

## **PORTABLE POWER HUB**



# RM1000PH & RM1500PH

For your safety, read & understand the instructions before use.

Keep this manual for future reference.

## SAFETY

Please pay attention to the following information before using this product to ensure there is no damage to electronic devices. Observe all input/output ratings of your electronic devices. To avoid fire or electrical shock, ensure that all products connected to the unit are compatible.

- 1) This product contains a lithium battery. Ensure you use this device as described in this document.
- 2) Recharge using the supplied AC mains powered adapter (or another device which meets the required input specifications). Do not attempt to charge using a device which does not meet the requirements detailed in this document.
- 3) This product is not waterproof. Do not submerge this product in liquid or use it in the rain. Do not drop or hit this product.
- 4) Keep this device and accessories in a safe place which is not accessible to children.
- 5) Do not insert metal objects in the output sockets. Only use the correct plug connectors.
- 6) Do not cover or obstruct the front and rear panels. Inadequate ventilation will limit air flow and may cause damage to the unit.
- 7) Do not disassemble, crush, heat or incinerate the device.
- 8) This device can generate the same AC power as a normal household wall outlet. To prevent injury or death from electrocution, treat it in the same way that you treat a normal AC outlet on the wall.
- 9) Do not attempt to disassemble or repair this device. Any repairs must be carried out by the manufacturer or an authorised repair agent in order to avoid danger.
- 10) Do not attempt to replace the internal battery.

### **GENERAL DESCRIPTION**

The REDMAX Portable Power Hub is a rechargeable battery powered generator. It contains a rechargeable lithium battery and Battery Management System (BMS) to safely store energy which can then be supplied as either 220VAC for mains powered devices, or as DC voltage for USB & 12V devices. For charging, it requires a 12V to 30V DC input, which can be supplied using the included AC power supply, a suitable solar panel (200W max.), a vehicle accessory socket or another DC power source.

The REDMAX Portable Power Hub can be used to deliver safe and reliable power for your devices when travelling or camping as well as in emergency situations when reliable power may not be available. The clear display on the front panel shows the battery level and power consumption in real time which enables you to manage and charge the battery when required.

#### **Power Outputs and applications**

USB Ports: Power & charge smart phones, MP3 players, digital cameras, tablets, e-readers DC 12V Output Ports: LED lights, fans etc.

DC 12V Cigarette Socket: Portable fridges, 12V automotive appliances, etc.

220VAC Output: Electric appliances such as Televisions, Laptops, Microwaves, Rice Cookers etc.

\* The power consumption of 220V appliances must be less than the device's rated continuous output power (i.e. RM1000PH is rated at 1000W & RM1500PH is rated at 1500W)

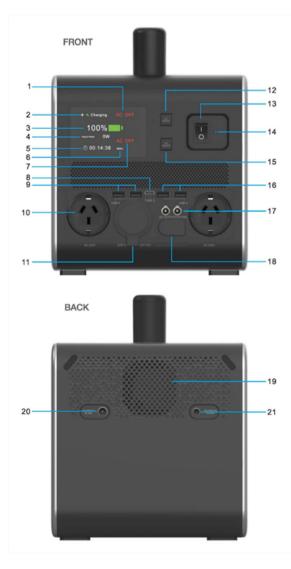
## **SPECIFICATIONS**

	RM1000PH	RM1500PH
Battery Capacity (Ah)	40.5Ah (25.6V)	58.5Ah (25.6V)
Battery Capacity (Wh)	1,037Wh	1.498Wh
Battery Type	LiFePO₄ (Lithium Iron Phosphate)	
AC Output	220VAC, 50Hz, Pure Sine Wave	
AC Power Continuous	1000W	1500W
AC Power Peak	2000W	3000W
DC Output – USB Type A	18W max.	
DC Output – USB Type C	100W max.	
DC Output – 12V 5521	12V, 5A (60W)	
DC Output – 12V Cigarette	12V, 10A (120W)	
Charging Input	12V to 30V DC	
Max. Charging Input Power	200W	
Charging Input Type	240VAC adapter, solar panel, 12V/24V vehicle	
<b>Operating Temperature</b>	0°C to 40°C	
Overall Size	385 x 190 x 245mm	480 x 190 x 245mm
Weight	14.8kg	19.8kg

#### **Package Contents**

- 1 x REDMAX Portable Power Hub
- 1 x 240VAC mains battery charger (7909 plug)
- 1 x 7909 solar input cable
- 1 x 7090 to 5521 adapter plug
- 1 x EC5 output cable
- 1 x User Manual

## POWER HUB CONTROLS AND CONNECTIONS



1	DC ON/OFF status
2	AC charging indicator
3	Battery display
4	AC output power
5	Operating time
6	Number of Hertz
7	AC ON/OFF status
8	TYPE-C output port
9	USB output port
10	AC output port
11	DC 12V cigarette port
12	DC ON/OFF
13	Power switch
14	Power-on indicator
15	AC ON/OFF
16	USB output port
17	DC 12V output port
18	DC 12V EC5 output port
19	Cooling fan
20	DC charging 7909 port
21	DC charging 5521 port

### **OPERATION**

#### **USING THE POWER HUB**

- a. Use the power switch (13) to turn on the power hub. The display (3) will show the battery status (%) and the power output indicators will show DC OFF (1) and AC OFF (7) in red.
- b. Press AC ON/OFF button (15) to activate AC power; the AC status will change to AC ON (7).
- c. Connect your AC device(s) to the AC socket(s) (10).
- d. Press AC ON/OFF button (15) again to turn off AC power when not in use. The AC status will change to AC OFF (7).
- e. Press DC ON/OFF (12) button to activate DC power; the DC status will change to DC ON (1).
- f. You can now connect devices any DC port (i.e. USB-A (9), USB-C (8), DC 5521 round port (17), car cigarette port (11) or EC5 (18)).
- g. Press DC ON/OFF button (12) again to turn off DC power when not in use. The DC status will change to DC OFF (1).

#### Will my AC device work with the Power Hub?

First, you need to determine the power consumption of your electronic device. This is normally written on the device and is also specified in the user manual.

You will then need to check the output port you intend to use to ensure that the maximum power output of the port is greater than the device requirement. If your device uses more power than the port is able to provide, the power supply will shut off automatically.

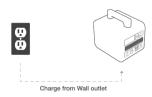
#### NOTE:

- 1. When the battery level is 10% or lower, the battery display (3) will turn red.
- 2. When the battery level is less than 1%, both AC and DC outputs will deactivate to protect the battery from being damaged.
- 3. If the Power Hub is not going to be used for an extended period, make sure it is fully charged before being stored.
- 4. The Power Hub should be charged every 6 months if it is not being used.

## **CHARGING THE POWER HUB**

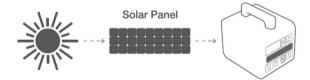
#### Charging with supplied AC adapter (12-30VDC, 200W max.)

- Plug the power cable into a wall outlet, then connect the output to the input port (20) at the rear of the power hub.
- The display will indicate that the Power Hub is charging (2).
- It will stop charging when the battery is full.



#### Charging with solar panel (12-30VDC, 200W max.)

- Place your solar panel in direct sunlight and face it to the sun to ensure maximum output.
- Connect the output from the solar panel into one of the charging ports at the rear of the Power Hub (20 or 21)
- The display will indicate that the Power Hub is charging (2).
- It will stop charging when the battery is full.



## **PROTECTION CIRCUITS**

#### Overload

When the AC output power is higher than the specified output power of the Power Hub, the display will show an OVERLOAD message. Depending on the power level, the device output may automatically turn off to protect itself. If this occurs, disconnect the device and press the AC ON/OFF button (15) to restart.

#### **High temperature**

When the internal temperature exceeds 35°C or the output power is greater than 200W, the cooling fan is activated. When the internal temperature exceeds 80°C, the temperature alarm is activated. The AC and DC outputs are turned off and the display will show a HI TEMP warning. The internal temperature must fall below 40°C before the Power Hub outputs function again.

## STORAGE AND DOWNTIME MAINTENANCE

Failure to maintain your power station by following steps can result in battery damage.

- 1. Please charge your power station before storage and fully recharge it every 6 months at least. Store it in a cool and dry place.
- 2.If the main power supply shuts down automatically because of low battery capacity, you must recharge the power hub as soon as possible.

#### NOTE:

Cold temperatures (below freezing) can impact the battery capacity of the power station. If you are living in sub-zero conditions, you can use the Power Hub to provide power however you must never charge the Power Hub in the sub-zero conditions (i.e. below 0°C). Charging the battery when it is below 0°C will damage the battery and reduce it's capacity.



#### **Correct Disposal of this product**

This marking indicates that this product should not be disposed with other household waste. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources.