



# Raspberry Pi UPS HAT

SKU:DFR0494

DFRobot Raspberry Pi UPS HAT is an uninterruptable power supply shield for Raspberry Pi. It can provide steady power source to Raspberry Pi for an extended period of time when the system is powered-off, by which to avoid system damage and assure safe shut down. In addition, the product could be used to supply stable power for some applications requiring mobility such as, Raspberry Pi camera, tablet PC, field data collection system.

A MAX17043 fuel gauge is adopted in this product for accurate power detection. Beside, we also employs an on-board microcontroller (MCU) for data processing. In this way, Raspberry Pi board is able to get information of power capacity and battery voltage directly via I2C communication. 5 on-board LEDs for the shield could show the status of the battery capacity visually without programming.

We adopted an excellent power management solution in this Raspberry Pi UPS HAT. Over 90% power conversion efficiency and non-diode design make the shield able to keep low heating temperature even under continuous high load operation of Raspberry Pi.

## Notes

3.7V Lithium Battery is not included in the package due to transportation constraints

Please use 3.7V Lithium Battery that meets standard specification

Please note that there would be a certain degree of heating in the power source area of the product during operation, you can never be too careful in use.

## FEATURES

- Standard Raspberry Pi extension interface, compatible with other expansion boards
- Support 2A maximum current output, suitable for more Raspberry Pi applications
- Auto switching of charge/recharge path, designed to against power-down
- On-board 5 LEDs for showing the batteries' status
- On-board Maxim fuel gauge IC
- Support reading battery information via I2C communication
- Lithium battery charge/discharge protection and over-heating protection
- Anti-backflow mainboard power source

## SPECIFICATION

- Supply Voltage: 4.5~5.5V
- Supply Current: (recommend using adapter with power of 2A and above)
- Power Supply Interface: Micro-USB
- Maximum Charge Current: 1.6A
- Battery Interface: PH2.0-2P or solderable contact
- Battery: 3.7 Lithium Battery
- Output Voltage: 5V
- Maximum Output Current: 2A
- Main-Board: Raspberry Pi B/B+/2B/3B/3B+ and subsequent version
- Communication Interface: I2C
- Dimension: 65mmx56mm/2.56"x2.20"
- Mounting Hole Size: 58mmx49mm/2.28"x1.93"
- Operating Temperature: -40°C~85°C

## SHIPPING LIST

- Raspberry Pi UPS HAT           x1
- Copper Columns and Screws   x4 sets