# Io/Ior DIGITAL CLAMP TESTER

## AC CURRENT/LEAKAGE/VOLTAGE

# Model MCL-500IR



#### **FEATURES**

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

resistive leakage current (lor), AC voltage. (0~500V)

Measuring Method CT clamp-on method

0-40mA, 400mA, 4A, 40A, 300A, 500A Measuring Range

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 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

Ior Switch pressing this key, lor value will be

displayed. pressing again,

display will return to lo 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:  $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$ ,  $<80^{\circ}\text{RH}$ (non-condensing) Storage Temperature:  $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ ,  $<70^{\circ}\text{RH}$ (non-condensing) Size & Weight :  $70(\text{W}) \times 223(\text{H}) \times 34(\text{D})$ mm

Appróx. 440 gś 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	
l.lo	40mA	0.01mA	0.40mA~39.99mA ±1.0%rdg ±10dgt	
	400mA	0.1mA	$40.0$ mA $\sim$ 399.9mA $\pm$ 1.0%rdg $\pm$ 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	
lor	40mA	0.01mA	$0.40$ mA $\sim$ 39.99mA $\pm$ 1.5%rdg $\pm$ 15dgt	
	400mA	0.1mA	$4.0$ mA $\sim$ 399.9mA $\pm$ 1.2%rdg $\pm$ 15dgt	
	4A	0.001A	$0.04A\sim3.999mA\pm1.2\%rdg\pm15dgt$	
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 (lor) accurately by voltage input with minimum resolution of 0.001mA
- Wide ranges for the measurement of AC load current, leakage current (lo), resistive leakage current (lor), 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 (lo), resis-

tive leakage current (lor), AC voltage.

Measuring Method CT clamp-on method

0-10mA, 100mA, 1000mA, 10Am (auto) ACV:10V $\sim$ 500V,MΩ: 0.001MΩ $\sim$ 9.999MΩ Measuring Range

50/60Hz (manual) Input Frequency

**Detection Method** RMS detection through average rectifi-

cation

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 min-

utes after the final key operation

Data Hold Indication: "DH" mark on LCD readout

1.5V ("AAA" size, um-4)×3 or AC adap-Power Supply

tor (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) -10°C~60°C, <70%RH(non-condensing) 71(W)×315(H)×37(D)mm, approx 750g

Size & Weight Accessories 

(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	
	10mA	0.001mA	±1.00/ rda ±10dat	
lo AC Current	100mA	0.01mA		
10 AC Current	1000mA	0.1mA	±1.0%rdg±10dgt	
	10A	0.001A		
	10mA	0.001mA	$\pm$ 1.5%rdg $\pm$ 20dgt	
lor AC Current	100mA	0.01mA		
lor AC Current	1000mA	0.1mA	$\pm$ 1.5%rdg $\pm$ 15dgt	
	10A	0.001A		
AC Voltage	500V	0.1V	±1.0%rdg±10dgt	