# PowerC HAT





# Description

PowerC HAT is a charging module specially designed for m5stickc, with built-in ip3005 high-precision lithium battery protection IC and ip5209 power management IC. It uses I2C communication protocol to carry out data transmission with m5stickc of the host computer, and can check the voltage, current and other information through programming. The back battery seat of the module can be installed with two 16340 batteries, which can be charged by the charging module, and can also be used as a charging treasure to provide external power through the battery In addition, the module provides an I2C interface for connecting I2C peripherals, a typec interface for power input, a usb-a bus for power output, with a voltage output of 5V / 1.5A and an input voltage of 5V. The module is equipped with an independent switch, which can be opened once and closed twice.



## **Product Features**

Battery testing Mobile power bank Battery charger IIC Address 0x75

#### Include

1x PowerC HAT(include battery 2 \* 700mAh)

## Specification

Resources	Parameter
net weight	55g
Gross weight	68g
Product Size	55*35*25mm
Package Size	100*96*70mm

# Communication protocol

IP5209 I2C address: 0x75

#### Related Link

IP5209 Datasheet IP3005 Datasheet 
 M5StickC
 GPIO0
 GPIO26
 5V
 GND

 PowerC
 SDA
 SCL
 5V
 GND

 PortA
 YELLO
 WHITE
 RED
 BLACK

## Example

#### 1. Arduino

To get complete code, please click here

#### 2. UIFlow

If you want the complete code, please click here

## EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification. Please install the corresponding driver according to the device type. M5Core host Please click here to view the CP210X driver installation tutorial, M5StickC/V/T/ATOM series can be used without driver)