BM5266 Digital Clamp Meter Operating Instruction

1. Introduction

Welcome to choose this product!

This is a kind of 31/2 bit portable digital Clamp-Shape meter, which may measure AC current and voltage, resistance, capacitance, test for connection and disconnection, positive voltage on diode, etc... The meter is the ideal tool of the industries of electricity, electronics and refrigeration due to wonderful structure, easily operated, more portable.

2. Safety

The meter is designed in accordance with the safety requirements of the standard IEC1010-1. Please Carefully read this manual before operate it.

2.1 Note for safety symbols:

⚠ Warning hint, Caution!

⚠ Danger by high-voltage shock!

Double insulation protection

2.2 During measuring, any range may not exceed its input value in Max

2.3 At resistance range, not allowed to impose voltage on input

2.4 During measuring, to prevent the meter from damage, do not turn its round switch to change its range.

2.5 Over DC60V or AC30V may be shock danger, carefully operating during measuring.

2.6 During clamping non-insulation wire, must specially be careful to avoid

2.7 During measuring current, fingers must be placed on the back of the armguard of the meter.

2.8 The meter shall avoid straight sunlight, high temperature and humidity.

2.9 After measuring end, the turning switch shall be at OFF.

2.10 Idling for long term, its batteries shall be taken out to prevent the batteries from leaking liquid to damage parts.

3. Features

3.1 Displaying mode: LCD displayer

3.2 Maximum display: 1999

3.3 Maximum open: 30mm

3.4 Automatic negative indication: Displaying "-"

3.5 Low battery indication: Displaying "⊟"

3.6 Operating environment: 0°C~40°C，70%RH(Max.)

3.7 Storage environment: -20°C~60°C，85%RH(Max.)

3.8 Power supply: 9v battery (IEC6F22, NEDA1604, JIS006P or equivalent types).

3.9 Size :195（Length）×74（Width）×35（Height）mm

3.10 Weight: about 220gram（with batteries）

4. Usage of Clamp Meter

4.1 Instruction on operating panel (see figure)

（1） Clamp mouth

（2） Range switch: choosing current, voltage, resistance, capacitance, frequency, forward voltage on diode, test for connection and disconnection and range.

（3） LCD

（4） "V/Ω"voltage-resistance- capacitance rature input jack

（5） "COM" for common input (input ground)

（6） DH reading holding button: pressing the button may lock the current reading, and displaying "DH" symbol, repressing the button to cancel the holding function, "DH" symbol disappears.

（7） Trigger

（8） Armguard

4.2 Measurement of AC voltage

Turn the range switch into the range "A600V", Plug the black pen into the jack"COM"，the red pen into the jack"V/Ω"，in parallel connect the pens with the measured circuit，read the displaying number.

4.3 Measurement of DC voltage

Turn the range switch into the range "D600V", Plug the black pen into the jack"COM"，the red pen into the jack"V/Ω"，in parallel connect the pens with the measured circuit，read the displaying number. When the reading is less than 20V, turn the range switch at range "DC20V" to measure again.

4.4 Measurement of AC current

Turn the range switch into the range "AC600A", clamp the wire of the measured current, shall put the wire into the canter of the completely closing clamp mouth as soon as possible, directly get the reading. When the reading is less, turn the range switch at lower range to measure again.

⚠ Cautions：If two or more than two different wires are clamped, the measuring can't be done.

4.5 Measurement of resistor

（1） Turn the range switch into the range Ω

（2） plug the black pen into the jack"COM"，the red pen into the jack"V/Ω"

（3） In parallel connect the pens into the two terminators of the measured circuit or component，get the reading.

（4） when the two pens open or input overload，the displayer shows “1”

4.6 Measurement of forward voltage of diode

（1） Turn the range switch into the range ▶|，when the input opens, the meter shows over range （show“1”）。

（2） Plug the black pen into the jack“COM”，the red pen into the jack“V/Ω”，（the red pen’s polarity is“+”）

（3） In parallel connect the pens into the two terminators of the measured diode，get the reading for approximation of the forward voltage.

（4） when the diode is connected in reverse or the input open，the displayer shall show “1”.

4.7 Test of connection and disconnection

（1）Turn the range switch into the range))，when the input opens, the meter shall show over range （show “1”）。

（2）Plug the black pen into the jack“COM”，the red into the jack“V/Ω”。

（3）In parallel connect the two pens into the two terminators of the measured circuit，if the resistance between the tested two points is less than approximate 50Ω，the buzzer shall make a sound.

⚠ Cautions: resistor, diode and connection and disconnection sharing the same range, when measuring, the measured component or circuit cannot be electrified, otherwise, shall misjudge.

4.8Measurement of capacitance

⚠Warning! When measurement of capacity, the measured capacitor should be completely discharged.

Turn the Rotary switch to “200uF” function. Plug red lead in “V/Ω” socket, and plug black lead in “COM” socket.

Warning:The range for capacitor can’t be set manually. When the capacity value is large, the time for measurement may be a little longer.

4.9 Phase identification(ϟ)

plug red lead in “V/R” socket, and plug black lead in “COM” socket. Hold the insulated part of the black lead with one hand,and do not connect it to the circuit ,the other hand hold the red lead to measure the circuit,when the red lead connect to Phase ,the LED will light,if the red lead connect to the neutral or earth wire ,the LED will not light, ,

NOTE: when the circuit is not connecting to the earth or has serious Electric leakage,when the red lead connect the neutra wire the LED may light

.

5. Technological Indices

Function	Range	Resolution	Accuracy
ACA	2A	1mA	±(1.9%+10)
	20A	10mA	
	600A	1A	
ACV	600V	1V	±(1.2%+5)
DCV	600V	1V	±(0.5%+5)
Resistor	2000Ω	1Ω	±(0.8%+5)
	2MΩ	1kΩ	
capacitance	200uF	100nF	±(3%+5)
▶|	Show the value of the forward voltage. Test conditions: forward DC current is about 1mA，backward DC voltage is about 2.8V。		
))	When Conductive resistance is less than about 50Ω, the buzzer in the meter sounds, test conditions：open voltage is about 2.8V。		

ACA frequency range ：50~60Hz(sine wave)，ACV frequency range：50~100Hz(sine wave)。

Overload protection(Resistor-capacitance-ϟ):250V

6. Maintenance of the Meter

⚠Cautions！ Before open the covers of the meter, or the batteries, shall switch off power and disconnect the pens and any input signal to prevent danger of shock.

6.1 when the meter shows symbol“ ”, shall change battery. Open the battery cover, change a fresh battery with 9V, to make sure the meter normal work.

6.2 Keep the meter and the pens clean, dry and non-damage, may clean the meter surface with clean clothes or eradicator, abrasive or organic solvent is banned.

6.3 Avoid mechanical damage, shake, impact, keep the meter away from high temperature and strong magnet field.

6.4 The meter shall be calibrated once a year.

7. Accessories

7.1 A pair of pen

7.2 A manual