



AMPROBE® Model GP-2
Ground Resistance and Resistivity Tester

Features

- Measures Earth Ground Resistance (Ω)
- Automatically Calculates Resistivity ($m\Omega$)
- Test leads, auxiliary electrodes and software are included for a complete instrument
- Voltage Measurement
- Automatically applies three testing frequencies for the most accurate readings
- Auto ranging
- Stores up to 999 measurements in the memory
- DATA download to a PC (RS-232)

Benefits

- Three point test (fall of potential) measures earth ground resistance as required by equipment manufacturer specifications and as mandated by national code requirements for proper grounding
- Two point test is used to test grounding wires resistance and resistance of connection points between ground system elements i.e., wires and electrodes
- Tests soil for a new ground system design
- Does not require any additional meters to test voltage before grounding test is performed
- Easy to operate
- Data can be stored for later viewing
- Durable
- Downloads data to a personal computer to generate reports and store historical data

GP-2 Geo Test

Applications

- Ground resistance of the electrode or grid system
- Cathodic protection
- Soil contamination
- Lighting protection
- Isolated grounding

put me to the test.

The largest selection of test measurement equipment for electrical professionals



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AAD-197



Model GP-2

TECHNICAL SPECIFICATIONS

GP-2

Geo Test

Resistance measurement

| Range (**) (Ω) | Resolution (Ω) | Accuracy (*) |
|----------------------------|----------------------------|--------------------------|
| 0.01 ÷ 19.99 | 0.01 | ±(2% reading + 3 digits) |
| 20.0 ÷ 199.9 | 0.1 | |
| 200 ÷ 1999 | 1 | |

Resistivity measurement ρ

| Range (**) | Resolution | Accuracy (*) |
|--------------------------|--------------------|--------------------------|
| 0.6-125.6 Ω m | 0.1 Ω m | ±(2% reading + 3 digits) |
| 0.125-1.256 k Ω m | 0.001 k Ω m | |
| 1.25-19.99 k Ω m | 0.01 k Ω m | |
| 20.0-199.9 k Ω m | 0.1 k Ω m | |

(*) If $R_p > 100R_E$ and/or $R_C > 100R_E$, $R_p > 50k\Omega$ and/or $R_C > 50k\Omega$, if the instrument carries out the test the accuracy of the instrument is ±(10%Reading)

R_p = resistance of the voltage circuit

R_C = resistance of the current circuit

R_E = earth resistance

$\rho = 2\pi DR_E$ = calculated resistivity

(**) Automatic selection of the range

| | |
|---------------------------------|--------------------|
| Testing frequency | 125Hz/75Hz/41.66Hz |
| Testing current | 10mA |
| Open-terminal measuring voltage | 25Vrms |
| Waveform of measuring voltage: | sine wave |
| Interfering voltage: | |

- amperometric circuit: the measurement is taken with the stated accuracy if the interfering voltage is $\leq 3V$, while for interfering voltages between 3 and 30V inclusive, the accuracy decreases progressively; with an interfering voltage of about 30V the instrument does not perform the test.
- voltmetric circuit: the measurement is taken if the interfering voltage is $\leq 3V$; in case of higher voltages the instrument does not perform the test.

Interfering voltage measurement

| Range (**) (V) | Resolution (V) | Accuracy |
|-------------------|-------------------|--------------------------|
| 500 | 1 | ±(2% reading + 2 digits) |

Safety Standards

This instrument complies with EN 61010, EN 61557-1, EN 61557-5 standards.


| | |
|------------------------|-------------------------------|
| Insulation | Class 2, double insulation |
| Pollution | 2 |
| Maximum altitude | 2000m |
| Surge voltage category | CAT III 250V (phase to earth) |

General features

Mechanical features

| | |
|------------------------------|-----------------------------------|
| Dimensions: | 8.74" (L) x 6.38" (W) x 2.25" (H) |
| Weight (batteries included): | About 2.2 lb (1000g) |

Power supply

| | |
|-------------------------|--|
| Batteries: | 6 batteries 1.5 V size AA (LR6 -AM3-MN1500) |
| Low battery indication: | The symbol  appears on the display when the battery voltage is low. |
| Battery life: | about 300 measurements |
| Fusible Link: | F 100 mA (not accessible to the operator) |
| Auto Power Off: | The instrument will automatically switch off 2 minutes after last selecting a function or PC command |

Display

| | |
|--------------------|--|
| Features: | standard LCD 65mm x 65mm. |
| Memory: | 999 memory locations |
| Interfaces: | opto-insulated serial output RS232 to transfer data to a PC. |

OPERATING CONDITIONS

Environmental conditions

| | |
|------------------------|---------------------------|
| Reference temperature: | 73 ± 41F (23°C ± 5°C) |
| Operating temperature: | 14 ± 122F (-10°C ÷ 50°C) |
| Relative humidity: | <80% |
| Storage temperature: | -4F ± 140F (-20°C ÷ 60°C) |
| Storage humidity: | <70% |

ECM

This instrument has been designed in compliance with the EMS standards in force and its compatibility has been tested for:

| | |
|---------------------------|------------------|
| Irradiated emissions: | EN55011 |
| Immunity: | EN50140, EN61000 |
| Electrostatic discharges: | EN61000-4-2 |
| R.F. range: | EN50140 |
| Fast transient: | EN61000-4-4 |

ACCESSORIES

Standard and optional accessories

| Standard accessories* | Code |
|---|-----------------|
| -1 carrying case containing: -4 earth rods -4 cables banana crocodile | GP-2CON |
| Carrying case | GP-2CC |
| Optical serial cable | C2000 |
| Software and manual | www.amprobe.com |