Digital Earth Tester

**Model:** DET-2000

**Application**

'CIE' Digital Earth Resistance Tester is designed to measure the resistance if earth used in power circuit, Telecommunications, Railway Electrification, Domestic and Industrial electrical installations. The tester measures directly the resistance of the earth and also measure the ground resistivity. The study, elegant and compact body makes the instrument portable, easy to use, Hand-held instrument.

**Salient Features**

- Rugged ABS body
- Easy to use hand held meter
- Ni-cd Re-chargeable Cells
- Facility as to make bench top type instrument
- Confirms to ISS : 9223/1979
- Four terminals {To measure earth resistance as well as specific soil resistivity}
- Lo-Bat or Δ indication appears on Display indicating that the indicating the cells (batteries) have gone down, which can be recharged by connecting to 230V, 50 Hz AC mains supply through charging cord provided with the instrument

**Technical Details**

- **Display**: 3½ Digits, LCD
- **Accuracy**: 0% to 10% of the range ±3%
  - 10% to 90% of the range ±1.5%
  - 90% to 100% of the range ±3%
- **Dimensions (in mm)**: 172 x 98 x 38 (Approx.)
- **Weight**: 575 gm (Approx.)

**Electrical Specifications**

- **H. V. Test**: 2KV AC (rms) for 1 min. between electrical circuit and containing case
- **Insulation Resistance Test**: More than 25 Mega ohms at 500 V DC between electrical circuit & containing case

**Accessories**

- **Standard Accessories**
  - (i) Carrying Case
  - (ii) Charging Cord
  - (iii) Instruction Manual

- **Optional Accessories (at extra cost)**
  - 4 Nos. M. S. Spike (45 cm Length)
  - 1 Nos. Hammer
  - 4 Nos. Cable (50 feet)
  - 1 No. Plier
  - 1 Nos. Screwdriver, all in one canvas bag

**Dual Ranges**

(a) 0 - 20 - 200 OHM  (b) 0 - 10 - 1000 OHM  (c) 0 - 100 - 1000 OHM  (d) 0 - 5 - 500 OHM  (e) 0 - 10 - 100 OHM
Guarantee
Guaranteed for 12 (twelve) months against any manufacturing defects

Hand Driven Generator Type
Model: CIE / 222M

Application
'CIE' Earth Tester permits direct measurement of the resistance of earth used in power circuits. Telecommunication, Railway Electrification, Domestic & Industrial Electrical Installation, Lighting Protection Installation and various other Electrical Systems, The tester performs equally well in Terrain where the conductivity of the soil is low, e.g., in mountainous areas and in places where powerful stray earth current exist.

The four terminal instrument is specially designed for making straight forward and approximate soil investigation of the kind needed in agricultural, geological research and in the planning of large civil engineering projects such as tunnels, Drainage, Sewerage schemes, Tube-Railways etc.

Measuring accuracy of the instrument is not effected by stray alternating or back e.m.f. of earth electrolytic. The instrument can also be used for measuring non-inductive or non-capacitive resistance.

Salient Features
- Silent Generator with Collapsible Handle
- Centrifugal Clutch (Governor) For Constant Output Voltage
- Chuck Nut Locking Arrangement to Prevent Anti-Clockwise Rotation
- Wide and Anti-Parallax Mirror Scale
- Anti Magnetic Aluminum Body with Protected Metallic Flap Over Glass Window of Scale
- Accurate, Reliable and Quick Response For Measurement of Resistance of Earth
- Accuracy CONFIRMS to IS : 923/1979
- Graceful Appearance, Long Life & Strength Against Vibration & Impact

Technical Details
- Scale Length: 80mm (Approx)
- Accuracy: ±5% (as per IS: 9223/1979)
- Generator Rotation Speed: 160 rpm
- Weight: 2.5 kg (Approx)
- Dimensions (in mm): 110 x 128 x 190 (Approx)

Electrical Specifications
- High Voltage Test: 2KV AC (rms) for 1 min. between Electrical Circuit & containing case

#6, Mc lean Street, 1st floor, Broadway, Chennai – 600 001
Ph: +91 44 4216 5807/2536 2183 Tele fax: +91 44 25362181
E-Mail ID: jic@iicchennai.com, jic.jain@gmail.com
Web Site: www.iicchennai.com & www.iicchennai.in
Insulation Resistance Test: Better than 25 Mega ohms at 500 V DC between electrical circuit & containing case

**Types**
Available in three (For measurement of Earth resistance) and four terminals (For measurement of Earth resistance & soil resistivity both)

**Ranges**
(i) Available single range from 0 - 1 ohm to 10,000 ohm (Any one range)
(ii) Also available in multi ranges provided with range selector switch, to be chosen from 0 - 1 ohm to 10,000 ohm
Any other ranges can also be made against specific requirement

**Guarantee**
Guaranteed for 12 (twelve) months against any manufacturing defects