

# PRECISION MEGGER/INSULATION METER

(A.C./D.C./)

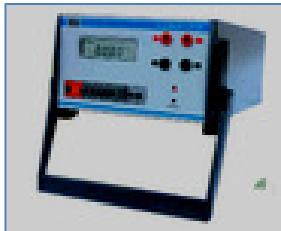
## Introduction:

Precision Insulation resistance/megger analyzer are available in 8 different regular(5000/3000/1000/500V) models apart from tailor made all industrial and research applications for insulation resistance ,meeting all electrical, thermal, mechanical, and environmental specifications. These Insulation resistance/megger analyzer has in-built high voltage source(D.C./Pulse) to measure high Insulation resistance of sample . These has inherent feature to minimize polarization effect of samples with target electrode. These finds applications in generation, transmission/distribution, defense, electrical/mechanical m/c testing instrument, industrial electronics, railway, and avionics and solid state physical application like dielectrics characterization, switch gears, lectrochemical,thermodynamical application,MEMS and many research and development activities. These precision instruments are compatible to any standard external current/voltage sensor and power source of specification as specified under.

**Operating Principle: Insulation resistance/megger** High voltage souce feed the current in sample for certain time and corresponding leakage current is measured by 5/6 digit instrumentation. Scale are graduated in term of insulation resistance/leakage current.



Pulse type MEGGER-0009991



D.C. Type metter MIRT-



handheld megger

## Benefits:

High input impedance/Low input biased current /higher accuracy. 0099991

- 5-1/2 & 6-1/2 digit display /analogue..consistent performance over large temperature/humidity range (70°C and 80 % RH)
- Scaled directly in micro ohm - ohm to giga micro-ohm range instrument repeatable accuracy.
- Auto/manual zero offset without drift. /Auto drift tracking
- RS-32 interface/high sample rate – 10,000 sample/second. / Feed back current measurement technique.
- Safety compliance-IE-1956 or as communicated/ inbuilt variable frequency excitation to get noise free reading in high Insulation resistance/megger area.
- Inbuilt climatically temperature/pressure compensated.

## General specification INSULATION RESISTANCE/MEGGER:

Range<999999x10<sup>+12</sup> ohm.m

Model	Range Volt	Range resistance	Frequency	Burdon Micro-volt	Accuracy limited to Resolution	Resolution quantified	Voltage/current source	interface
MIRT-9999990101	10.0/5.0 -99999.9v	05.0/02.0 -999999 mega-ohm 0009999-0999999 -ohm(in-multi-step)	0-1000Hz	< 100	99.99999%	1/2/5 counts	5000/3000/1000/500V	RS-232/USB
MIRT-9999990401	10.0/5.0 -99999.9v	05.0/01.0 -999999 mega-ohm 0999.99-0999999 -ohm(in-multi-step)	0-50 k. Hz	< 100	99.99999%	1/2/5 counts	5000/3000/1000/500V	RS-232/USB
MIRT-9999990102	05.0/1.0 -99999.9v	10.0/05.0 -999999mu-ohm 0.999999-0999999 -ohm (in-multi-step)	0-50K.Hz	< 100	99.99999%	1/2/5 counts	5000/3000/1000/500V	RS-232/USB

## General specification of table top Megger

Operating voltage: 220 volt A.C..

Measurement range (full scale): as above in different model.

Voltage(ac/dc) :10<sup>+0</sup>-10<sup>+4</sup> volts in two step least count- 10.0volt

Current(ac/dc) : 10<sup>-07</sup>-10<sup>-1</sup> .Amps x 10 in four step least count- 1.0 mcro amp

Resistance: 10<sup>+9</sup>-10<sup>+03</sup> -ohm least count- 0.1 mega ohm

Temperature: -50 to 300 deg cel

Input capacitance: 10 nF

Response time: 1000 sample/sec

Burden: less than 100 micro volt/full scales current or better

Accuracy error : 1.0 % reading

Repeatability: 100 of reading

Resolution: 0.1 mega ohm/option

Linearity adjustment: upto 100 count

Input impedance: ultra high (<1000 count),

Filtering: low pass( adjustable)

Offset: variable upto 10,000 count (manual/auto)

**Display: 5/6 digit/analogue**

CMMR: >80 db at 50-60 Hz

Isolation: > 100 giga ohm

Connector: BNC-9 pinx2 and BNC-25 pinx2

Size: 8X8X12 inches/rack mounted or portable

Interface: usb

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