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# DC digital multi-function meter

**Product type: PZEM-051**

## **A. Function**

1. Electrical parameter measurement function (voltage, current, active power, energy)
2. Voltage alarm function (over voltage alarm threshold, backlight and voltage flashing to alarm).
3. The reset function of energy key.
4. Store data when power off.
5. Large-screen LCD (display voltage, current, active power, energy at the same time)
6. Backlight function.

## **B. Appearance and Key function**

### **I. Display Interface**

Display interface is large-screen LCD, it can display voltage, current, power, energy parameters at the same time.

### **II. Display format**

#### **1. Power: test range: 0~10kW**

within 1KW, the display format is 0.0~999.9W;

1KW and above, the display format is 1000~9999W.

#### **2. Energy: test range: 0~9999kWh**

Within 10KWh, the display format is 0~9999Wh;

10kWh and above, the display format is 10~9999kWh.

#### **3. Voltage: test range: 6.5~100V**

Display format: 6.50~99.99V

#### **4. Current: test range: 0~100A**

Display format: 0.00~99.99

### **III. Key**

#### **1. Backlight control**

Short press the key to turn on or off the backlight, the backlight has memory function, it can store the on or off state when power off.

#### **2. Reset energy**

Step1: Long press the key until the power display area display “**CLr**”, then release the key.

Step2: At this moment, the energy is flashing to prompt this is the energy reset state, if short press the key again, then the energy value is cleared and exit the reset flashing state.

Step 3: If there is no operation within 5 seconds, it means the energy value is not cleared and will exit the reset state.

#### **3. Set voltage alarm threshold**

Step1: Long press the key until the power display area display “**SET**”, then release the key.

Step2: After enter this state, the voltage area display the current high voltage alarm value, the current area display the current low voltage alarm value and the last digit begin to flash, then you can short press to plus

1, when there is no operation over 3 seconds, it will switch the digit position automatically, from the high voltage alarm value to the low voltage alarm value, there are total six digits, the range of the voltage alarm threshold is **6.5~99.9V**;

Step3: After finish the setting, long press the key until the screen display "**PASS**", that means you set successfully and will exit the setting state automatically.

#### 4. Choose measuring range

Step1: Long press the key until the power area display "Curr", then release the key

Step2: At this moment, the current area display "100A", short press the key to switch between "100A" and "50A", to prompt the range of the external shunt is 100A/75mV or 50A/75mV, please note that this meter can only use these two specification shunt.

Step3: Long press the key to exit the setting state or after no operation within 3 seconds it will store automatically and exit the setting state.

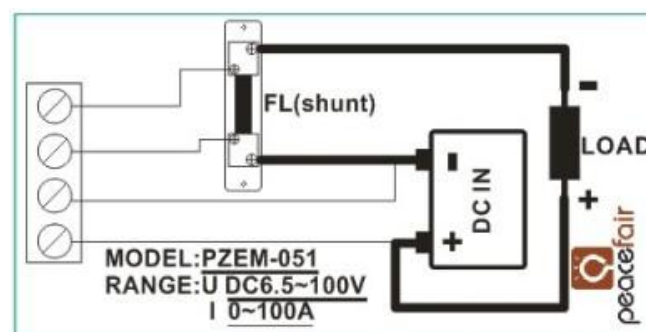
#### C. Precautions

1. This module is suitable for indoor, please do not use outdoor.
2. Applied load should not exceed the rated voltage, current.
3. Wiring order can't be wrong.

#### D. Specification parameters

1. Working voltage: **6.5~100VDC**
2. Test voltage: **6.5~100VDC**
3. Rated power: **100A/10000W**
4. Measurement accuracy: 1.0 grade

#### E. Wiring diagram



#### F. Dimension diagram (mm)

