 Note: This product is only applicable to the measurement of 12V, 24V, 36V, 48V, 60V, 72V lithium iron phosphate battery or ternary polymer lithium battery

Model: PZEM-009

A. Function

- Measure battery voltage, SOC and display with LCD

B. Display

I .Display interface

- Color LCD: Five cell battery symbol + voltage + percentage combination display



Figure 1 Display diagram

Note: The film of this product has a variety of colors. The pictures on display are for reference only. The actual product shall prevail.

II . Display description

◎ Display voltage, percentage, and battery symbol

PZEM-009			
Voltage	Measurement range: DC8-100V	Percentage	Range : 0%~100%
	Display format		Display format
	< 10V display format such as:9.99V		< 10% display format such as:9%
	< 100V display format such as:99.9V		< 100% display format such as:99%
	≥ 100V display format such as: OL		100% display format such as:100%
	Accuracy: ± 1%		
Battery symbol	① Graphical		
	Five cell symbol, each representing 20%		
	② Display format		
	SOC > 90% display full cells 80% < SOC ≤ 90% the first cell is flicker		
	SOC ≤ 80% display four cells 60% < SOC ≤ 70% the second cell is flicker		
	And so on.....		

C. Other Function

1. Turn on or turn off the display

- Short press the key to turn on or off the LCD display.

2. Battery specification selection

- If you want to change the battery specification during using, you can set it as follows:

Step 1: Press the key for 1 second until the words like [60V L] appear on the screen (the specific display content varies according to the battery specification, see Table 1 for details), and then release the key;

Step 2: Short press the key to select the battery specification. See Attached Table 1 for specifications;

Step 3: Long press the key for 1 second or stop the key action for 2 seconds, the data will be saved and return to the normal display interface.

3. Calibration

◎ All products have been calibrated before leaving the factory. If you think there is deviation, you can calibrate by yourself. The methods are as follows:

Step 1: Long press the key when the meter is powered off

Step 2: Input the standard DC 20V voltage

Step 3: The LCD displays CAL → PASS and returns to the normal display interface that means the calibration is successful, then release the key

4. Waterproof function

◎ The panel of this product is embedded with a sealing ring. After installation, the panel has the waterproof function of life splash (as shown in Figure 2)



Fig. 2 Structural Diagram of Seal Ring

D. Installation

● This product is installed in an embedded way. You need to make holes on the user panel in advance, the shape and size of the holes are shown in Figure 3:

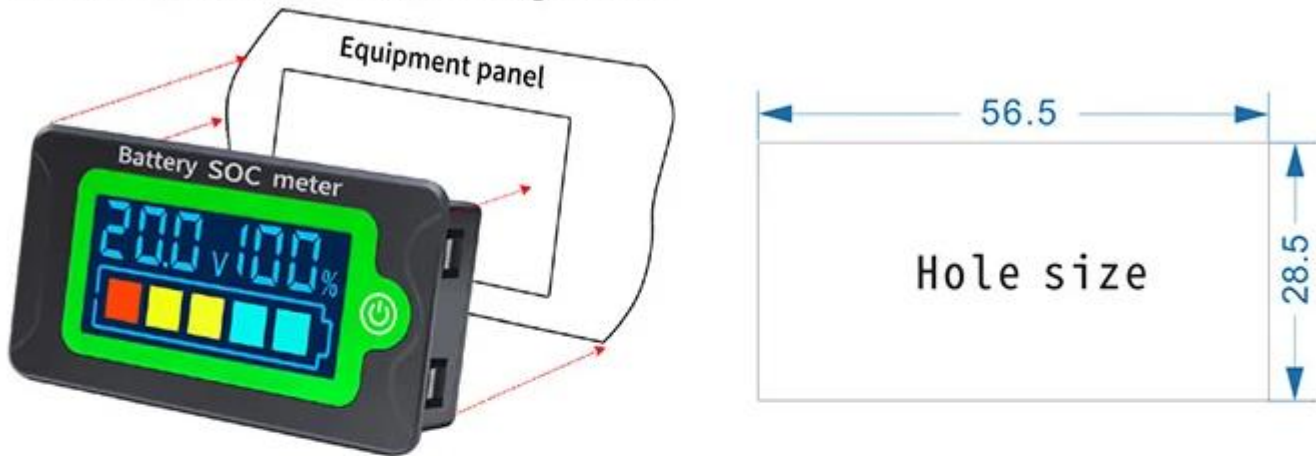


Fig. 3 Assembly Diagram

E. Dimension diagram (mm)



Figure 4 Dimension diagram

F. Precautions

1. This product is only applicable to the measurement of 12V, 24V, 36V, 48V, 60V, 72V lithium iron phosphate battery or ternary polymer lithium battery
2. This product is applicable to DC, cannot test AC
3. The battery voltage shall not exceed the calibration range
4. This product is anti life splash, but cannot be immersed in water

G. Table 1

Setting display	Corresponding battery specification	Setting display	Corresponding battery specification
12V L	12V Lithium iron phosphate battery	12V S	12V Ternary polymer lithium battery
24V L	24V Lithium iron phosphate battery	24V S	24V Ternary polymer lithium battery
36V L	36V Lithium iron phosphate battery	36V S	36V Ternary polymer lithium battery
48V L	48V Lithium iron phosphate battery	48V S	48V Ternary polymer lithium battery
60V L	60V Lithium iron phosphate battery	60V S	60V Ternary polymer lithium battery
72V L	72V Lithium iron phosphate battery	72V S	72V Ternary polymer lithium battery