

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



► SPECIFICATIONS





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)





MODEL 6472 ELECTRICAL 3-Point Measurement 0.09Ω to $99.9k\Omega$ Range (Auto-Ranging) 0.01 to 100 Ω Resolution Test Voltage Nominal 16 or 32Vrms user selectable 41 to 5078Hz automatic **Resistance Measurement** Frequency 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 Measurement Test Method Wenner or Schlumberger selectable with automatic calculation of test results in Ω -meters 0.01 to 99.99k Ω ; ρ max: 999k Ω m Range (Auto-Ranging) Resolution 0.01 to 100Ω Test Voltage 16 or 32V user selectable From 41 to 128Hz selectable Frequency **External Voltage Measurement** 0.1 to 65.0Vac/pc - DC to 440Hz Range (Auto-Ranging) ±2% of Reading + 1ct Accuracy 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 $99.99k\Omega$; 4-Pole 0.02Ω to $99.99k\Omega$ ±2% of Reading + 2cts Accuracy Test Voltage 16Vpc (+, - or auto polarity) Test Current Up to 250mA max Data Storage 512 test results (64KB) Memory Capacity 9.6V rechargeable battery pack (included) **Power Source** 110/220V, 50/60Hz external charger **Recharging Source** with 18Vpc, 1.9A output





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Catalog #2135.85 (optional)

Set of two, for use with

Reel Caddy

ground kit spools

Model 6472

Large Functional Displays

► FEATURES

- 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 (p) 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

DECODIDITION

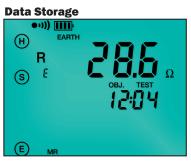
4-Point Bond Test



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

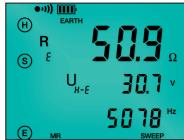


The Schlumberger test displays test lead connection, soil resistivity (ρ) test results, test electrode resistance and more.



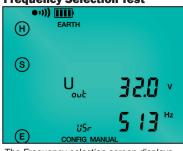
Memory Recall displays test results stored at a specific memory location.

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.

GAIALUG NU.	DESCRIPTION		
		PRICE	NIST CALIBRATION
2135.51	Ground Resistance Tester Model 6472 (2-Point, 3-Point, 4-Point, Bond Test, Digital, Rechargeable Battery, DataView® software)	\$3,795.00	\$105.00
2135.53	Ground Resistance Tester Model 6472 Kit – 300ft (Model 6472 and Catalog #2135.36)	\$4,299.00	\$105.00
2135.54	Ground Resistance Tester Model 6472 Kit – 500ft (Model 6472 and Catalog #2135.37)	\$4,449.00	\$105.00
Accessories (Optio	onal) available on website storefront		
2135.71*	AC Current Probe Model MN82 for use with Model 6472	\$ 299.00	\$68.00
2135.72*	AC Current Probe Model SR182 for use with Model 6472	\$ 369.00	\$68.00
2135.85	Caddy – Set of 2, Reel Caddy for use w/Ground Kit Spools	\$ 80.00	_
*2 probas required t	for two clamp testing method		

*2 probes required for two clamp testing method

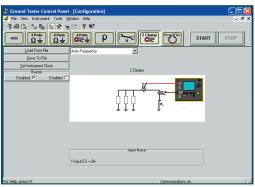


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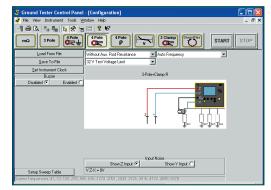
Ground Testers Models 6471 & 6472

Typical DataView® Functional Displays

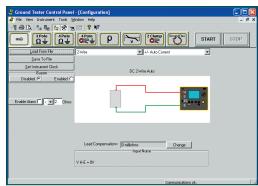
2 Clamp Method Setup



Selective 3-Point Testing of Multiple Rods



Bonding



OPTIONAL KITS

150ft Kit

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

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

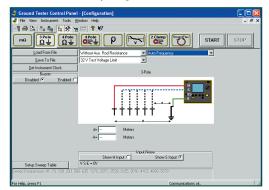
Catalog #2135.36 Test Kit for 4-Point testing includes carrying bag, two

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.



two 500ft coll bools (red/blue), spools (red/blue), (/blue), two 100ft (red/blue), tw black), four 14.5" and black), o ctrodes, one set T-shaped aux

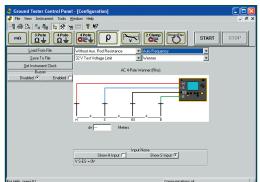
Fall-of-Potential, Step-Touch Potential



4-Point Bonding For Very Low Resistance

🕹 Ground Tester Control Panel	- [Configuration]
🦑 File View Instrument Tools 🗄	éndow Help _ 🗗 :
- 📲 🖧 🖕 🐜 💺 🗶 😁	1 🖾 🦹 🐕
mΩ 3Pole Ω± 4Pole Ω±	
Load From File	43Wire Kelvin 💌 +/- Auto Durrent 💌
Save To File	
Set Instrument Clock Buzzer	DC 4-Wire Auto
Disabled C Enabled C	
	Show Hinput C Show Silout C
For Help, press F1	Communications ok.

Soil Resistivity



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.

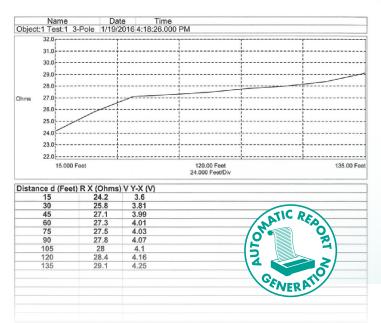


DATAVIEW® Software for Ground Resistance Testers

DataView[®]

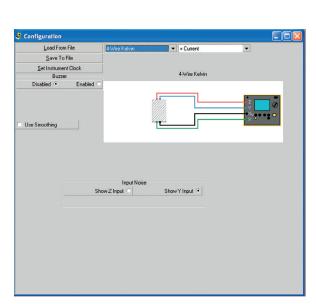
Data Analysis and Reporting Software for Ground Testers





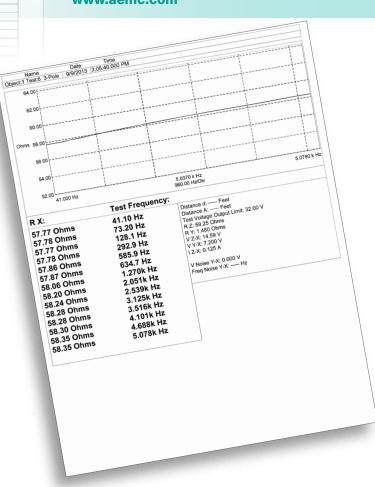
Configure all functions of the Models 6417, 6471 & 6472

- 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 TESTER Selection 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-On Ground Resistance Tester w/Alarm & Memory				_	—	✓ **	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	0.01 to 99.99kΩ													
6471	2135.49		Rechargeable Battery	*	~	√	~	✓	~	√	Digital	Value Displayed	_	_	
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 1999Ω		Battery	√	√		~				Digital	LED/Buzzer		
4620 Kit 150FT	2135.19		Dattery	¥	, v		√ *				Digitai	LLD/Duzzei		_	
4620 Kit 300FT	2135.20	0.0 to 2000Ω	Battery	~	\checkmark	_	~	_	_	_	Digital	LED/Buzzer	_	_	
4620 Kit 500FT	2135.21	0.0 to 1999Ω	Battery	~	~	_	\checkmark	_	_	_	Digital	LED/Buzzer	_	_	
4630	2130.44			✓	✓										
4630 Kit 150FT	2135.22	0.0 to	Rechargeable		~	_	√ *	·	_	_		LED/Buzzer		_	
4630 Kit 300FT	2135.23	0.0 to 1999Ω		 ✓ 			✓				Digital				
4630 Kit 500FT	2135.24						~								
3640	2114.92	0.0 to 1999Ω													
3640 Kit 150FT	2135.13		0.0 to 1999Ω Battery	\checkmark	✓	_	_	_	_	—	Digital	LED	-	_	
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.

