

RAYSTECH

Solar Power System RT-2.5KW

Main Features

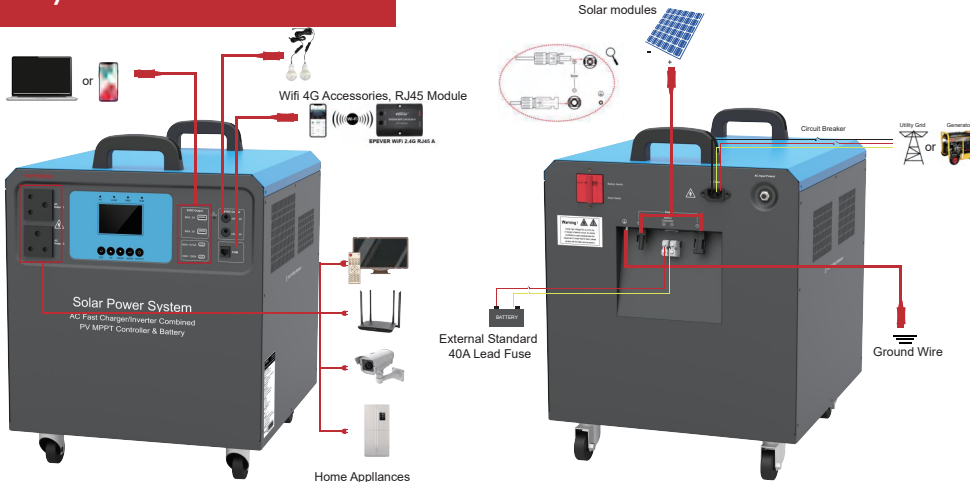
- Full intelligent digital energy storage equipment;
- Work continuously at full power for a long time;
- Multiple DC output ports, two 12V2A, two USB 5V3A, one Type C 5V3A, and one 100W Type C interface(compatible with PD3.0PPS and other protocols);
- Built-in long-life and deep-cycle sealed valve-controlled GEL battery;
- Advanced SPWM technology and pure sine wave output;
- Active PFC is adopted for AC charging, power factor is close to 1, and settable constant voltage current limiting output control;
- Adopt the bidirectional isolation topology;
- Advanced MPPT technology, with efficiency no less than 99.5%;
- Bypass automatic switching function (switch to utility mode if the power supply is normal);
- Lightning protection circuit for the Utility input terminal;
- AC output electromagnetic compatibility;
- Overload relay at the Utility input terminal to disconnect the inverter/charger when the fault occurs;
- Circuit breaker at the PV input terminal to ensure the PV array safe running;
- Circuit breaker at the Battery output terminal to ensure the battery safe running;
- Large lattice LCD screen;
- Remote temperature compensation feature for batteries;
- Optional 4G, WiFi module to remote control the inverter/charger by the RS485 com. port;
- Three-stage charging method;



Technical Data

Work Temperature Range	-20°C~55°C(when the environment temperature exceeds 25°C, the charging power and load power will be reduced appropriately; working of full load is not supported.)
Enclosure	IP20
Communication Method	RS485 (4G, Wifi Optional)
LCD	Monochrome LCD, English interface
Warranty	2 years
Dimension (Length x Width x Height)	435X504X574.5mm(Include Wheels And Handles)
Weight	106.5kg

Solar System Connection

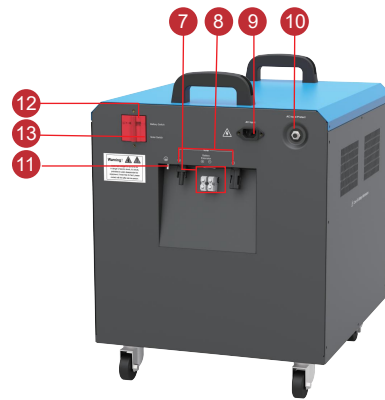


*The default output mode is energy-saving mode, and the factory setting of the battery discharge depth is to be determined.

Product Overview



- 1 AC Outlet 1/2
- 2 LCD
- 3 5V/3A Output Port
- 4 12V/2A Output Port
- 5 RS485 Com. Port
- 6 Type C 100W+Type C 30W
- 7 Battery Extension Terminal




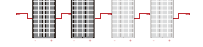
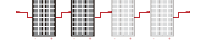
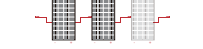
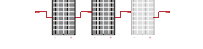
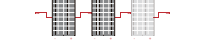
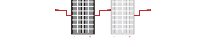
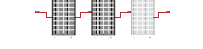
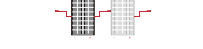
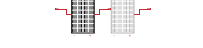
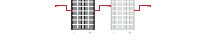
- 8 PV Input Terminals
- 9 AC Input Port
- 10 AC Input Overload Relay (15A/250VAC)
- 11 Grounding Terminal
- 12 Battery Output Circuit Breaker (125A/60VDC)
- 13 PV Input Circuit Breaker (32A/220VDC)

Technical Data

Model	RT252422
Utility Input	
Rated Utility Work Voltage	220V
Utility Work Voltage Range	176V~285Vac
Utility Input Frequency Range	45Hz-65Hz
Max. Utility Input Current (Charging + Bypass)	Current for charging 3.5A+bypass load current 11.4A@220Vac
Utility Transfer Time (Bypass To Inverter)	Utility Transfer Time(Bypass to Inverter): < 10ms Utility Transfer Time(Inverter to Bypass):0ms
AC Input Overload Relay	YES
Inverter Output	
Continuous Output Power(@25°C)	2500W
Surge Output Power(5s)	4000W
Rated Output Voltage	220V±3%
Rated Output Frequency	Default 50Hz/60Hz settable, error ± 0.2%
Output Wave	Pure Sine Wave
Output Distortion THD	THD≤3%(Resistive Load)
Output Soft Start	YES
Solar Controller	
Max. PV Input Withstand Voltage	30V~145V
Solar Controller Type	MPPT
MPPT Efficiency	>99.5%
MPPT Voltage Range	30V~120V
MPPT Ways	One way
Max. PV Output Charging Current	30A
Battery	
Battery Type	GEL
Rated Battery Voltage	24VDC
Battery Work Voltage Range	21VDC-32VDC
Battery Work Temperature Range	Discharging Mode:-20°C~55°C Charging Mode:0°C~40°C
Rated Battery Capacity	12V · 120Ah*2
DC Output	
DC 12V Port	12V2A* 2pcs
USB Port	5V3A* 2pcs
TYPE C Port	Type C-100W * 1pcs (support PD3.0 and multiple protocols) Type C-5V/3A * 1pcs
DC Output Switch	YES

*Note: In any case, if PV input voltage exceeds 145V, the equipment will be damaged, which is not within the scope of warranty.








Recommended Component Configuration table

Specifications	Size	Efficiency	Recommended Components	PV Voltage Access Range	Recommended PV access
Poly	1470x670x28mm	165~170W		30V~145V	3 In Series 68V 4 In Series 90V 5 In Series 113V
Mono	1580x710x28mm	220~235W		30V~145V	2 In Series 53V 3 In Series 80V 4 In Series 106V
Mono	1570x765x28mm	250~260W		30V~145V	2 In Series 53V 3 In Series 80V 4 In Series 106V
Poly	1640x992x30mm	270~280W		30V~145V	1 In Series 38V 2 In Series 76V 3 In Series 104V
Poly	1956x992x30mm	330~350W		30V~145V	1 In Series 45V 2 In Series 90V 3 In Series 135V
Mono	1755x1038x30mm	370~380W		30V~145V	1 In Series 45V 2 In Series 90V 3 In Series 135V
Mono	2094x1038x30mm	450~470W		30V~145V	1 In Series 53V 2 In Series 106V
Mono	1722x1134x28mm	400~415W		30V~145V	1 In Series 40V 2 In Series 80V 3 In Series 120V
Mono	2279x1134x30mm	540~555W		30V~145V	1 In Series 53V 2 In Series 106V
Mono	2204x1303x35mm	590~600W		30V~145V	1 In Series 53V 2 In Series 106V
Mono	2384x1303x35mm	650~670W		30V~145V	1 In Series 50V 2 In Series 100V

*This meter shall be checked according to the limit open circuit voltage at the lowest temperature, and shall not exceed 145V under any conditions.

Portable Power Station



 Macbook 13 7105mAh ≈ 105+ times	 iphone XR 2942mAh ≈ 260+ times
 Coffee Machine 900W ≈ 2.6+ hours	 Percussive Electric Drill 1100W ≈ 2.4+ hours
 Rice Cooker 600W ≈ 4.4+ hours	 Television 100W ≈ 24+ hours
 Electric Oven 800W ≈ 3.1 hours	 Car Refrigerator 62W ≈ 45+ hours

Notes

Empty rectangular box for notes.

RAYSTECH

Raystech (Pty) Ltd

TEL: +27 10 110 7188 E-MAIL: info@raystechglobal.com

ADD: Unit 12, ABC Business Park | 17 Mastiff Rd Linbro Business Park | Sandton | Johannesburg | 2065 | South Africa