GROUND RESISTANCE TESTERS

Multi-Function



Model 6472



Used under difficult conditions such as the presence of high stray currents that normally affect accuracy





Have a better understanding about **Ground Resistance** Testing





The Model 6472 provides an automated way to measure the value of the earth/ground using the Fall-of-Potential method and storing measurements.

►TEST KITS

6472 Meter

300ft Kit: Catalog #2135.53 500ft Kit: Catalog #2135.54

Refer to page 40 for Model 6472 Kit descriptions Catalog #2135.35, #2135.36 & #2135.37



►ACCESSORIES

► MN82 current probe (2mA to 10Arms)

Catalog #2135.71 (optional)



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

► SR182 current probe (0.5mA to 40Arms) Catalog #2135.72 (optional)



▶ SPECIFICATIONS









	cover closed							
MODEL	6472							
ELECTRICAL								
3-Point Measurement								
Range (Auto-Ranging)	0.09Ω to 99.9 k Ω							
Resolution	0.01 to 100Ω							
Test Voltage	Nominal 16 or 32Vrms user selectable							
Resistance Measurement Frequency	41 to 5078Hz automatic or user selectable							
Test Current	Up to 250mA							
Accuracy	±2% of Reading + 1ct @ 128Hz							
2 Clamp Measurement								
Range	0.1 to 500Ω							
Resolution	0.01 to 1Ω							
Measurement Frequency	Auto: 1611Hz Manual: 128Hz-1367Hz-1611Hz-1758Hz							
Soil Resistivity 4-Point Meas	urement							
Test Method	Wenner or Schlumberger selectable with							

Accuracy	±2 /0 Of heading + Tot @ 120112					
2 Clamp Measurement						
Range	0.1 to 500Ω					
Resolution	0.01 to 1Ω					
Measurement Frequency	Auto: 1611Hz Manual: 128Hz-1367Hz-1611Hz-1758Hz					
Soil Resistivity 4-Point Me	asurement					
Test Method	Wenner or Schlumberger selectable with automatic calculation of test results in $\Omega\text{-meters}$					
Range (Auto-Ranging)	0.01 to 99.99k Ω ; ρ max: 999k Ω m					
Resolution	0.01 to 100Ω					
Test Voltage	16 or 32V user selectable					
Frequency	From 41 to 128Hz selectable					
External Voltage Measure	ment					
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 0.02 Ω to 99.99k Ω ; 4-Pole 0.02 Ω to 99.99k Ω					
Accuracy	±2% of Reading + 2cts					
Test Voltage	16Vpc (+, - or auto polarity)					
Test Current	Up to 250mA max					



512 test results (64KB)

9.6V rechargeable battery pack (included)

110/220V, 50/60Hz external charger

with 18Vpc, 1.9A output

Data Storage

Power Source

Memory Capacity

Recharging Source

Model 6472

Large Functional Displays

▶FEATURES

- Ground Integrity® Measurement
- Ground Resistance testing using the 2 clamp method (no auxiliary rods needed) using optional current probes
- 2- and 4-Wire 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
- Measures Ground Impedance at frequencies up to 5kHz to test lightning strike protection
- Manual and automatic frequency scan from 41 to 5078Hz for optimum test accuracy in electrically noisy environments
- Selectable test voltage of 16 or 32V up to 250mA of test current
- Auto Power OFF feature
- Automatic recognition of all electrode connections and their resistance value
- Stores up to 512 complete test results
- Display with automatic backlight when entering a function
- Optically isolated USB communication cable included
- Automatic report generation including the fall of potential plot
- Rechargeable NiMH batteries from wall charger or vehicle power
- Rugged dustproof and rainproof field case IP53 rated in closed position
- Includes DataView® software for set up, 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.

Schlumberger Test



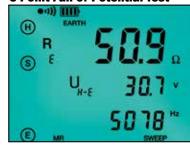
The Schlumberger test displays test lead connection, soil resistivity (ρ) test results, test electrode resistance and more.

Data Storage



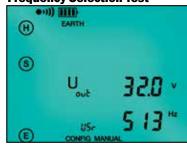
Memory Recall displays test results stored at a specific memory location.

3-Point Fall-of-Potential Test



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

Frequency Selection Test



The Frequency selection screen displays selected test frequency and voltage for the test as well as lead connection.

Wenner Test



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

CATALOG NO.	DESCRIPTION						
2135.51	Ground Resistance Tester Model 6472 (2-Point, 3-Point, 4-Point, Bond Test, Digital, Rechargeable Battery, DataView® software)						
2135.53	Ground Resistance Tester Model 6472 Kit – 300ft (Model 6472 and Catalog #2135.36)						
2135.54	Ground Resistance Tester Model 6472 Kit – 500ft (Model 6472 and Catalog #2135.37)						
Accessories (Optional) available on website storefront							
2135.71*	AC Current Probe Model MN82 for use with Model 6472						
2135.72*	AC Current Probe Model SR182 for use with Model 6472						
2135.85	Caddy – Set of 2, Reel Caddy for use w/Ground Kit Spools						

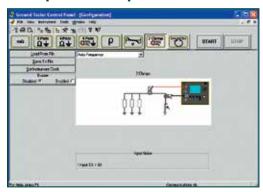
^{*2} probes required for two clamp testing method.



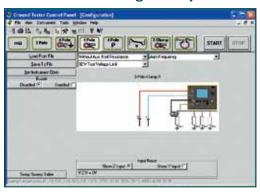
Ground Testers Models 6471 & 6472

Typical DataView® Functional Displays

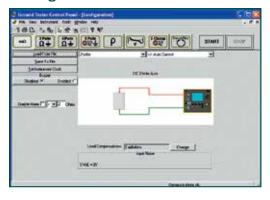
2 Clamp Method Setup



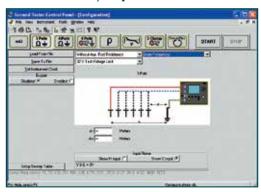
Selective 3-Point Testing of Multiple Rods



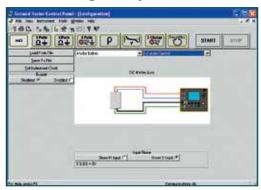
Bonding



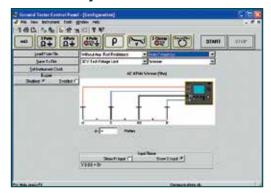
Fall-of-Potential, Step-Touch Potential



4-Point Bonding For Very Low Resistance



Soil Resistivity



▶OPTIONAL KITS

150ft Kit

Catalog #2135.35 Test Kit for 3-Point testing includes carrying bag, two 150ft

carrying bag, two foots color-coded leads on spools (red/blue), two 5ft color-coded leads (red/blue), one 30ft lead (green), two 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs and 100ft tape measure.

300ft Kit

Catalog #2135.36 Test Kit for 4-Point testing includes carrying bag, two

300ft color-coded leads on spools (red/blue), two 5ft color-coded leads (red/blue), two 100ft color-coded leads (green and black), four 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs and 100ft tape measure.

500ft Kit

Catalog #2135.37 Test Kit for 4-Point

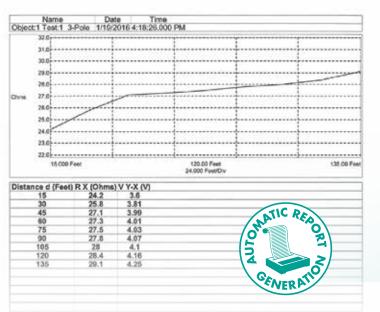
testing includes carrying bag, two 500ft color-coded leads on spools (red/blue), two 5ft color-coded leads (red/blue), two 100ft color-coded leads (green and black), one 30ft lead (green), four 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs and 100ft tape measure.



Data View®

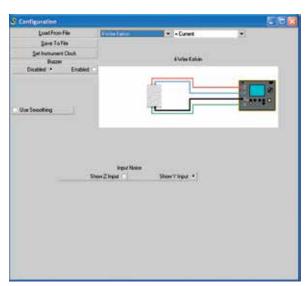
Data Analysis and Reporting Software for Ground Testers



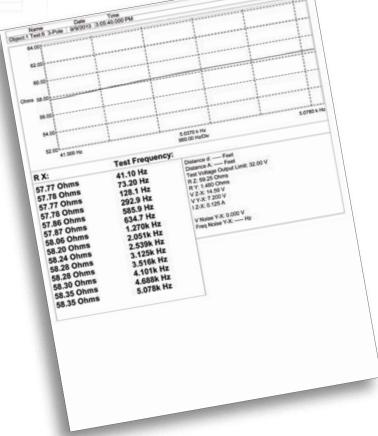


Configure all functions of the Models 6417, 6471 & 6472

- 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 (Models 6471 & 6472)
- 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 RESISTANCE TESTERSelection Chart

AEMC Model Number	AEMC CATALOG NUMBER	RESISTANCE Range	POWER Source	2 Point Test	3 POINT TEST	4 Point/ Selective	SOIL RESISTIVITY TEST	EARTH Coupling	2 CLAMP	BONDING	DISPLAY	VOLTAGE INDICATION	INDUCTANCE INDICATION	SWEEP FREQUENCY
6416	2141.01	0.01 to 1500Ω	Battery	Clamp		ound Resista arm & Memo		-	-	√ **	Digital	Voltage Displayed (noise icon, buzzer)	✓	_
6417	2141.02	0.01 to 1500Ω	Battery	Clamp-On Ground Resistance Tester w/Alarm, Memory & <i>Bluetooth</i> communication				-	_	√ **	Digital	Voltage Displayed (noise icon, buzzer)	✓	_
GroundFlex [®] Field Kit Model 6474	2136.03	0.001Ω to 99.99kΩ	Rechargeable Battery	_	✓	✓	✓	✓	_	√	Digital	Value Displayed	_	✓
6471 (SR182 probes not included)	2135.48		Rechargeable Battery	✓	✓	√	√	√	✓	✓	Digital	Value Displayed	-	_
6471	2135.49	0.01 to 99.99kΩ												
6471 Kit 300FT	2135.50													
6472	2135.51				✓	√	✓	√	√	✓	Digital	Value Displayed	_	
6472 Kit 300FT	2135.53	0.01 to 99.99kΩ	Rechargeable Battery	✓										✓
6472 Kit 500FT	2135.54													
4620	2130.43	0.0 to	Battery	✓	✓	_	✓				Digital	LED/Buzzer	_	-
4620 Kit 150FT	2135.19	1999Ω					√ ∗							
4620 Kit 300FT	2135.20	0.0 to 2000Ω	Battery	✓	✓	_	✓	_	_	_	Digital	LED/Buzzer	_	_
4620 Kit 500FT	2135.21	0.0 to 1999Ω	Battery	✓	✓	_	✓	_	_	_	Digital	LED/Buzzer	_	_
4630	2130.44			√	√	_	✓	_	_	_	Digital	LED/Buzzer	_	_
4630 Kit 150FT	2135.22	0.0 to 1999Ω	Rechargeable Battery				√ ∗							
4630 Kit 300FT	2135.23						✓							
4630 Kit 500FT	2135.24						✓							
3640	2114.92	0.0 to 1999Ω		√	✓	_	_	_	_	_	Digital	LED	_	_
3640 Kit 150FT	2135.13													
3640 Kit 300FT	2135.14													

^{*} Performing soil resistivity tests with this kit requires two additional auxiliary electrodes not supplied in the 150ft kit and one additional test lead.



^{**} Clamp-on Ground Resistance Tester can measure system continuity inclusive of all bonding points.