GROUND RESISTANCE TESTERS
Multi-Function

Model 6471

Test ground resistance without the need of auxiliary rods!

The Model 6471 performs a fast and easy way to measure the value of the earth/ground using the 2 Clamp method (no auxiliary rods needed).

AC Current Probes Model SR182

▶SPECIFICATIONS

MODEL	6471
ELECTRICAL	
2 Clamp Measurement	
Range	0.10 to 500Ω
Resolution	0.01 to 1Ω
Measurement Frequency	Auto: 1367Hz Manual: 128Hz-1367Hz-1611Hz-1758Hz
3-Point Measurement	
Range (Auto-Ranging)	0.09Ω to 99.9kΩ
Resolution	0.01Ω to 100Ω
Test Voltage	Nominal 16 or 32Vrms user selectable
Resistance Measurement Frequency	41 to 513Hz automatic or user selectable
Test Current	Up to 250mA
Accuracy	±2% of Reading + 1ct @ 128Hz
Soil Resistivity 4-Point Measurement	
Test Method	Wenner or Schlumberger selectable with automatic calculation in Ω-meters
Range (Auto-Ranging)	0.01 to 99.99kΩ; ρ Max: 999kΩm
Resolution	0.001 to 10Ω
Test Voltage	16 or 32V user selectable
Frequency	From 41 to 128Hz selectable
External Voltage Measurement	
Range (Auto-Ranging)	0.1 to 65.0VAC/DC – DC to 440Hz
Accuracy	±2% of Reading + 1ct
Resistance Measurement (Bond Testing)	
Measurement Type	2-Pole (with lead resistance compensation) or 4-Pole (Kelvin sensing) user selectable
Range (Auto-Ranging)	2-Pole 0.02Ω to 99.99kΩ; 4-Pole 0.02Ω to 99.99kΩ
Accuracy	±2% of Reading + 2cts
Test Voltage	16VDC (+, - or auto polarity)
Test Current	Up to 250mA max
Data Storage	
Memory Capacity	512 test results (64KB)
Communication	Optically Isolated USB
Power Source	9.6V rechargeable battery pack (included)
Recharging Source	110/220 50/60Hz external charger with 18VDC, 1.9A output

▶TEST KITS

300 ft Kit: Catalog #2135.50

Includes meter, set of two SR182 current probes, rechargeable NiMH batteries, optical USB cable, power adapter 110/240V with power cord 115V US, two 300 ft color-coded leads on spools (red/blue), two 5 ft color-coded leads (red/blue), two 100 ft color-coded leads (hand-tied, green/black), four T-shaped auxiliary ground electrodes, set of five spaded lugs, one 100 ft tape measure, DataView® software, ground tester workbook CD, carrying bag for meter, carrying bag for kit, product warranty and registration card and a user manual.

▶ACCESSORIES

▶MN82 current probe (50A)
Catalog #2135.71 (optional)

▶Reel Caddy
Catalog #2135.85 (optional)
Set of two, for use with ground kit spools

▶PRODUCT INCLUDES

SR182 current probe (50A)
Catalog #2135.72

Model 6471

Large Functional Displays

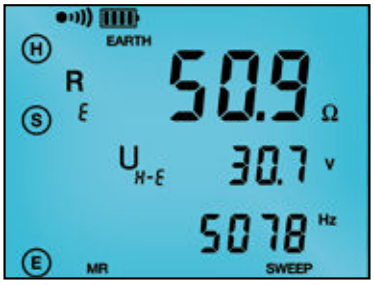
▶FEATURES

- Ground Resistance testing using the 2 clamp method (no auxiliary rods needed)
- 2- and 4-Point Bond Resistance/Continuity measurement (DC Resistance) with automatic polarity reversal
- 3-Point Fall-of-Potential measurement with manual or automatic frequency selection
- 4-Point Soil Resistivity measurement with automatic calculation of Rho (ρ) and user selection of the Wenner or Schlumberger test method
- 3-Point Earth Coupling measurement
- Manual and Automatic frequency scan from 41 to 513Hz for optimum test accuracy in electrically noisy environments
- Selectable test voltage of 16 or 32V up to 250mA of test current
- Auto-off power management
- Automatic recognition of all electrode connections and their resistance value
- Stores up to 512 complete test results in internal memory
- Display with automatic backlight when entering a function
- Optically isolated USB communication cable included
- Remote set up and operation of all measurements using DataView® software
- Rechargeable NiMH batteries from wall charger or vehicle power
- Rugged dustproof and rainproof field case – IP54 rated in closed position
- Grounding standards IEC 61557 parts 4 and 5 compliant
- Includes DataView® software for data storage, real-time display, analysis, report generation and system configuration

4-Point Bond Test

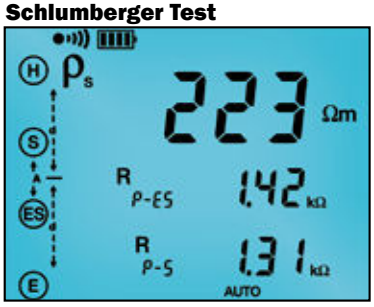
The 4-Point Bond test shows lead connections, bond resistance test results, test voltage and current.

3-Point Fall-of-Potential Test



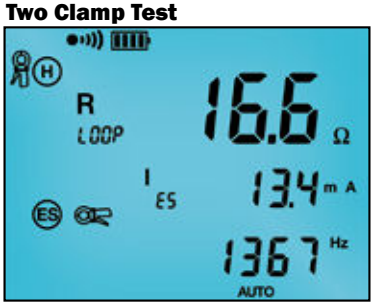
The 3-Point Fall-of-Potential test displays test lead connection, grounding rod resistance and test electrode resistances.

Schlumberger Test



The Schlumberger test displays test lead connection, soil resistivity (ρ) test results and electrode spacing.

Two Clamp Test

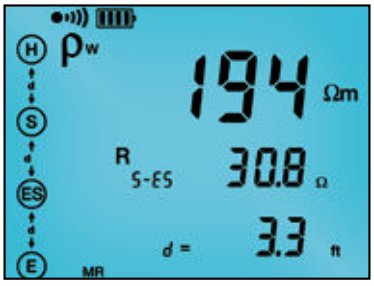


The 2 Clamp method displays clamp connection resistance, test current and frequency.

Data Storage

Memory Recall displays test results stored at a specific memory location.

Wenner Test



The Wenner test displays test lead connection, soil resistivity (ρ) test results, electrode spacing and resistance.

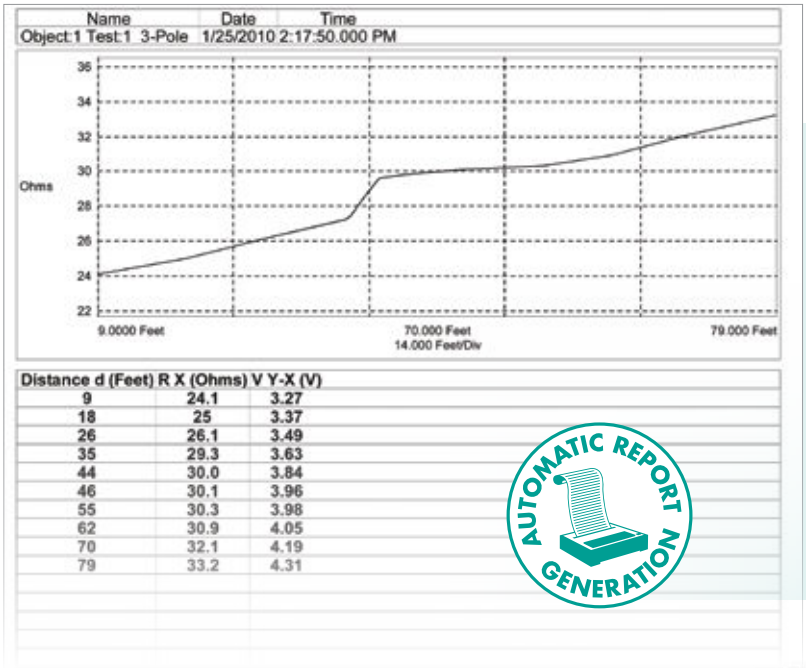
NOTE: More information for each test is available by scrolling through the displays.

CATALOG NO.	DESCRIPTION
2135.49	Ground Resistance Tester Model 6471 (set of two SR182 current probes, 2-Point, 3-Point, 4-Point, Bond Test, Digital, Rechargeable Battery, DataView® software)
2135.50	Ground Resistance Tester Model 6471 Kit – 300 ft (Catalog #2135.49 and Catalog #2135.36)
Accessories (Optional)	
2135.71*	AC Current Probe Model MN82 for use with Model 6471
2135.72*	AC Current Probe Model SR182 for use with Model 6471
2135.85	Caddy – Set of 2, Reel Caddy for use w/Ground Kit Spools ***(available on website storefront)***

**2 probes required for two clamp testing method.*

DataView®

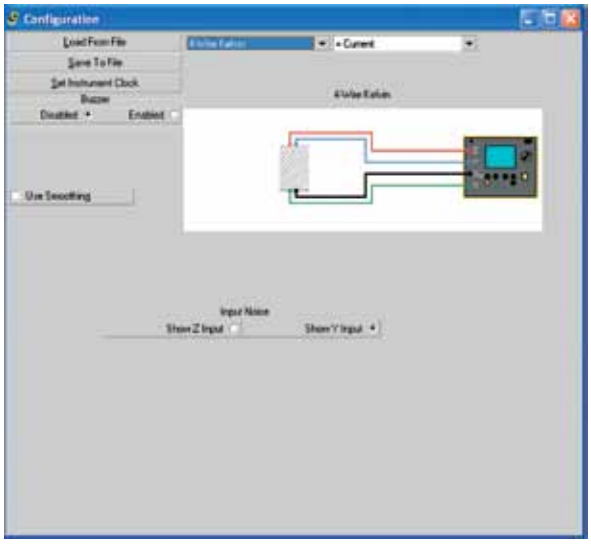
Data Analysis and Reporting Software for Ground Testers



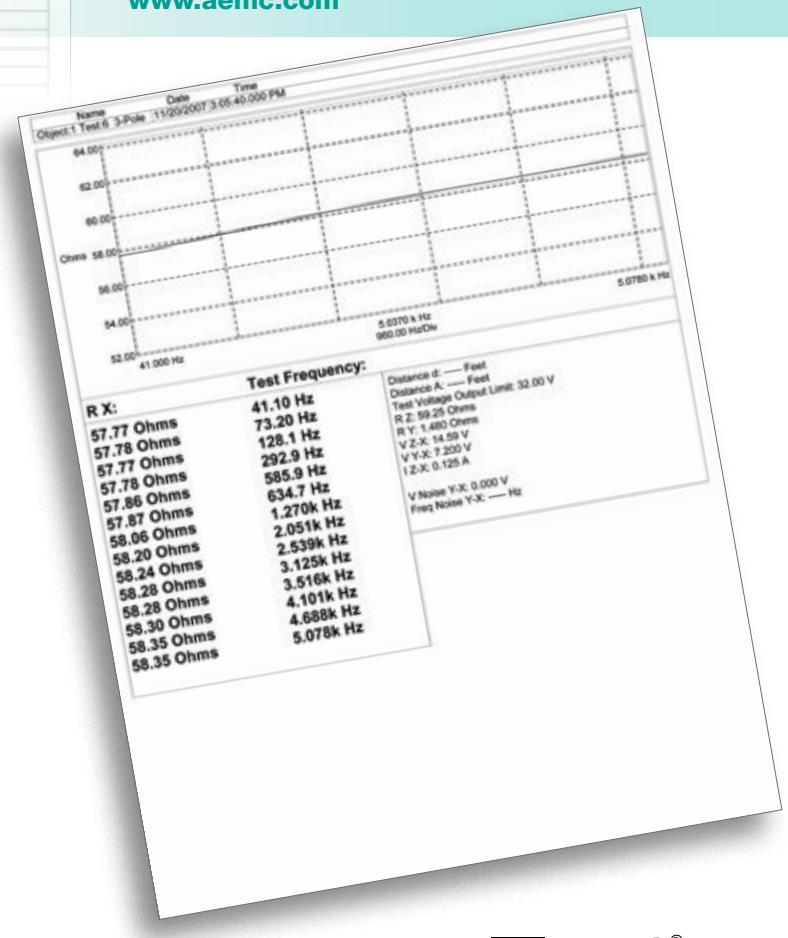
AUTOMATIC REPORT GENERATION

Configure all functions of the Models 6470-B, 6471 & 6472

- Run tests and analyze real-time data from your PC
- Configure all test functions and parameters from your PC
- Customize views, templates and reports to your exact needs
- Display Fall-of-Potential plots, tabular listings of test results, resistance vs. frequency plots, soil resistivity and bonding tests
- Print reports using standard or custom templates you design
- Free updates are available on our website **www.aemc.com**



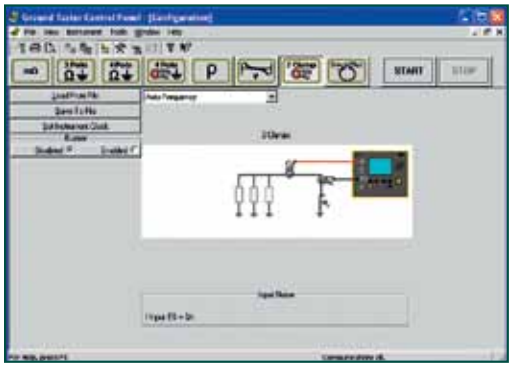
DataView® software provides a convenient way to configure and control ground resistance tests from your computer. Through the use of clear and easy-to-use tabbed dialog boxes, all ground tester functions can be configured and tests can be initiated. Results can be displayed in real-time and stored in your PC. Reports may be printed along with the operator's comments and analysis.



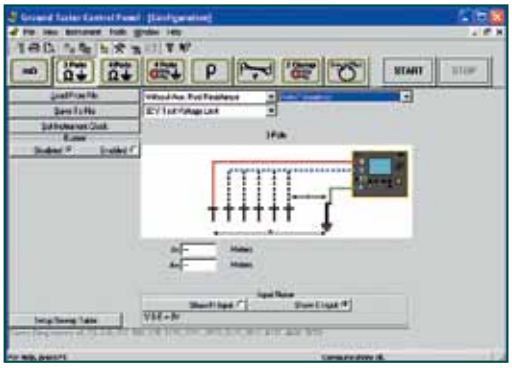
Ground Testers Models 6470-B, 6471 & 6472

Typical DataView® Functional Displays

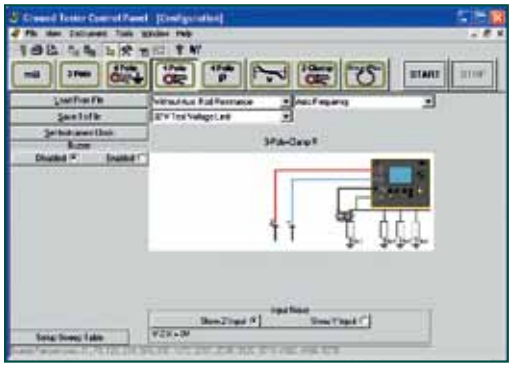
2 Clamp Method Setup



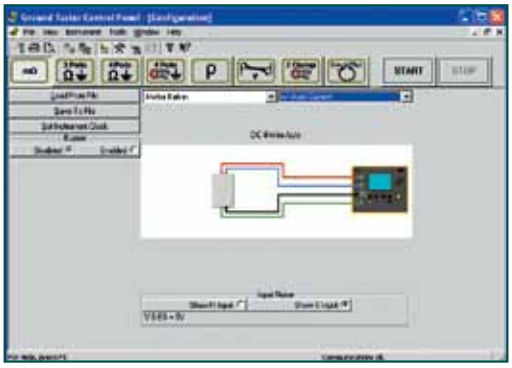
Fall-of-Potential, Step-Touch Potential



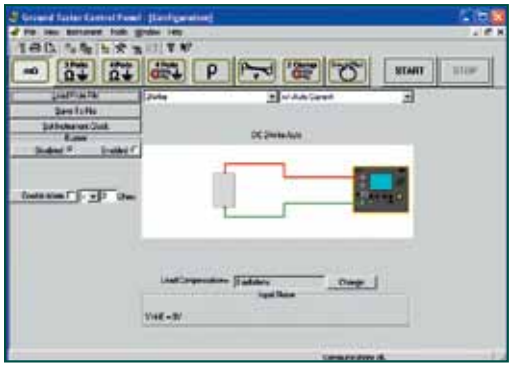
Selective 3-Point Testing of Multiple Rods



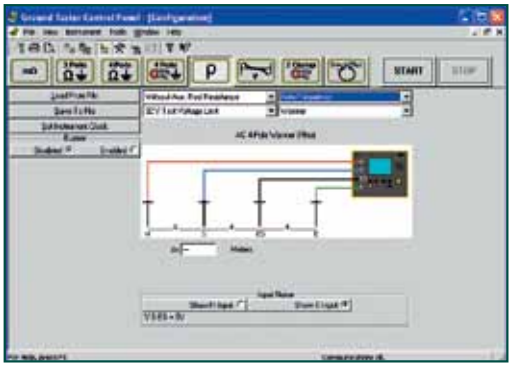
4-Point Bonding For Very Low Resistance



Bonding



Soil Resistivity



▶OPTIONAL KITS

150 ft Kit

Catalog #2135.35
Test Kit for 3-Point testing includes two 150 ft color-coded leads on spools (red and blue), two 5 ft color-coded leads (red/blue), one 30 ft lead (green), two 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs, 100 ft tape measure and carrying bag.

300 ft Kit

Catalog #2135.36
Test Kit for 4-Point testing includes two 300 ft color-coded leads on spools (red and blue), two 5 ft color-coded leads (red/blue), two 100 ft color-coded leads (green and black), four 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs, 100 ft tape measure and carrying bag.

500 ft Kit

Catalog #2135.37
Test Kit for 4-Point testing includes two 500 ft color-coded leads on spools (red and blue), two 5 ft color-coded leads (red/blue), two 100 ft color-coded leads (green and black), one 30 ft lead (green), four 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs, 100 ft tape measure and carrying bag.