

# 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