

ANALOG INSULATION RESISTANCE TESTER

Single Scale Indicator for 3 Range Insulation Measurements

Model **MIS-1A**

50V/10M Ω
125V/20M Ω
250V/50M Ω

Model **MIS-2A**

125V/ 20M Ω
250V/ 50M Ω
500V/100M Ω

Model **MIS-3A**

125V/ 20M Ω
250V/ 50M Ω
1000V/2000M Ω

Model **MIS-4A**

250V/ 50M Ω
500V/ 100M Ω
1000V/2000M Ω



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 μ A, 870 Ω , 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 Ω or more (MIS-1A, MIS-2A)
 DC 1000V-50M Ω 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 Ω 125V-20M Ω 250V-50M Ω	125V- 20M Ω 250V- 50M Ω 500V-100M Ω	125V-20M Ω 250V-50M Ω 1000V-2000M Ω	250V-50M Ω 500V-100M Ω 1000V-2000M Ω
Center scale	0.2M Ω /0.5M Ω /1M Ω	0.5M Ω /1M Ω /50M Ω	0.5M Ω /1M Ω /2M Ω	1M Ω /2M Ω /50M Ω
Minimum measurable resistance at rated voltage	0.05 M Ω 0.125M Ω 0.25 M Ω	0.125M Ω 0.25M Ω 0.5 M Ω	0.125M Ω 0.25M Ω 1M Ω	0.25M Ω 0.5M Ω 1M Ω
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 Ω ~ 5M Ω \pm 5%rdg	0.02M Ω ~ 10M Ω \pm 5%rdg	0.05M Ω ~ 20M Ω \pm 5%rdg	0.1M Ω ~ 50M Ω \pm 5%rdg	2M Ω ~ 1000M Ω \pm 5%rdg
Second effective range	0.005M Ω ~ 0.01M Ω 5M Ω ~ 10M Ω \pm 10%rdg	0.01M Ω ~ 0.02M Ω 10M Ω ~ 20M Ω \pm 10%rdg	0.02M Ω ~ 0.05M Ω 20M Ω ~ 50M Ω \pm 10%rdg	0.05M Ω ~ 0.1M Ω 50M Ω ~ 100M Ω \pm 10%rdg	1M Ω ~ 2M Ω 1000M Ω ~ 2000M Ω \pm 10%rdg
	10M Ω ~ 50M Ω \pm 30%rdg	20M Ω ~ 100M Ω \pm 30%rdg	50M Ω ~ 100M Ω \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 Ω	AC 600V rms