# **Three Terminal**

# **Ground Resistance Tester**



- Simple operation
- Quick, routine single electrode tests
- Direct readout in ohms

#### **DESCRIPTION**

The Three-Terminal Ground Resistance Tester is the economical choice for electrical contractors, plant electricians, telephone and CATV technicians making routine ground resistance tests on single electrodes and other simple grounding systems. The instrument is easy to use for quick measurement of resistances from 0.5 to 500 ohms.

Because factors such as seasonal variations in temperature, moisture and salt content affect soil resistivity, periodic tests are essential to ensure that resistance to ground remains at a safe value.

The instrument is simple to operate:

- Drive probes and hook up the leads.
- Push switch to READ and ground resistance is displayed directly.
- If reading is questionable, switch to CHECK to verify test lead continuity and probe resistance.

Designed for simplicity of use, the instrument is operated by a single three-position switch to read the measurement, check the probe resistance and turn the instrument off. Measurements are displayed directly in ohms; range changing, multipliers or calibration adjustments are not necessary.

#### **APPLICATIONS**

The instrument can be used to makethe usual fall-of-potential ground resistancemeasurements. Two models areavailable, one for testing in the vicinity of 60-Hertz power systems; the other near 50-Hertz systems. Applications include testing grounds of:

- Utility poles
- Distribution transformers
- Residential wiring systems
- Lightning arresters
- Computer grounds
- Machinery safety grounds
- Telecommunication and data transmission systems
- Railway electric substations and signal systems
- Antistatic grounds

# **FEATURES AND BENEFITS**

- Measures ground resistance down to 0.5 ohm
- Reads directly in ohms on a single range scale
- Stable calibration requires no field adjustments
- Checks probe resistance and battery condition
- Powered by replaceable C cells
- Limits output to 50 volts open circuit, 5 mA short circuit
- Weighs less than 3 lb (1.5 kg)



## **SPECIFICATIONS**

### Input

**Power Source** 

Four C alkaline batteries

### Output

**Test Frequency** 

Cat. No. 250260: 135 Hz Cat. No. 250261: 121.6 Hz Maximum Output Voltage: 50 V Maximum Test Current: 5 mA

Accuracy

**1 to 100**  $\Omega$ :  $\pm 2\%$  of full-scale deflection **500**  $\Omega$ :  $\pm 4\%$  of full-scale deflection

### Range

0.5 to 500  $\Omega$ 

### Interference

2 V peak to peak

#### **Dimensions**

7.5 H x 6.5 W x 4.75 D in. (190 H x 165 W x 120 D mm)

## Weight

2.8 LB (1.3 KG)



Accessory kit, Cat. No. 250560, includes probes, leads, ground rods and a calibration standard  $\,$ 

	ORDERING
Item [Qty]	Cat. No.
Three-Terminal Ground Resistance Tester	
60 Hz	250260
50 Hz	250261
Included Accessories	
Test record cards	250942
Batteries, C cell [4]	19111
Instruction manual	AVTM25-J4

2	
Optional Accessories	
Accessory kit	
Includes three color-coded test leads, 12, 31	
and 50 ft (3.6, 9.4 and 15 m) [1 set];	
ground rods, 11 in. (250 mm) [1 pr];	
and a calibration standard	250560
Test leads, color-coded, 12, 31 and 50 ft	
(3.6, 9.4 and 15 m) [1 set]	250574
Ground rods	
11 in. (250 mm) [1 pr]	250584
20 in. (510 mm) [1 pr]	250580
30 in. (760 mm) [1 pr]	250582
Field calibrator	10245
Canvas case for leads and rods only	250578
Instrument case	217719
Instrument and accessory case	250855
"Getting Down to Earth" manual	AVTM25-TA

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# UNITED STATES

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F +1 214 337 3038

## OTHER TECHNICAL SALES OFFICES

INFORMATION

Item [Qty]

Valley Forge USA, Toronto CANADA, Mumbai INDIA, Trappes FRANCE, Sydney AUSTRALIA, Madrid SPAIN and the Kingdom of BAHRAIN. Registered to ISO 9001:2000 Reg no. Q 09290
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Cat. No.