





Digital Earth Tester DET-20

FEATURES

- 3½ digit LCD display with Max Reading 1999.
- Earth Resistance Ranges of 0.01Ω to 1999Ω .
- Rechargeable Internal Ni-MH Battery.
- 4 Wire Soil Resistivity Measurement.
- Measurement Method 3 terminal & 4 terminal.

GENERAL SPECIFICATIONS

Earth Resistance Ranges

 0.01Ω To 19.99 Ω 0.1Ω To 199.9 Ω 1Ω To 1999Ω

- 4 Wire Soil Resistivity Measurement.
- Measurement Method 3 terminal & 4terminal.
- Type Tested as per IS-9223.
- Earth Voltage Measurement up to 200V.
- Accuracy $(25^{\circ} \text{ C} \pm 5^{\circ} \text{ C})$

± 1.5% of reading ±5 digits valid from 10% of reading to 95% of the range.

Earth voltage accuracy : 2% of Range.

Earth voltage resolution: 0.1V

Test Frequency: 128 Hz ±0.5 Hz

Test Current

20-Ohm Range : 10 mA AC rms 200-Ohm Range : 1 mA AC rms 2000-Ohm Ranges : 100 μA AC rms

Test current is generally constant throughout the range.

Interference voltages of 20 V ±5% peak-to-peak, 50 Hz in the potential circuit will have a maximum effect of $\pm 1\%$ on the reading obtained for the 20Ω to 2 $k\Omega$ ranges.

- Minimum Open Circuit Output Voltage: 36 V Approx.
- Display: 3½ digits LCD, max. Reading 1999
- **Influence of Temperature:**

 $\leq \pm 0.2\%$ per °C over the temperature range 0-20°C and 28-55 °C.

Temperature Range:

Operating : 0°C to +55°C : - 20°C to +70°C Storage

Humidity

: 95% RH non condensing max. at 40°C Operating

Storage : 93% RH max. at 55°C

Flash Test : 3 kV AC.

Voltage Withstand

In the event of a system fault, the instrument will withstand 240V AC, applied between any two terminals.

Approx. 180 (H) x 100(W) x 54(D)mm. **Dimensions**

Weight Approx. 550gms.

Internal, rechargeable Ni-MH 1.2V, 600mAh x 8 Nos. Power supply

Charging time Recommended 16hrs.

Single Charge Battery Life: Approximately 5 - 6 hrs of continuous operation on mid ranges.

STANDARD ACCESSORIES

- 1. Operating Instruction Manual
- 2. Battery Charger.
- 3. Carrying bag containing
- a. Four spikes of 10 mm dia, 450 mm. long.
- **b.** 10 m, 20 m, 30 m & 40 m of cable on a winder as standard.
- c. Hammer

APPLICATION

- Outdoor Earth Testing.
- Substations.
- Captive Power Plants.
- Soil Resistivity for new Installations.



DBS/PC/ET-01/Rev-02

1. The Instrument is accompanied with Test & calibration sheet. 2. Test Facilities can be provided at the factory with the available test set-ups only. 3. The Company's policy is continuous improvement of its products, we therefore reserve the Right of any deviation from illustration or specifications without notice. 4 Stated accuracies are valid from 1/10th of range to FS. 5. Accuracy Specified for temperature range of 25° C $\pm 5^{\circ}$ C & 55%RH $\pm 10\%$.