## HIGH PRECISION MILLIOHM METER

Model: MO-2013 *ISO-9001, CE, IEC1010* 





The Art of Measurement

## **HIGH RECISION MILLIOHM METER**

Model: MO-2013

## **FEATURES**

* 4 terminal devices for accurate measurement of very low
resistance.
* Ideal for measuring the resistance of components precisely.
* Ideal for testing protective conductors, lightning
conductors and welded points.
* High/Good/Low set-function for input quality control.
* Build in buzzer sound (GOOD STATUS) to assist the Q.C.
judgment.
* Especial "CALCULATE" function to measure cable / wire
length.
* Wide measuring range, 0.001 m ohm - 20K ohm, 7 ranges.
* RS232/USB computer interface.
* 26.7 mm large size and back-light LCD display, easy
read-out.
* LSI circuit provides high accuracy, reliability and durability.
* Built-in over input protection.
* Durable bench type housing plastic case stand.

## **GENERAL SPECIFICATIONS**

Test Range	20 m ohm ( 1 A DC )			
(Test Current)	200 m ohm ( 1 A DC )			
	2 ohm ( 100 mA DC )			
	20 ohm ( 10 mA DC )			
	200 ohm ( 1 mA DC )			
	2 K ohm ( 100 uA DC )			
	20 K ohm ( 10 uA DC )			
Warning Setup	* Warning LCD Indicator			
	* Buzzer			
Operating Temp.	0 to 50 $^{\circ}\mathrm{C}$ ( 32 to 122 $^{\circ}\mathrm{F}$ ).			
Operating Humidity	Less than 80 %RH.			
Power Supply	AC 110V +/- 15%, 50/60 Hz			
	or AC 230V +/- 15%, 50/60 Hz.			
Power Consumption	AC 110V : Approx. 33 mA			
	AC 230V : Approx. 15 mA			
Fuse for Power	* 500 mA / 250 V			
Supply	* Size : 5 X 20 mm dia			

Data Output	RS 232/USB PC serial interface.			
	* Connect the optional RS232 cable			
	UPCB-02 will get the RS232 plug.			
	* Connect the optional USB cable			
	USB-01 will get the USB plug.			
Dimension	280 x 210 x 90 mm			
	( 11.0 x 8.3 x 3.5 inch)			
Weight	Approx. 2.04 Kg ( 4.49 LB ).			
Standard	Power Cord1 PC.			
Accessories	4 wire with 2 Kelvin clips1 pair.			
	Instruction Manual1 PC.			
Optional	RS232 cable, UPCB-02			
Accessories	USB cable, USB-01			
	Data Acquisition software, SW-U801-WIN			

ELECTRICAL SPECIFICATIONS (23 ± 5  $^{\circ}$ C)

Range	Resolution	Test	current	Accuracy
20 m ohm	0.001 m ohm	1	А	± ( 0.2 % + 12 d )
200 m ohm	0.01 m ohm	1	Α	
2 ohm	0.0001 ohm	100	mA	
20 ohm	0.001 ohm	10	mA	± (0.2 % + 4 d)
200 ohm	0.01 ohm	1	mA	
2 K ohm	0.0001 K ohm	100	uA	
20 K ohm	0.001 K ohm	10	uA	

@ The above accuracy is based on the reading value.

@ Spec. tested under the environment RF Field Strength less than 3 V/M & frequency less than the 30 MHz only.

Range	Open Circuit Voltage
20 m ohm	Approx. DC 4.54 V
200 m ohm	Approx. DC 4.54 V
2 ohm	Approx. DC 4.50 V
20 ohm	Approx. DC 4.06 V
200 ohm	Approx. DC 3.51 V
2 K ohm	Approx. DC 3.08 V
20 K ohm	Approx. DC 2.32 V

 $<sup>^{\</sup>star}$  Appearance and specifications listed in this brochure are subject to change without notice.