage System

Integrating a high-capacity battery pack with a performance inverter, the ROYPOW Off-Grid Residential Energy Storage System offers a reliable and efficient solution for homes seeking energy resilience.

It ensures a continuous power supply from renewable sources, even during grid outages, empowering users with stable energy and peace of mind.

## ROYPOW System Includes:



### LiFePO<sub>4</sub> Batteries

ROYPOW LiFePO<sub>4</sub> battery pack is a safe and efficient solution for storing excess solar energy, reducing costs, increasing energy independence, and providing backup power for your home.

Up to **16**  
units in parallel

Capacity range:  
**5.1 ~ 81.6** kWh

**>6,000**  
times of cycle life

**IP65**  
ingress rating

Built-in hot aerosol  
**fire extinguishing**  
system



### 5kW / 6.5kW / 10kW Solar Inverter

ROYPOW solar inverter offers a dependable solution for converting solar energy into usable power, optimizing energy consumption, and enhancing system performance, while ensuring smooth operation for your home.

**99.9%** max.  
MPPT tracking efficiency

Up to **6** unit  
in parallel

**Three phase**  
available parallel connection

**Generator**  
input

## Solar part

### Inverter

R5000S-UP-120V  
R6500S-US  
R10000S-US

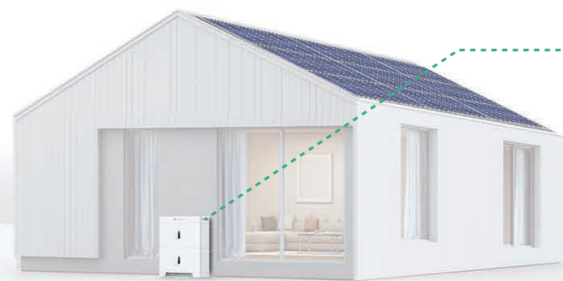


### solar panel

405W solar panel  
550W solar panel  
605W solar panel  
660W solar panel

Inverter Model	R5000S-UP-120V	R6500S-US	R10000S-US
Max.PV Power	5.5 kW	11 kW	11 kW
MPPT Voltage Range	120~450 V	150 ~450 V	125 ~425 V
Max. Input Current per MPPT	22 A	18 A / 18 A	22 A / 22 A
Number of MPPT	1	2	2
405W Solar Panel	14 pcs (7 s 2 p)	28 pcs (7 s 4 p)	28 pcs (7 s 4 p)
550W Solar Panel	10 pcs (5 s 2 p)	20 pcs (5 s 4 p)	20 pcs (5 s 4 p)
605W Solar Panel	8 pcs (8 s 1 p)	16 pcs (8 s 2 p)	16 pcs (8 s 2 p)
660W Solar Panel	8 pcs (8 s 1 p)	16 pcs (8 s 2 p)	16 pcs (8 s 2 p)

## Battery part



### Battery

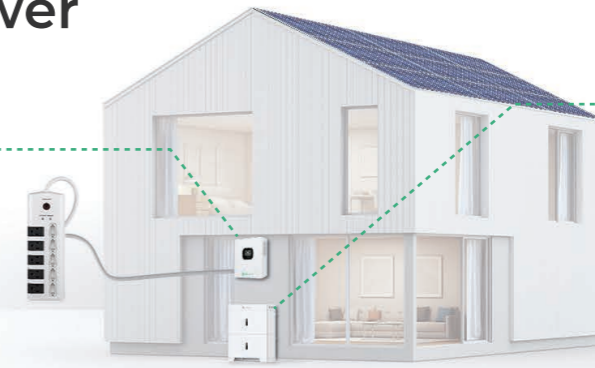
2\*RBmax5.1L2  
3\*RBmax5.1L2  
4\*RBmax5.1L2

Battery Model	2*RBmax5.1L2	3*RBmax5.1L2	4*RBmax5.1L2
Nominal Energy	10.24 kWh	15.36 kWh	20.48 kWh
Usable Energy	9.58 kWh	14.37 kWh	19.16 kWh
Operating Voltage	44.8 ~ 56.8 V		
Max. Discharge Current	200 A		
Min. Continuous DC Discharge Power	8.9 kW	8.9 kW	8.9 kW

## Backup power

### Inverter

R5000S-UP-120V  
R6500S-US  
R10000S-US

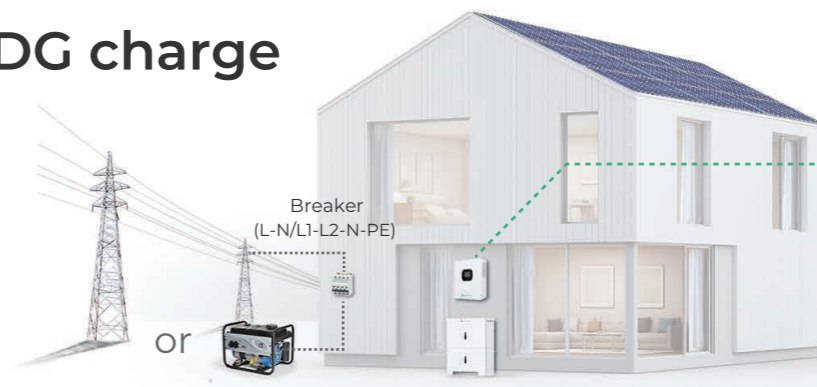


### Battery

2\*RBmax5.1L2  
3\*RBmax5.1L2  
4\*RBmax5.1L2

Inverter Model	R5000S-UP-120V	R6500S-US	R10000S-US
Rated Power	5 kW	6.5 kW	10 kW
Overload	105%<Load≤115%@10 min. 115%<Load≤125%@1 min		
Rated Voltage	120 V (L-N)	120 V (L-N) / 240 V, (L1 / L2 / N)	120 V (L-N) / 240 V, (L1 / L2 / N)
Frequency	60 Hz		
Output Current	41.7 A	27 A	41.7 A
Battery Model	2*RBmax5.1L2	3*RBmax5.1L2	4*RBmax5.1L2
Usable Energy	9.58 kWh	14.37 kWh	19.16 kWh
To Load	<5 kW	<6.5 kW	<10 kW/8.9 kW









## Mains/DG charge



### Inverter

R5000S-UP-120V  
R6500S-US  
R10000S-US

Inverter Model	R5000S-UP-120V	R6500S-US	R10000S-US
Max. Mains/Generator Charging Current	40 A	80 A	120 A
Battery Charging Voltage	48 V	48 V	40-58 V
Mains/Generator Input Voltage Range	90-140 V	65-140 V	90-140 V
Frequency	60 Hz	60 Hz	60 Hz
Only Mains/DG Charge Power	1.9 kW	3.84 kW	5.76 kW
2*RBmax5.1L2 Charging Time	<5 hrs	<2.5 hrs	<2 hrs
3*RBmax5.1L2 Charging Time	<7.5 hrs	<4 hrs	<3 hrs
4*RBmax5.1L2 Charging Time	<10 hrs	<5.5 hrs	<3.5 hrs

Model	1*RBmax5.1L	2*RBmax5.1L2	3*RBmax5.1L2	4*RBmax5.1L2	5*RBmax5.1L2	6*RBmax5.1L2	7*RBmax5.1L2	8*RBmax5.1L2
								
Nominal Energy (kWh)	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
Scalability (kWh)	Max. 16 in parallel, Max. 81kWh							
Nominal Charge/Discharge Current (A)	50 / 50	100 / 100	150 / 150	200 / 200	250 / 250	300 / 300	350 / 350	400 / 400
Max. Charge/Discharge Current(A)	100 / 100	100 / 200	150 / 200	200 / 200	250 / 400	300 / 400	350 / 400	400 / 400
Cell type	Lithium iron phosphate (LFP)							
Operating voltage range (V)	44.8 ~ 56.8							
Nominal voltage (V)	51.2							



Model	R6500S-US	R10000S-US
<b>PV Input</b>		
Max. PV Input Power	10000 W	11000 W
Max. DC Voltage	550 V	500 V
MPPT Voltage Range	150 V - 450 V	125 V - 425 V
Max. Input Current	18 A / 18 A	22 A / 22 A
Number of MPPT	2	2
<b>Battery Input</b>		
Battery Type	Lead-acid / LFP	Lead-acid / LFP
Rated Voltage	48 V	48 V
Voltage Range	40 V - 60 V	40 V - 60 V
Max. MPPT Charging Current	140 A	200 A
Max. Mains/GeneratorCharging Current	80 A	120 A
Max. Hybrid Charging Current	140 A	200 A
<b>AC Input</b>		
Input Voltage Range	65-140 VA	90-140 VA
Frequency Range	50 Hz / 60 Hz	50 Hz / 60 Hz
Bypass Overload Current	40 A	63 A
<b>AC Output</b>		
Rated Output Power	6500 W	10000 W
Max. Peak Power	13000 W	20000 W
Rated Output Voltage	120/240Vac (Split Phase/Single Phase)	
Load Capacity of Motors	4HP	6HP
Rated AC Frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
Waveform	Pure Sine Wave	Pure Sine Wave
Switch Time	10 ms	10 ms
<b>Efficiency</b>		
MPPT Tracking Efficiency	99.90%	99.9%
Max. Efficiency (Battery)	93%	92%
<b>General Specifications</b>		
Dimension (L x W x H)	584.6 x 410 x 133 mm (23.0 x 16.14 x 5.24 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.)
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	

Model	1*RBmax5.1L	2*RBmax5.1L2	3*RBmax5.1L2	4*RBmax5.1L2	5*RBmax5.1L2	6*RBmax5.1L2	7*RBmax5.1L2	8*RBmax5.1L2
Weight (Kg / lbs.)	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 x D x 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 mm 25.6x9.4x57.1 inch+ 25.6x9.4x57.1 inch
Operating temperature (°F/°C) <sup>①</sup>	Charge: 32 ~ 131°F (0 ~ 55°C), Discharge: 4 ~ 131°F (-20 ~ 55°C)							
Storage temperature (°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 derating)							
Ingress rating	IP 65							
<b>Certification</b>	IEC 62619, UL 1973, EN 61000-6-1, EN 61000-6-3, FCC Part 15, UN38.3							



Model	R5000S-UP-120V
<b>PV Input</b>	
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
<b>Battery Input</b>	
Battery Type	Lead-acid / LFP
Rated Voltage	48 V
Voltage Range	40V-60 V
Max. MPPT Charging Current	100 A
Max. Mains/GeneratorCharging Current	40 A
Max. Hybrid Charging Current	100 A
<b>AC Input</b>	
Input Voltage Range	90-140 VA
Frequency Range	50 Hz / 60 Hz
Bypass Overload Current	63 A
<b>AC Output</b>	
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
<b>Efficiency</b>	
MPPT Tracking Efficiency	99.90%
Max. Efficiency (Battery)	92%
<b>General Specifications</b>	
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	>2,000m / >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

Note: All data are based on ROYPOW standard test procedures. Actual performance may vary according to local conditions



*Reliable Energy  
for the Perfect Getaway*



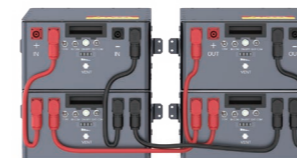
## Off-Grid Vehicle-Mounted Energy Storage System

For vehicles parked in unconventional locations without convenient access to the mains grid, a reliable off-the-grid power system is essential.

ROYPOW's vehicle-mounted system, featuring high-capacity batteries with fast charging, an efficient inverter, and an intelligent energy monitoring and management system, is the ideal, cost-effective solution.

It meets basic power needs for lighting, refrigeration, and other electric appliances and reduces generator usage, enabling off-grid living with modern conveniences while reducing carbon footprint.

### ROYPOW System Includes:



#### LiFePO<sub>4</sub> Batteries

ROYPOW LiFePO<sub>4</sub> battery pack provides a robust and reliable power source for the off-grid system to run appliances on the vehicle without running the generator.

Up to **8** units  
in parallel

Capacity range:  
**5.1 ~ 40.8** kWh

**>6,000**  
times of cycle life

**Automotive-grade,**  
vibration-resistant cells

Built-in hot aerosol  
**fire extinguishing**  
system

**IP65**  
ingress rating



#### Solar Inverter

Whether camping or traveling, ROYPOW solar inverters are a valuable addition to any RV setup, providing an efficient solution for a reliable power supply for all your devices and appliances to enhance your adventures.

**6.5 kW / 10 kW**  
optional

**99.9%** max.  
MPPT tracking efficiency

Up to **6**  
in parallel

**Three phase** available  
via parallel connection

**Generator**  
input



#### Energy Management System (EMS)

It collects, manages and coordinates equipment in the region, ensuring the safe, stable, and efficient operation of the system.

**Energy allocation** management

Connection via **Wi-Fi hotspot**

**Remote** control

**IP65** ingress rating

## Park Models

Empower park models with sustainable, uninterrupted power, enhancing convenience and reducing reliance on grid power.

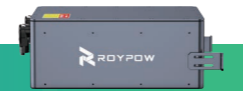


## Trailers

Enjoy the reliable power that supports your new adventures and hit the road with peace of mind.



### LiFePO<sub>4</sub> Battery



Module	<b>XBmax 5.1L</b>
Normal Voltage	<b>51.2V</b>
Normal Capacity	<b>100Ah</b>
Voltage Range	<b>40-58.4V</b>
Max Continuous Charge Current	<b>50A</b>
Peak Discharge Current	<b>100A</b>
Cycle Life	<b>&gt; 6,000</b>
Ingress Protection	<b>IP65</b>
Cooling mode	<b>Natural convection</b>
Dimension	<b>20.15 x 14.88 x 8.26 inch</b>
Weight	<b>99.2 lbs</b>
Warranty	<b>5 Years</b>

### Solar Charger Inverter



Module	<b>R6500S-US</b>
AC Output Power	<b>6,500W</b>
Max. Peak Power	<b>13,000W</b>
AC Output Voltage	<b>120/240Vac, 50 Hz / 60 Hz</b>
AC Input Voltage	<b>65-140 VA</b>
Ingress Protection	<b>IP20</b>
Support	<b>Diesel Generator</b>
Battery Rated Input	<b>48V</b>
Max. AC/Generator Charging Current	<b>80 A</b>
Dimension	<b>23.0 x 16.14 x 5.24 inch</b>
Weight	<b>1.66 lbs</b>
Warranty	<b>2 Years</b>

### Solar Charger Inverter



Module	<b>R10000S-US</b>
AC Output Power	<b>10,000W</b>
Max. Peak Power	<b>20,000W</b>
AC Output Voltage	<b>120/240Vac, 50 Hz / 60 Hz</b>
AC Input Voltage	<b>65-140 VA</b>
Ingress Protection	<b>IP20</b>
Support	<b>Diesel Generator</b>
Battery Rated Input	<b>48V</b>
Max. AC/Generator Charging Current	<b>120A</b>
Dimension	<b>24.41 x 17.52x 5.12 inch</b>
Weight	<b>59.52 lbs</b>
Warranty	<b>2 Years</b>

### Energy Management System(EMS)



Display Size	<b>XTouch7</b>
Features	<b>7 inch</b>
Ingress Protection	<b>Energy allocation management, Wi-Fi hotspot, Remote control</b>
Dimension	<b>IP65</b>
Weight	<b>7.16 x 6.61 x 1.42 inch</b>
Warranty	<b>2.2 lbs</b>
	<b>2 Years</b>





*Sustainable, Efficient,  
and Reliable Power*



## Off-Grid Solar Air Conditioner System

For areas where grid power sources are unstable or unavailable but require a reliable power source for their cooling needs, the ROYPOW Off-Grid Solar Air Conditioner System is the way to go.

It features a high-performance DC inverter air conditioner paired with an efficient MPPT and reliable battery energy storage, ensuring optimal cooling and comfort.

ROYPOW System Includes:



### DC48V Inverter Air Conditioner

Deliver efficient cooling and operate quietly, creating a comfortable environment with long-lasting performance.

**14** hours+ of runtime

**12,000** BTU/h cooling capacity

As low as **35**dB noise

**>15** EER high efficiency



### MPPT Solar Charge Controller

Efficiently optimize energy capture from solar panels and ensure maximum power transfer to the batteries, while providing comprehensive charging and discharging protection.

Up to **99%** MPPT efficiency

Support solar panel **2** in series / more in parallel



### LiFePO<sub>4</sub> Batteries

Designed for efficiency, reliability, and safety, the batteries ensure an uninterrupted power supply to run the air conditioner throughout the night.

Up to **16** units in parallel

Capacity range: **5.1**kWh ~ **81.6**kWh

**>6,000** times of cycle life

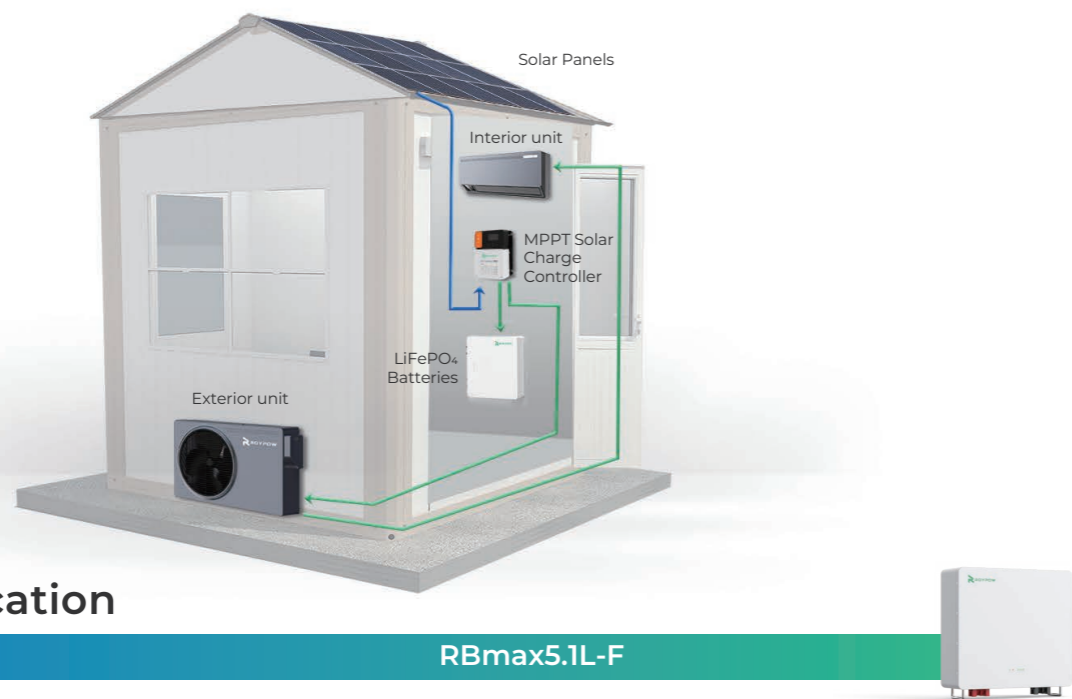
**10** years of warranty



### Recommended Solar Panels

3PCS of **480**W solar panels

Total **1500**W solar panel power



## System Specification

### Model RBmax5.1L-F

Electric Data	
Nominal Energy (kWh)	5.12
Usable Energy (kWh)	4.79
Cell Type	LFP (LiFePO <sub>4</sub> )
Nominal Voltage (V)	51.2
Operating Voltage Range (V)	44.8 ~ 56.8
Max. Continuous Charge Current (A)	100
Max. Continuous Discharge Current (A)	100

General Data	
Weight (Kg / lbs.)	48 Kg / 105.8 lbs.
Dimensions (W x D x H) (mm / inch)	500 x 167 x 490 mm / 19.69 x 6.57 x 19.29 inch
Operating Temperature (°C)	0 ~ 55°C (32 ~ 131°F) (Charge), -20 ~ 55°C (4 ~ 131°F) (Discharge)
Storage Temperature (°C) Delivery SOC State (20~40%)	>1 Month: 0 ~ 35°C (32 ~ 95°F); ≤1 Month: -20 ~ 45°C (-4 ~ 113°F)
Relative Humidity	≤ 95%
Max. Altitude (m)	4000 m / 13,123 ft (>2,000 m / >6,561.68 ft derating)
Protection Degree	IP 20
Installation Location	Ground-Mounted; Wall-Mounted
Communication	CAN, RS485

Certification			
EMC	CE	Transportation	UN38.3

Warranty	
Warranty (Years)	10 Years

Model	1*RBmax5.1L-F/FA	2*RBmax5.1L-F/FA	3*RBmax5.1L-F/FA	4*RBmax5.1L-F/FA	5*RBmax5.1L-F/FA	6*RBmax5.1L-F/FA	7*RBmax5.1L-F/FA	8*RBmax5.1L-F/FA
Nominal Energy (kWh)	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
Scalability (kWh)	Max. 16 in parallel, Max. 81kWh							
Nominal Voltage (V)	51.2							
Operating Voltage Range (V)	44.8-56.8							
Nominal Charge/Discharge Current (A)	50 / 50	100 / 100	150 / 150	200 / 200	250 / 250	300 / 300	350 / 350	400 / 400
Max. Charge/Discharge Current(A)	100 / 100	100 / 200	150 / 300	200 / 400	250 / 400	300 / 400	350 / 400	400 / 400

Model	XKF-12-FTT
Rated input voltage	DC 48 V
Inverter / Non-inverter	Inverter
Mode	Cooling / Heating
Refrigerating capacity	5,000 ~ 12,000 BTU / h (1,500 ~ 3,500 W)
Refrigerating power	300 ~ 830 W
Rated cooling capacity	12,000 BTU / h (3,520 W)
Rated cooling power	750 W
Energy efficiency ratio (EER)	15 BTU / w.h
Max. rated input current	25 A
Heating capacity	2,700 BTU / h (800 W)
Input power of heating	800 W
Air flow	≥294 CFM (≥500 m <sup>3</sup> /h )
Temperature range	61°F - 86 °F (16 C - 30 C )
Refrigerant	R410A
Outdoor unit waterproof level	IPX4
Indoor unit noise level	35 dB
Outdoor unit noise level	52 dB
Indoor unit dimension (L x W x H)	26.1 x 7.7 x 11.7 inch (663 x 197 x 296 mm)
Outdoor unit dimension (L x W x H)	35.5 x 9.4 x 20.4 inch (902 x 240 x 519 mm)
Indoor / outdoor unit weight	13.2 lbs (6.0 kg) 66.1 lbs (30.0 kg)

### Model Xm4830AL

PV Input	
Max. PV Open Circuit Voltage	150 Vdc
MPPT Operating Voltage Range	(Battery Voltage + 2 V) ~ 110 Vdc
Max. PV Input Power	400 W / 12 V, 800 W / 24 V, 1,200 W / 36 V, 1,600 W / 48 V

Battery	
Battery Type	Lead-acid / Lithium-ion / User-defined
Rated Voltage	12 / 24 / 36 / 48 Vdc
Voltage Range	8 ~ 64 Vdc
Rated Charging Current	30 A
MPPT Charging Mode	Buck Charging

Load	
Load Type	Resistive Load, Inductive Load, Capacitive Load
Rated Load Voltage	Equal to Battery Voltage 12 / 24 / 36 / 48 V
Rated Load Current	30 A
Load Operation Mode	Light Control, Light and Time Control, Manual Mode (Default), Debugging Mode, Normally Opened

Efficiency	
MPPT Tracking Efficiency	>99%
Max. Charging Conversion Efficiency	85% ~ 98% (10% ~ 100% of Load Power)

Communication	
TTL	Baud Rate 9,600 kps
RS485	RS485 Communication Port

General Specifications	
Weight	7.94 lbs. / 3.6 kg
Dimension	10.24 x 8.5 x 3.88 inch / 260 x 216 x 98.5 mm
Ingress Rating	IP32
Operating Temperature Range	-35°C ~ 65°C / -31°F ~ 149°F

Note: All data are based on ROYPOW standard test procedures. Actual performance may vary according to local conditions