

OP-SERIES Outdoor portable power station

Small and convenient

Rich interfaces

Stable sine wave output

Support multiple energy replenishment methods



Comply with IEC/GBT standards

Provided customized manufacture

Whole solutions for design, assembly, test...

Accountable solution for safety and reliability

Wide range offering, easy business and ready to use out of the box



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<http://www.rw-relay.com>

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Zhejiang Rockwill Energy Technology Co., Ltd. is a technology enterprise specializing in providing complete solutions for power automation system and related automation system supporting equipment.

The company has a long-term strategic cooperation with internationally renowned middle and high voltage electrical equipment R & D and manufacturing companies and research institutes, and has jointly developed a series of high-quality automation products,. The company has also married with the provincial intelligent high-voltage switch laboratory to jointly develop a new generation of intelligent synchronous switch measurement and control devices, electronic transformers, voltage sensor processing units, etc., and has achieved some fruitful technical achievements and accumulated a large number of industry professional and technical elites with excellent experience. Solid talent base, advanced production equipment, perfect quality system, strict testing means, is a strong guarantee for the company's product quality alone.

In addition to providing a rich choice of products, we can provide you with technical solution support services, you only need to tell us your needs, our technical staff will be tailored for you to design a complete set of product solutions

The company is renowned at home and abroad for providing high-quality products and services. In addition to the domestic market, the products are currently exported to South America, Central Asia, the Middle East, Central Europe, Southeast Asia, Africa and other places. We always adhere to the belief of growing together with customers, and strive to provide safer, more reliable, more advanced and more humane automation system solutions and equipment.

ROCKWILL®, China. Provide with best support.

If you have any question please consult below:

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Summary

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ROCKWILL® Energy strives to bring our customers the latest technology and competitive pricing and best service for distribution automatic.

The OP series outdoor portable power supply is a convenient power device specially designed for outdoor activities.

It is compact and lightweight, making it convenient to carry. It can be easily carried whether for hiking, camping or fieldwork. It is equipped with high-performance lithium iron phosphate batteries inside and can store a considerable amount of electricity.

Functionally, it is usually equipped with multiple output interfaces, including a USB interface, which can charge digital devices such as mobile phones and tablet computers. There is also an AC interface, which can power laptops and even small electrical appliances. This outdoor power supply also provides a set of 300W DC interfaces, which can be used as an emergency power source for vehicle startup when necessary. In addition, high-power outdoor power supplies can also provide greater inverter power. You can use some high-power tools to help you solve the power supply problem for outdoor operations

In terms of energy replenishment, this outdoor portable power supply also has a solar charging function. In outdoor environments with sunlight, it can use solar energy to replenish power, which is both environmentally friendly and can extend the usage time, greatly meeting people's electricity needs outdoors. At the same time, a power adapter and a vehicle-mounted charging interface are provided.

In terms of safety, it is equipped with a complete circuit protection system that can prevent overcharging, over-discharging, short circuits and other situations.

Service environment

Air temperature: Ambient temperature: -10°C ~ +40°C

Humidity: 0% ~ 95% (Non-congealing cream)

Above sea level: -100~2000m

About customization

Support interface styles and power supply standards for AC output

1. Multi-interface compatibility, meeting the power supply requirements of all scenarios

The core advantage of outdoor portable power supplies lies in their diversified interface configuration, which can meet the charging needs of the vast majority of electronic devices. Taking mainstream products as an example, they are usually equipped with:

AC output port (100V-240V, sine wave) : Supports various AC electrical equipment and solves the pain point that traditional outdoor power supplies cannot drive high-energy-consuming appliances.

USB-A and USB-C fast charging interface: Supports up to 100W PD fast charging protocol, which can provide "fast charging" for digital devices such as mobile phones, tablets and cameras.

DC output port and cigarette lighter interface: Compatible with outdoor lighting fixtures, car vacuum cleaners, portable projectors and other devices, meeting diverse needs such as campsite construction and entertainment and leisure.

Some models are equipped with wireless charging coils, with a charging power of 20W.

2, A large-capacity battery pack ensures long-lasting operation

The outdoor portable power supply adopts high-density lithium iron phosphate batteries, with a capacity ranging from 576Wh to 4800Wh. It is equipped with an intelligent battery management system that can accurately display the remaining battery life.

For instance, a power supply with a capacity of 1008Wh can charge a smart phone (3000mAh) about 80 times or more, provide continuous power to a laptop (50W) for over 18 hours, and power outdoor tools such as a cutting machine (600W) for over 1.5 hours

Combined with the low-power mode and multi-level power regulation function, users can optimize energy consumption according to actual needs and extend the service life.

3, All-channel rapid charging and discharging, get rid of range anxiety

To solve the problem of outdoor recharging, the new generation of portable power supplies generally adopts hybrid charging technology:

Direct charging from mains power: It provides a high-power power adapter that can quickly complete energy replenishment within 1 to 2 hours.

Solar panel charging: Compatible with 40W-600W solar panels, and a matrix composed of multiple solar panels can also be used, with a maximum support of 6000W. Generally, 80% of the energy can be replenished within 4 to 8 hours, achieving "self-sufficiency" in off-grid environments.

Car charging: Recharge through the car cigarette lighter interface.

4. Intelligent protection system to ensure electrical safety

For the complex outdoor environment, the portable power supply is equipped with multiple safety protection mechanisms:

BMS Battery management system: Real-time monitoring of voltage, current and temperature to prevent risks such as overcharging, over-discharging and short circuit.

Fireproof and flame-retardant enclosure: Made of engineering plastics and alloy frames, it achieves an IP53 protection level.

Silent and seamless operation: Compared with traditional fuel generators, lithium battery power supply is completely silent and has zero emissions, avoiding pollution to the natural environment.

5. Humanized Functional Details

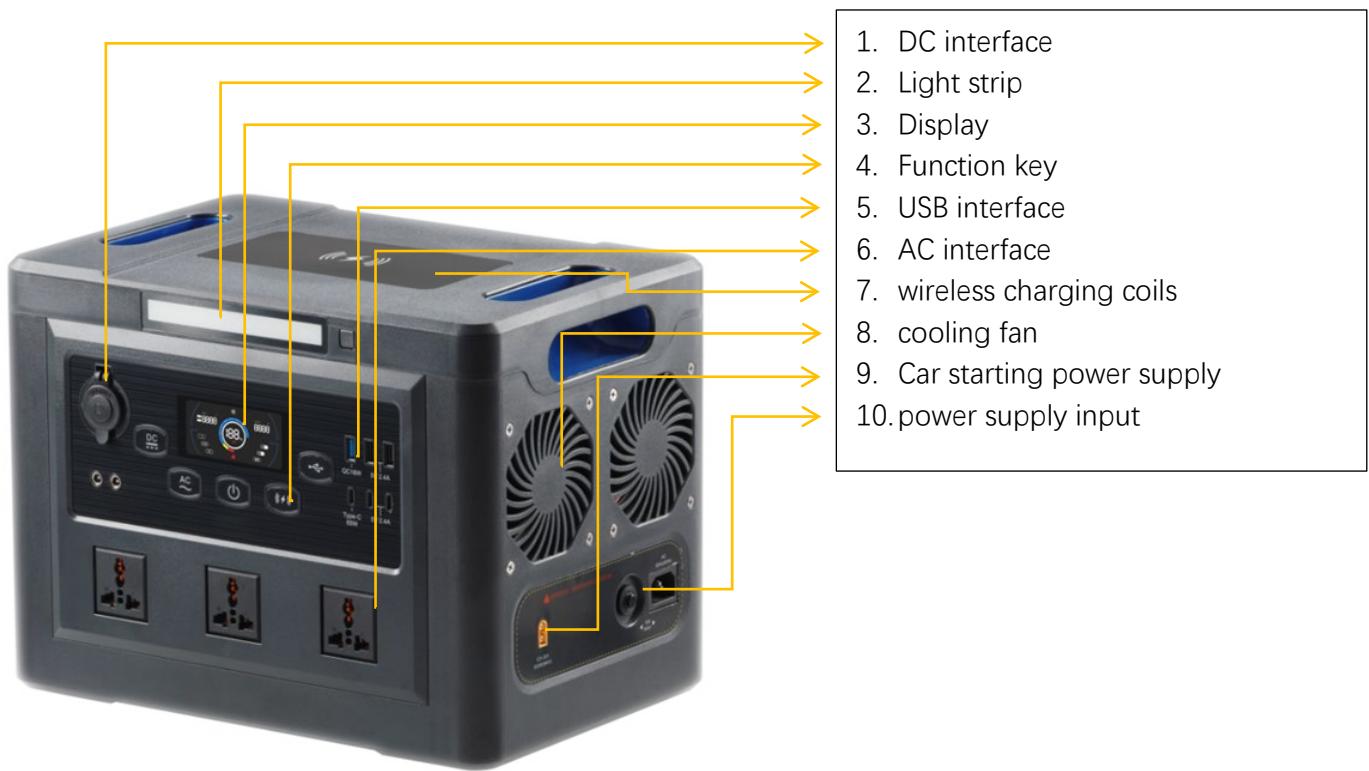
To enhance experience, the product design takes into account both lightweight and ergonomics:

The compact body weighs between 4.9 and 55 kilograms and is equipped with a reinforced handle for easy transportation.

Some models support Bluetooth /Wi-Fi connection and can be remotely monitored through a mobile phone APP.

It is equipped with an emergency lighting lamp that supports SOS flashing mode and can be used as a distress signal in an emergency.

Product display:



system structure:

Mobile power system

A complete set of portable mobile power supply includes input units, energy storage units, regulators, inverters, protection devices and various output sockets and interfaces of these basic units, as well as multimedia, Internet of Things communication and other expansion units.



Main control unit
RW-PWC

- Main control unit
- Prerequisite unit
- Optional unit
- Final product



RW-NB-XXXW
Dc inverter unit



RW-TYQ
Voltage stabilizer



Interfaces and sockets



Energy storage device



WIFI module



app version



Portable power station



Multimedia module



Multimedia version

| | |
|-------------------------------|--|
| Product model | OP-600-576 |
| Picture | |
| Battery capacity | 576WH |
| Rated discharge current | 50A |
| Maximum discharge current | 100A |
| Voltage range | 10~16.8V |
| Standard battery unit voltage | 14.4V |
| Maximum DC charging voltage | 16.8V |
| Rated output power | 0.6kW |
| Inverter mode | Single phase inverter |
| Power input voltage | AC 170~280V |
| Input frequency | 45~65Hz |
| Maximum PV input power | 100W |
| Interface Overview | 2*DC 100W 12.5V 8A 1*Car cigarette lighter 12.5V 8A 2*USB QC3.0 2*USB-C PD100W 1*Wireless charging 12V 1.25A 1*AC socket 220V 50HZ (Chinese main land) |
| Size(mm) | 265*200*195 |
| Weight(kg) | 4.9 |
| Protection | Under (over) voltage protection/Overload protection/Over temperature protection/Short circuit protection/Over discharge protection |
| Inverter efficiency | 86%~94% |
| Cooling mode | Forced air cooling |
| Operating environment | Temperature: -0~40°C Humidity: 45~85RH% |
| Maximum working altitude | 2000m(> 2000m load reduction required) |
| Class of protection | IP53 |
| Operation mode | PV priority/battery priority |

| Product model | OP-1200-1008 | OP-1500-1536 |
|-------------------------------|---|---|
| Picture | | |
| Battery capacity | 1008WH | 1536WH |
| Rated discharge current | 100A | 60A |
| Maximum discharge current | 200A | 90A |
| Voltage range | 11~16.8V | 22~29.2V |
| Standard battery unit voltage | 14.4V | 25.4V |
| Maximum DC charging voltage | 16.8V | 29.2V |
| Rated output power | 1.2kW | 1.5kW |
| Inverter mode | double phase inverter | double phase inverter |
| Power input voltage | AC 170~280V | |
| Input frequency | 45~65Hz | |
| Maximum PV input power | 550W | 800W |
| Interface Overview | 2*DC 100W 12.5V 8A 1*Car cigarette lighter 12.5V 8A 1*USB QC3.0 1*USB-C PD60W 2*USB 5V 2.4A 2XUSB-C 5V 2.4A 1*Wireless charging 12V 1.25A 3*AC socket 220V 50HZ (Chinese main land) | 2*DC 100W 12.5V 8A 1*Car cigarette lighter 12.5V 8A 2*USB-C PD60W 4*USB 5V 2.4A 1*Wireless charging 12V 1.25A 2*AC socket 220V 50HZ (Chinese main land) |
| Size(mm) | 370*245*275 | 390*290*295 |
| Weight(kg) | 13 | 22.5 |
| Protection | Under (over) voltage protection/Overload protection/Over temperature protection/Short circuit protection/Over discharge protection | |
| Inverter efficiency | 86%~94% | |
| Cooling mode | Forced air cooling | |
| Operating environment | Temperature: -0~40°C Humidity: 45~85RH% | |
| Maximum working altitude | 2000m(> 2000m load reduction required) | |
| Class of protection | IP53 | |
| Operation mode | PV priority/battery priority | |

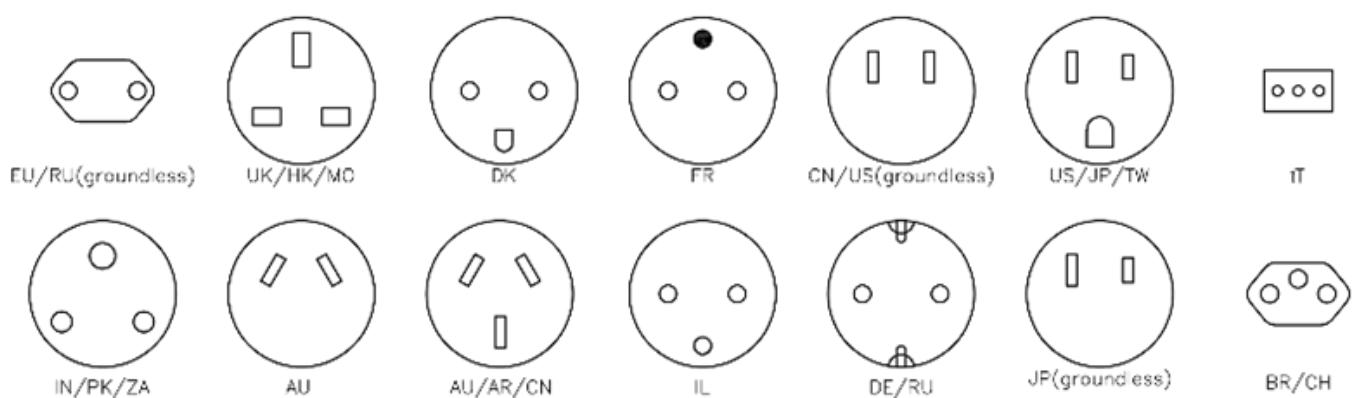
| Product model | OP-2000-1843 | OP-3000-3024 |
|-------------------------------|---|---|
| Picture | | |
| Battery capacity | 1843WH | 2880WH |
| Rated discharge current | 80A | 120A |
| Maximum discharge current | 120A | 150A |
| Voltage range | 19.25~29.4V | 19.25~29.4V |
| Standard battery unit voltage | 25.2V | 25.2V |
| Maximum DC charging voltage | 29.4V | 29.4V |
| Rated output power | 2kW | 3kW |
| Inverter mode | double phase inverter | double phase inverter |
| Power input voltage | AC 170~280V | |
| Input frequency | 45~65Hz | |
| Maximum PV input power | 800W | 1000W |
| Interface Overview | 2*DC 100W 12.5V 8A 1*Car cigarette lighter 12.5V 8A 1*USB QC3.0 1*USB-C PD60W 2*USB 5V 2.4A 2XUSB-C 5V 2.4A 1*Wireless charging 12V 1.25A 3*AC socket 220V 50HZ (Chinese main land) | 2*DC 100W 12.5V 8A 1*Car cigarette lighter 12.5V 8A 1*USB QC3.0 1*USB-C PD60W 2*USB 5V 2.4A 2XUSB-C 5V 2.4A 1*Wireless charging 12V 1.25A 3*AC socket 220V 50HZ (Chinese main land) |
| Size(mm) | 400*300*322 | 400*300*322 |
| Weight(kg) | 25 | 28 |
| Protection | Under (over) voltage protection/Overload protection/Over temperature protection/Short circuit protection/Over discharge protection | |
| Inverter efficiency | 86%~94% | |
| Cooling mode | Forced air cooling | |
| Operating environment | Temperature: -0~40°C Humidity: 45~85RH% | |
| Maximum working altitude | 2000m(> 2000m load reduction required) | |
| Class of protection | IP53 | |
| Operation mode | PV priority/battery priority | |

| | | |
|-------------------------------|--|---|
| Product model | OP-3200-3K | OP-3000-3024 |
| Picture |  | |
| Battery capacity | 2560WH | 4800WH |
| Rated discharge current | 120A | 100A |
| Maximum discharge current | 150A | 150A |
| Voltage range | 19.25~29.4V | 44~58.4V |
| Standard battery unit voltage | 25.2V | 51.2V |
| Maximum DC charging voltage | 29.4V | 58.4V |
| Rated output power | 3.2kW | 5kW |
| Inverter mode | Integrated inverter & control | Integrated inverter & control |
| Power input voltage | AC 170~280V | |
| Input frequency | 45~65Hz | |
| Maximum PV input power | 4000W | 6000W |
| Interface Overview | 2*DC 100W 12.5V 8A 1*Car cigarette lighter 12.5V 8A 2*USB 5V 2.4A 1*AC socket 220V 50HZ (Chinese main land) | 2*DC 100W 12.5V 8A 1*Car cigarette lighter 12.5V 8A 2*USB 5V 2.4A 1*AC socket 220V 50HZ (Chinese main land) |
| Size(mm) | 500*300*340 | 500*300*340 |
| Weight(kg) | 42 | 55 |
| Protection | Under (over) voltage protection/Overload protection/Over temperature protection/Short circuit protection/Over discharge protection | |
| Inverter efficiency | 86%~94% | |
| Cooling mode | Forced air cooling | |
| Operating environment | Temperature: -10~40°C Humidity: 0~95RH% | |
| Maximum working altitude | 2000m(> 2000m load reduction required) | |
| Class of protection | IP53 | |
| Operation mode | PV priority/battery priority | |

Size:



AC Socket:





Field service operation and warranty issues:

ROCKWILL® can provide competent, well trained field service representatives to provide technical guidance and advisory assistance for the installation, overhaul, repair and maintenance of ROCKWILL® equipment, processes and systems.

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