

Io/Ior DIGITAL CLAMP TESTER

AC CURRENT/LEAKAGE/VOLTAGE

FOR LEAKAGE CURRENT

Model MCL-500IR



FEATURES

- Can measure the resistive leakage current (Ior) accurately by voltage input.
- Wide ranges for the measurement of AC load current, leakage current (Io), resistive leakage current (Ior), and AC voltage.

SPECIFICATIONS

1) CT Sensor

Inside Diameter of CT : 40mm
 Influence of External Magnetic Field : less than 5mA nearby 100A conductor.
 Withstanding Voltage : AC2200V, 1 minute

2) Measuring Part

Measuring Function : load current, leakage current (Io), resistive leakage current (Ior), AC voltage. (0~500V)
 Measuring Method : CT clamp-on method
 Measuring Range : 0-40mA, 400mA, 4A, 40A, 300A, 500A
 Input Frequency : 50/60Hz
 Detection Method : True RMS detection by analog operation
 A/D Conversion : successive comparator method
 Display : 3.5 digit LCD, max. reading of 4000
 Sampling Rate : 2 times/second
 Over Range Indication : "OL" mark on LCD readout
 Battery Indication : Battery mark on LCD readout
 Auto Power Off : automatically power off approx. 10 minutes after the final key operation
 Data Hold Indication : "DH" mark on LCD readout
 Ior Switch : pressing this key, Ior value will be displayed. pressing again, display will return to Io value.
 Power Supply : 1.5V ("AAA" size, um-4)×3 or AC adaptor (option)
 Power Consumption : Approx. 14mA (approx.45 hours with continuous use).
 Limitation of Circuit Voltage : Less than AC 500V
 Operating Temperature : 0°C~40°C, <80%RH(non-condensing)
 Storage Temperature : -10°C~60°C, <70%RH(non-condensing)
 Size & Weight : 70(W)×223(H)×34(D)mm
 Approx. 440gs including batteries
 Accessories : Battery (LR03).....3 (installed into the body case)
 Voltage input test lead ... 1
 Carrying Case 1
 Instruction Manual 1

3) Measuring Ranges and Accuracy

	Range	Resolution	Accuracy
I.Io	40mA	0.01mA	0.40mA~39.99mA ±1.0%rdg ±10dgt
	400mA	0.1mA	40.0mA~399.9mA ±1.0%rdg ±10dgt
	4A	0.001A	0.4A~3.999A ±1.0%rdg ±10dgt
	40A	0.01A	4.0A~39.99A ±1.0%rdg ±10dgt
	500A	0.1A	40.0A~499.9A ±1.0%rdg ±3.0%FS
Ior	40mA	0.01mA	0.40mA~39.99mA ±1.5%rdg ±15dgt
	400mA	0.1mA	4.0mA~399.9mA ±1.2%rdg ±15dgt
	4A	0.001A	0.04A~3.999mA ±1.2%rdg ±15dgt
V	500V	0.1V	10.0V~499.9V ±1.0%rdg ±8dgt

Model MCL-800IR

High Precision - Big Window CT - Wide Ranges
 Lowest Influence from External Magnetic Fields and Residual Current.



FEATURES

- Can measure the resistive leakage current (Ior) accurately by voltage input with minimum resolution of 0.001mA.
- Wide ranges for the measurement of AC load current, leakage current (Io), resistive leakage current (Ior), and AC voltage.
- MΩ Display on LCD up to 9.999MΩ

SPECIFICATIONS

1) CT Sensor

Inside Diameter of CT : 80mm
 Withstanding Voltage : AC2200V, 1 minute

2) Measuring Part

Measuring Function : load current, leakage current (Io), resistive leakage current (Ior), AC voltage.
 Measuring Method : CT clamp-on method
 Measuring Range : 0-10mA, 100mA, 1000mA, 10Am (auto)
 ACV:10V~500V,MΩ: 0.001MΩ~9.999MΩ
 Input Frequency : 50/60Hz (manual)
 Detection Method : RMS detection through average rectification
 A/D Conversion : successive comparator method
 Display : LCD, max. reading of 9999
 Sampling Rate : 2 times/second
 Over Range Indication : "OL" mark on LCD readout
 Low Battery Indication : Battery mark on LCD readout
 Auto Power Off : automatically power off approx. 10 minutes after the final key operation
 Data Hold Indication : "DH" mark on LCD readout
 Power Supply : 1.5V ("AAA" size, um-4)×3 or AC adaptor (option)
 Power Consumption : Approx. 14mA (approx.48 hours with continuous use).
 Limitation of Circuit Voltage : Less than AC 500V
 Operating Temperature : 0°C~50°C, <80%RH(non-condensing)
 Storage Temperature : -10°C~60°C, <70%RH(non-condensing)
 Size & Weight : 71(W)×315(H)×37(D)mm, approx 750g
 Accessories : Battery (LR03)..... 3pcs. (installed into the body case)
 Voltage input test lead..... 1set
 Carrying Case..... 1pce.
 Instruction Manual 1pce.

3) Measuring Ranges and Accuracy

Measuring Function	Range	Resolution	Accuracy
Io AC Current	10mA	0.001mA	±1.0%rdg±10dgt
	100mA	0.01mA	
	1000mA	0.1mA	
Ior AC Current	10A	0.001A	±1.5%rdg±20dgt
	100mA	0.01mA	
	1000mA	0.1mA	±1.5%rdg±15dgt
	10A	0.001A	
AC Voltage	500V	0.1V	±1.0%rdg±10dgt