Product Type： DC Digital Multi-function Meter

Product Model： PZEM-051

Product 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.

Measurement range：

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

DC DIGITAL MULTI-FUNCTION METER
INSTRUCTION MANUAL
MODEL: PZEM-031/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. Display Interface

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

C. Display format

PZEM-031 Display format

Power: test range: 0~2kW

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

1KW and above, the display format is 1000~2000W.

Energy: test range: 0~9999kWh

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

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

Voltage: test range: 6.5~100V

Display format: 6.50~99.99V

Current: test range: 0~20A

Display format: 0.00~20.00A

PZEM-051 Display format

Power: test range: 0~10kW

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

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

Energy: test range: 0~9999kWh

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

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

Voltage: test range: 6.5~100V

Display format: 6.50~99.99V

Current: test range: 0~100A

Display format: 0.00~99.99A

Accuracy: ≤1% , the lower the better

D. Specification parameters

PZEM-031

Working voltage:	6.5~100VDC
Test voltage:	6.5~100VDC
Rated power:	20A/2000W
Measurement accuracy:	1.0 grade

PZEM-051

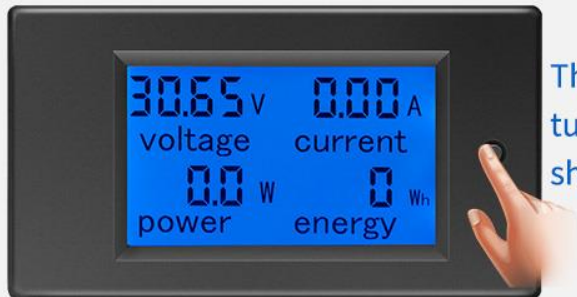|	
Working voltage:	6.5~100VDC
Test voltage:	6.5~100VDC
Rated power:	100A/10000W
Measurement accuracy:	1.0 grade

E. 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.

The backlight can be turned on or off by short press the key

F. Other Function

1.Reset energy

Step 1 Long press the key until the power display area display "CLr", then release the key.

Step 2 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.
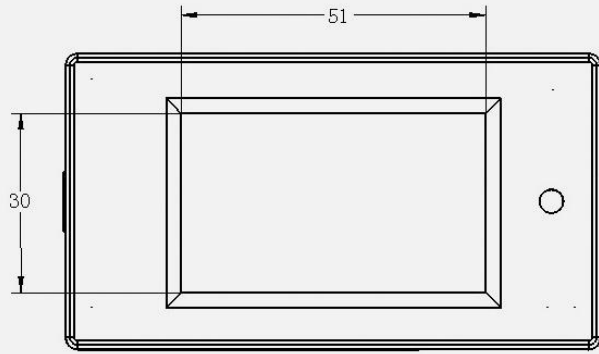
2.Set voltage alarm threshold

Step 1 Long press the key until the power display area display "SET", then release the key.

Step 2 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;

Step 3 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.
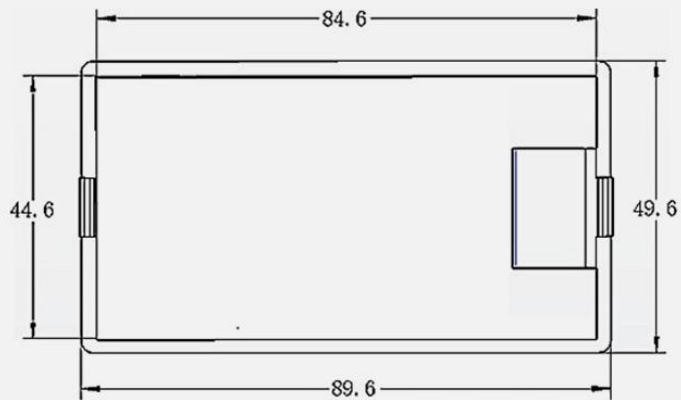
3. RANGE SELECTION

Step 1 Press the key long enough for the "CURR"character to appear in the power display area, then release the key

Step 2 The current area shows the "100A"short button switching between "100A"and "50A"to indicate the range of the external shunt is 100A/75MV or 50A/75MV.

Step 3 Long press until the settings or keyless operation 3 seconds after the automatic save and exit settings.
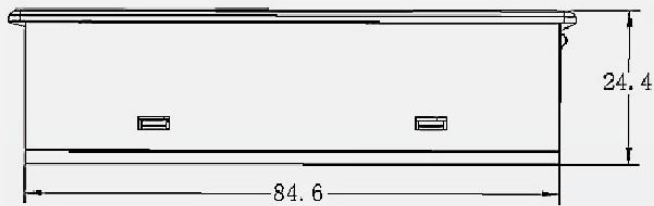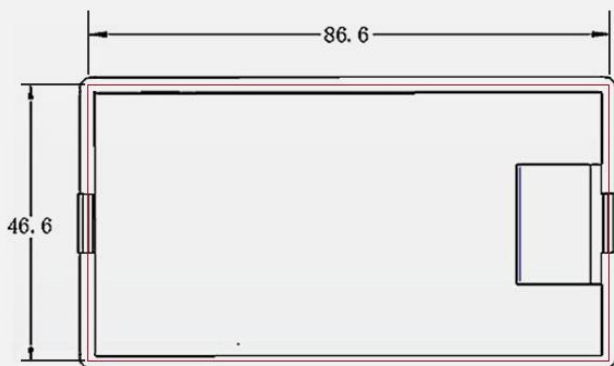
51

30

Screen size

84. 6

44. 6

49. 6

89. 6

Apparent size

24. 4

84. 6

Height dimension

86. 6

46. 6

Opening size

Figure 1 dimension diagram (mm)

50A/75mV shunt

Load

CE FC ☒

FL(shunt)

LOAD

DC IN

+

peacefair

MODEL:PZEM-051
RANGE:U DC6.5~100V
I 0~100A

Test/Power supply

PZEM-051 (back)+50A shunt

Load

30.65 V   0.00 A
voltage   current
0.0 W   0 Wh
power   energy

Test/Power supply

Load
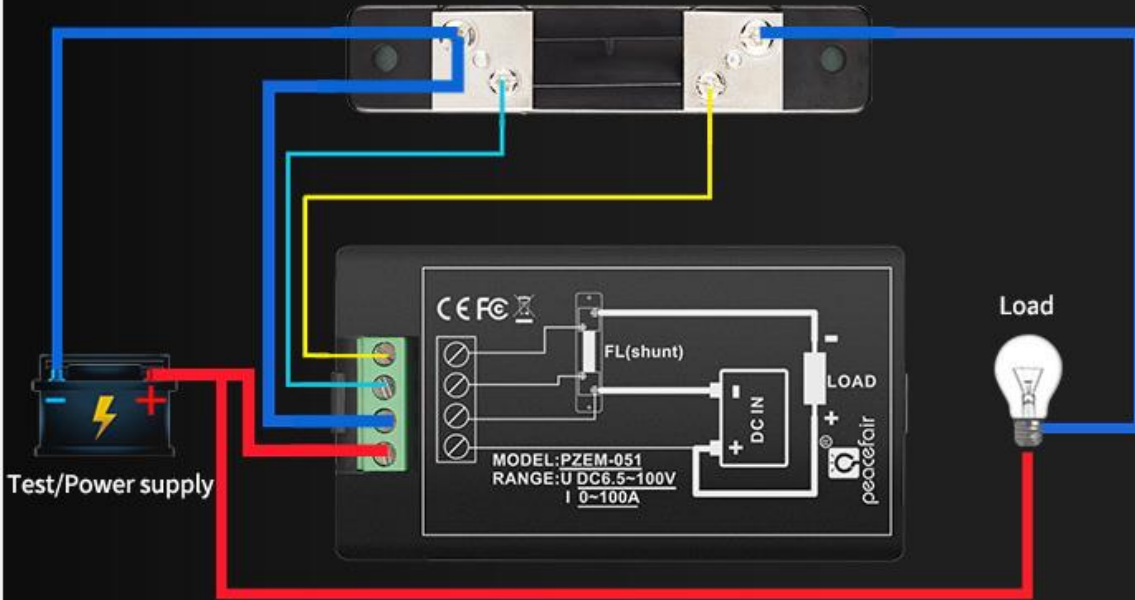
50A/75mV shunt

PZEM-051 (front)+50A shunt