



Microprocessor Based MOTOR OPERATED DIGITAL INSULATION TESTER MODEL : CIE-1500

**DIRECT READINGS
OF I.R., D.A.R. & P.I.**



FEATURES

- DUAL OUTPUT VOLTAGE ; 2500 Volts & 5000 Volts D.C.
- MEASURES INSULATION RESISTANCE (I.R.)
2500V/50-50000 M Ω (i.e. 50 G Ω)
5000V/100-100000 M Ω (i.e. 100 G Ω)
- MEASURES DIELECTRIC ABSORPTION RATIO (DAR) 0.0 ~ 9.9
- MEASURES POLARISATION INDEX RATIO (PI) 0.0 ~ 9.9
- 16 \times 2 ALPHANUMERICAL DISPLAY with Backlit
- Infinity Indicated as (OVER.....) & lower readings indicated as (UNDER.....)
- AUTO CALIBRATION ADJUSTER
- Inbuilt Programmed Timer
- AUTO POWER OFF & DATA HOLD
(Motor stopped after 10 min. and measured data of I.R., D.A.R. & P.I. holds on LCD.
"TEST DONE" appears on L.C.D.)
- POWERFUL SOFTWARE (In built)
- Short Circuit Protection
- GUARD TERMINAL PROVIDED
- Housed in attractive Wooden Body with sunmica finished.
- Easy to use, reliable and accurate.

INSTRUMENTS FOR ACCURACY & RELIABILITY

APPLICATION

Type CIE-1500 is a universal, Multi-purpose instrument for checking insulation and conductance during simulated operating conditions in high tension electrical and electronic fields. It is ideally useful for the electrical maintenance of Rotating plant machinery, Distribution networks, Communication cable, Insulators and servicing of Control and switching equipments, transformers and industrial installations. Di-electric Absorption test requires the voltage to be applied for several minutes. Operating an instrument under motor power allows this to be done easily. The high sensitivity of the instrument enables sensible reading to be obtained from such polarization index tests. (Polarisation Index = Resistance after 10 min./Resistance after 1 min.) Better results are obtained by longer time periods. It is a versatile mains operated insulation tester which is recommended for every electrical engineer.

The CIE 1500 is a smart microprocessor based 5KV Insulation Tester and analyser besides the conventional measurement of Insulation resistance up to 100.0GΩ. Its advanced features allow one to automatically measure both the polarization Index and Dielectric absorption ratio, thus significantly simplifying the testing of transformers and motors.

The Insulation Tester is a mains (230V AC, 50-60Hz) operated motorised Insulation Tester and analyser.

The test voltage may be chosen in between 2.5KV and 5KV. Due to its measurement principle (actual voltage and current readings) the accuracy of resistance measurement is not affected by any test voltage error.

The built-in chronometer automatically counts the elapsed time since the start of the measurement and shown over display by which user can easily understand the actual condition of the insulation testing (e.g. in DAR Mode or in PI mode or in IR mode) The measured values all are automatically hold over display until the instrument restart or off. The Test Voltage shown over display at the time of measurement.

SPECIFICATION

Measuring range and accuracy (at 23 ± 5°C and 45-75% RH)

INSULATION RESISTANCE TEST		
Rated output Voltage (DC)	2500 V	5000 V
Measurable Insulation Range	50-50000 MΩ (i.e. 50MΩ ~ 50GΩ)	100-100000 MΩ (i.e. 100MΩ ~ 100GΩ)
Accuracy	± 5% ± 3dgt	± 5% ± 3dgt
Short Circuit Current	Max. 2mA	Max. 2mA
Rated Measurement Current	1mA or less at a load of 50 MΩ	1mA or less at a load of 100 MΩ
OUTPUT VOLTAGE	2500V DC	5000V DC
Rated Voltage Monitor Accuracy	± 10%	± 10%

CALCULATED VALUE ON DISPLAY : PI & DAR

Measurement Mode	PI	DAR
DISPLAY RANGE	0.0 ~ 9.9	0.0 ~ 9.9

Overload Protection	:	AC 600 V for 10 sec.
Dimension	:	13" × 9" × 8½" (approx) (including Top cover)
Weight	:	9kg (approx)
Power Source	:	AC Power supply 230V AC (50/60Hz)
Measuring Time	:	Approx 10 min. (continuous use), 5 minutes interval after 10 Min. test.
Accessories	:	Instruction Manual 1 No.; Mains Cord – 1 No.; H.V. Testing leads (2 mtr. length) – 1 pair; Manufacturer's (Works) Test Certificate.

'CIE' in a continuing effort to offer excellent products at a fair value, reserves the right to change models, specifications and designs without notice.

CAMBRIDGE INSTRUMENTS & ENGINEERING CO.