

## ANALOG INSULATION RESISTANCE TESTER

*Single Scale Indicator for 3 Range Insulation Measurements*

Model **MIS-1A**

50V/10M $\Omega$   
 125V/20M $\Omega$   
 250V/50M $\Omega$

Model **MIS-2A**

125V/ 20M $\Omega$   
 250V/ 50M $\Omega$   
 500V/100M $\Omega$

Model **MIS-3A**

125V/ 20M $\Omega$   
 250V/ 50M $\Omega$   
 1000V/2000M $\Omega$

Model **MIS-4A**

250V/ 50M $\Omega$   
 500V/ 100M $\Omega$   
 1000V/2000M $\Omega$



### FEATURES

- The single and fluorescent scale indicator for 3 ranges insulation measurements enabled easy observation. Especially useful when working in dark place.
- Hand free and continuous measurements with custom made switch.
- Safe design with built in automatic discharging function for any capacitors present in the circuit.
- The voltage in the circuit can be pre-checked without any switch operation for safe insulation measurements.
- Compact, light weight and heavy duty rugged case.

# ANALOG INSULATION RESISTANCE TESTER

## SPECIFICATIONS

- Function : Insulation resistance, AC voltage, battery check
- Meter movement : 100 $\mu$ A, 870 $\Omega$ , taut band meter.
- Safety standard : Meets the requirements for double insulation to IEC 61010-1 (2001), IEC 61010-2-032 (2002) installation Category II, 600V phase to earth.
- E.M.C. standard : The instrument meets EN 61326 (2004)
- Constructional standard : In accordance with IEC 1557-2 or JIS C1302(1994)
- Insulation resistance : DC 500V-50M $\Omega$  or more (MIS-1A, MIS-2A)  
 DC 1000V-50M $\Omega$  or more (MIS-3A, MIS-4A)
- Withstanding voltage : AC 3700V, 1 minute (Between input terminal and outer case)
- Overload protection : 120% of the highest nominal output voltage (10sec.)
- Battery check : DC 6.3V ~ 9.5V
- Low battery limit : DC 6.3V
- Temperature characteristics (0 ~ 40 $^{\circ}$ C) :  $\pm$  5%rdg of specified accuracy
- Operating temperature : 0 $^{\circ}$ C to 40 $^{\circ}$ C, 80% RH max. (Non-condensing)
- Storage temperature : -10 $^{\circ}$ C to 60 $^{\circ}$ C 80% RH max. (Non-condensing)
- Power supply : 1.5V ("AA" size, R6)  $\times$  6
- Size : 170(W)  $\times$  105(D)  $\times$  54(H) mm
- Weight : Approx. 330g (Excluding batteries)
- Accessories : Line test lead 1  
 Earth test lead ..... 1  
 Batteries ..... 6  
 Test lead case ..... 1  
 Belt ..... 1  
 Instruction manual ..... 1
- Optional accessory : Remote switch test lead

## Measuring Ranges and Technical Data

Insulation resistance measurement

Model	MIS-1A	MIS-2A	MIS-3A	MIS-4A
Rated voltage & effective measuring range	50V-10M $\Omega$ 125V-20M $\Omega$ 250V-50M $\Omega$	125V- 20M $\Omega$ 250V- 50M $\Omega$ 500V-100M $\Omega$	125V-20M $\Omega$ 250V-50M $\Omega$ 1000V-2000M $\Omega$	250V-50M $\Omega$ 500V-100M $\Omega$ 1000V-2000M $\Omega$
Center scale	0.2M $\Omega$ /0.5M $\Omega$ /1M $\Omega$	0.5M $\Omega$ /1M $\Omega$ /50M $\Omega$	0.5M $\Omega$ /1M $\Omega$ /2M $\Omega$	1M $\Omega$ /2M $\Omega$ /50M $\Omega$
Minimum measurable resistance at rated voltage	0.05 M $\Omega$ 0.125M $\Omega$ 0.25 M $\Omega$	0.125M $\Omega$ 0.25M $\Omega$ 0.5 M $\Omega$	0.125M $\Omega$ 0.25M $\Omega$ 1M $\Omega$	0.25M $\Omega$ 0.5M $\Omega$ 1M $\Omega$
Rated current	1mA + 20% - 0%			
Maximum no-load voltage	Rated voltage + 30% - 0%			
Short circuit current	< 2mA			

Accuracy

Rated voltage	DC 50V	DC 125V	DC 250V	DC 500V	DC 1000V
First effective range	0.01M $\Omega$ ~ 5M $\Omega$ $\pm$ 5%rdg	0.02M $\Omega$ ~ 10M $\Omega$ $\pm$ 5%rdg	0.05M $\Omega$ ~ 20M $\Omega$ $\pm$ 5%rdg	0.1M $\Omega$ ~ 50M $\Omega$ $\pm$ 5%rdg	2M $\Omega$ ~ 1000M $\Omega$ $\pm$ 5%rdg
Second effective range	0.005M $\Omega$ ~ 0.01M $\Omega$ 5M $\Omega$ ~ 10M $\Omega$ $\pm$ 10%rdg	0.01M $\Omega$ ~ 0.02M $\Omega$ 10M $\Omega$ ~ 20M $\Omega$ $\pm$ 10%rdg	0.02M $\Omega$ ~ 0.05M $\Omega$ 20M $\Omega$ ~ 50M $\Omega$ $\pm$ 10%rdg	0.05M $\Omega$ ~ 0.1M $\Omega$ 50M $\Omega$ ~ 100M $\Omega$ $\pm$ 10%rdg	1M $\Omega$ ~ 2M $\Omega$ 1000M $\Omega$ ~ 2000M $\Omega$ $\pm$ 10%rdg
	10M $\Omega$ ~ 50M $\Omega$ $\pm$ 30%rdg	20M $\Omega$ ~ 100M $\Omega$ $\pm$ 30%rdg	50M $\Omega$ ~ 100M $\Omega$ $\pm$ 30%rdg		

AC voltage measurement (50/60Hz)

Range	Accuracy	Input impedance	Maximum input voltage
AC 600V	$\pm$ 2.5% of full scale	Approx. 1.5M $\Omega$	AC 600V rms