

# EARTH TESTER

HAND DRIVEN GENERATOR TYPE (3 Terminals & 4 Terminals)

MODEL : CIE /222M



## SPECIAL 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 aluminium 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 : 9223/1979
- Graceful appearance, long life & strength against vibration & impact

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## APPLICATION

“CIE” Earth Tester permits direct measurement of the resistance of earth used in power circuits, telecommunication, railway electrification, domestic & industrial electrical installation, lightning 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 exists.

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 affected 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.

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## DESCRIPTION

The sturdy and elegant aluminium casted case, with metallic carrying handle makes the instrument conveniently portable. The dust-free instrument has rubber shoes that hold the surface and give the instrument good stability.

Protected metallic flap over the glass window of scale.

Collapsible driven generator handle – folds back flush into casing when tester is not in use.

The Earth Tester is simple to operate. Test current is generated by a smooth and noiseless hand driven A.C. generator. A high grade centrifugal governor holds constant voltage for accurate measurement. Variation in speed rotation does not affect the reading. Measuring accuracy of the instrument is not affected by stray alternating current or back e.m.f. of earth electrolysis. The instrument can also be used for measuring non-inductive or non-capacitive resistance.

## TYPES & RANGES

Types: Available in Three Terminals & Four Terminals.

### Ranges:

- (i) Available in single range from  $0-1\Omega$  to  $10,000\Omega$  (any one range)
- (ii) Also available in multi-range provided with range selector switch, to be chosen from ( $0-1\Omega$  to  $10,000\Omega$ )
- (iii) Any other range/s can also be made against specific requirement.

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<b>TECHNICAL DATA</b>	<b>Specification</b>
<b>Scale Length</b>	80 mm (Approx.)
<b>Accuracy</b>	±5% (as per IS : 9223/1979)
<b>Generator Rotation Speed</b>	160 r.p.m.
<b>Weight</b>	2.5 kg (Approx.)
<b>Dimensions (in mm)</b>	110 × 128 × 190 (Approx.)
<b>High Voltage Test</b>	2KV AC (r.m.s.) for 1 min. between electrical circuit & containing case
<b>Insulation Resistance Test</b>	Better than 25 MΩ at 500V DC between electrical circuit & containing case
<b>Guarantee</b>	For a period of 12 (Twelve) months against any manufacturing defects

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