

Flush Mount Battery Capacity Meter

OPERATING INSTRUCTIONS



Appearance and Key Functions

1. Display Interface: Display interface is a colour LCD screen that shows the following; Five cell battery symbol, voltage and percentage combination display

- 2. Display format:
- 2.1. Voltage
- Direct Power supply Measurement range: DC8-100V
- Individual power supply range: DC5-12V
- Measurement range: DC0-100V
- Display format
- <10V display format such as:9.99V
- <100V display format such as:99.9V 100V display format such as:100V
- Accuracy:±1%
- 2.2. Percentage
- Range: 0%~100%
- Display format
- < 10% display format such as:9%
- <100% display format such as:99%
- 100% display format such as: 100%
- 2.3. Battery symbol
- Graphical: Five cell symbol, each representing 20%
- Display format SOC= State of change
- SOC >90% display full cells
- 80% \leq SOC \leq 90% the first cell is flicker
- SOC≤80% display four cells
- 60% \leq SOC \leq 70% the second cell is flicker And so on.....

3. Кеу

 $\ensuremath{\mathsf{3.1.Backlight}}$ control: Press the buttons for a short time to turn on or off the backlight

3.2. Set full/cut off voltage: Before you use it, please set the full and cut off voltage depend on the battery specification, the default specification is a single 18650 battery (full voltage 4.2V, cut off voltage 2.75V).

- Step1: Press the key for roughly 2 seconds to enter the full voltage setting
- interface, display such as: H 4.20V, then release the key

• Step2: The digit scrolls (automatically move without key operation for 2 seconds), in order: high digit \rightarrow middle digit \rightarrow low digit \rightarrow decimal point, short press to set the value and decimal point

• Step 3: After setting, press the key for roughly 2 seconds to enter the cut off voltage setting interface, display such as: L 2.75v, then release the key, and the setting method same as above

• Step 4: After setting, press the key for roughly 2 seconds to save and exit; if there is any problem with the setting data, (e.g. cut-off voltage > full voltage), it cannot exit. After this step it will display "Err" and will return to the full voltage setting interface and prompts the user to modify the full/cut-off voltage

Calibration

If the product has incorrect measurement data, facing problems due to interference, faulty operation or wrong wiring and so on, then we recommend you recalibrate it. To do this please follow the steps below, if you feel you cannot recalibrate it yourself please contact your supplier.

- Step 1: Cut off the power, open the back cover, short circuit the calibration point (there are two holes marked "W" on the margin of the circuit board)

• Step 2: Then give it the standard voltage and current for 10V/1A(for example: use the DC electrical source to output 10V voltage to the product, and the load wire a standard resistor of 10 Ω /10W, then you can get the calibration condition.)

 Step 3: Then the screen will display "10V,1A" flashing, which indicate it is the calibration state and the calibration condition is "10V,1A"

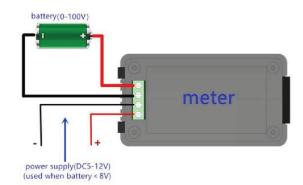
• Step 4: If the calibration is successful, the screen will display "PASS" for 1 second, then exit the calibration state and return to normal, if display other information, it means the calibration has failed.

• Step 5: After calibration, cut off the power and calibration point, then you can use it normally.

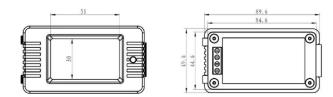
OVERVIEW

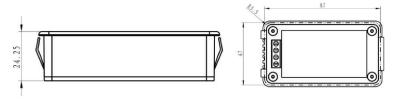
An adjustable battery capacity readout allowing you to display approximate battery levels for any battery between 1V and 100V. You can set an operation voltage range and the display will show battery capacity in a 5 segment display & percentage reading. 0.1V resolution with 1% accuracy. Cut out dimensions: 87 x 47mm. Overall dimensions: 89.5 x 49.5 x 25mm.

Wiring Diagram



Product Dimensions (mm)





Precautions

- 1. This module is suitable for indoor, please do not use outdoor.
- 2. The product is only suitable for DC not AC.
- 3. Ensure the wiring order is correct.
- 4. The power supply and battery voltage do not exceed the range