BM2060 Leakage (Micro) Current

Clamp Meter



1. Overview

BM2060 is a 3 1/2 digital micro-current clamp meter with stable, safe, and reliable performance. The meter can automatically switch among the ranges of 20mA, 200mA, 2A, 20A, and 60A during measurement. It is an intelligent and digital clamp meter with automatic range switching function and high precision, and specially used in the measurement of small alternating current.

2. Characteristics

· Max. display: 1999

· Manual range: Press "RAN GE" button to switch

• Automatic rang: Automatically switch among 20mA, 200mA, 2A, 20A, and 60A

· Data hold: A letter "H" is displayed.

· Low-voltage display: A sign "I" is displayed

· Max. caliber of the clamp mouth: D = 30mm

· Size of the meter body (the place with the max. width): $170 \times 61 \times 27$ (mm)

 \cdot Net weight of the meter: 136g (the batteries are not included)

• Automatic shutdown: The meter shuts down automatically when no button is operated for approx. 10 minutes.

• Battery type: Two pieces of No. 7 dry batteries (AA A), 1.5V

3. Diagram of the parts



4. Instructions for the use of the parts

1) Power button: Press and hold the "POWER" button for two seconds, and the meter is turned on or off. In the manual range mode, the meter switches to next range in a descending sequence when the button is pressed once.

2) RANGE button to switch between manual and automatic range mode: The meter switches from the automatic mode to the manual mode when the button is pressed once. In the manual mode, the meter can switch to next range in an ascending sequence. In the manual mode, the meter switches to the automatic mode when the button is pressed and held for two seconds. In the automatic mode, the meter automatically switches among the ranges without need to operate it manually.

3) Data hold: The "DH" button is data hold button. During current measurement, the presently measured data is displayed on the screen when the button is pressed once. The held data is released when the button is pressed once again.

5. Measurement method

1) Measurement of AC leakage current

A. Take measurement of the leakage current of the ground wire: Press the trigger and clamp the ground wire with the jaws. The reading is displayed on the LCD. This is the value of the leakage current of the ground wire (as shown in Figure 2); (as shown in Figure 3); 'four wires' in three-phase four-wire system (as shown in Figure 3). Do not clamp a ground wire together into the jaws if it exists.

Attention: At present, many factories or companies use three-phase five-wire system. In addition to three phase wires, there is a working zero wire and a protective zero wire (ground wire). It is necessary to take measurement of the leakage current of the ground wire separately. Do not clamp the ground wire into the jaws together with four working power wires.

2) Measurement of alternating current

When take measurement of the alternating current, press the trigger and clamp one of the live wires (phase wire) with the jaws. Keep the conducting wire in the center of the jaws. Then, get the reading from the screen (as shown in Figure 4).

Attention: during current measurement, the two jaws should be tightly contacted, and no gap between them is allowed. Otherwise, the measured value would be inaccurate.



6. Range parameters

Precision (\pm % reading \pm number); one-year warranty Environmental temperature: 23 °C \pm 5 °C; relative humidity <75%

Range	Resolution	Precision (50/
		60Hz)
20mA .	0.01mA	
200mA	0.1mA	1 (1 50/ 15)
2A	1 mA	$\pm(1.5\%+5)$
20A	10mA	ж. -
60A	100mA	±(1.5%+10)

7. Important safety notices

 For the safety sake, use the meter in a circuit with AC voltage under 600V. Furthermore, the insulating layer of the to-be-tested conducting wire must be in a very good condition in order to prevent electric shock.
The head of the clamp meter is of a precision mechanical structure. Do not have it impacted by an outside force. The clamp meter can't work properly when it is impacted misshaped.

3) Wet a piece of soft cotton cloth and wipe the surface of the meter with the cloth when cleaning meter. Be sure not to have water seep into the meter and cause a short circuit of the meter, resulting in meter damage or human injury.

4) For the safety of you and the meter, the nonprofessionals and the persons who are not assigned by our company must not disassemble or alter the meter.

5) The product is subject to change without a notice.

6) Read the warranty card for important notices about the warranty.

8. Battery replacement

1) Take out the fastening screw of the battery cover with a Philip screwdriver

2) Gently lift the battery cover.

3) Pull the battery cover downwards with strength.



4) Be sure to make a correct connection of the positive and negative pole of the batteries when replace the batteries. Otherwise, the inside chips of the meter would be damaged.

5) You can see a slide switch under a small hole in the battery compartment. Do not touch the part.

9. Accompanying spare parts

1) BM2060 meter	one set
2) User's manual	one copy
3) Cloth bag	one piece