

## **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 $0.09\Omega$ to $99.9k\Omega$ Range (Auto-Ranging) 0.01 to 100 $\Omega$ 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 $500\Omega$ Resolution 0.01 to $1\Omega$ 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 $\Omega$ -meters 0.01 to 99.99k $\Omega$ ; $\rho$ max: 999k $\Omega$ 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 $0.02\Omega$ to $99.99k\Omega$ ; 4-Pole $0.02\Omega$ 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<sup>®</sup> software for set up, data storage, real-time display, analysis, report generation and system configuration

DECODIDITION

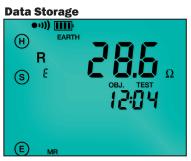
#### **4-Point Bond Test**



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

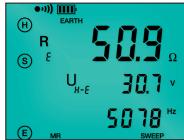


The Schlumberger test displays test lead connection, soil resistivity ( $\rho$ ) test results, test electrode resistance and more.



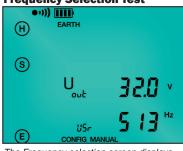
Memory Recall displays test results stored at a specific memory location.

#### **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 ( $\rho$ ) 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

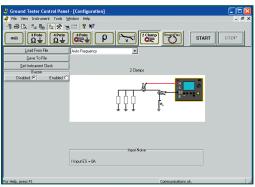


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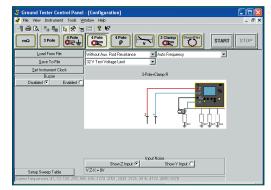
## Ground Testers Models 6471 & 6472

## **Typical DataView® Functional Displays**

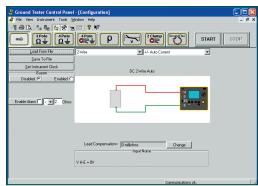
#### 2 Clamp Method Setup



#### **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

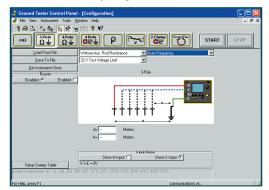
**Catalog #2135.36** Test Kit for 4-Point testing includes carrying bag, two

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

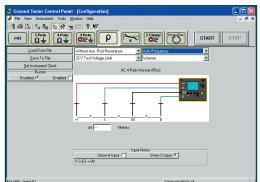
#### Fall-of-Potential, Step-Touch Potential



#### **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.

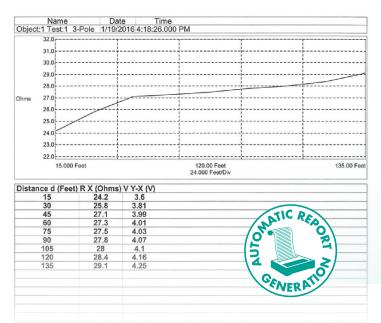


## **DATAVIEW®** Software for Ground Resistance Testers

# DataView<sup>®</sup>

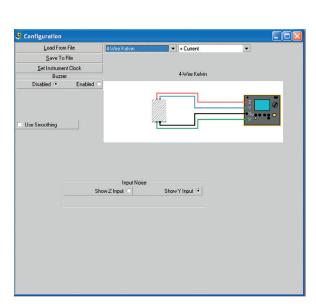
## **Data Analysis and Reporting Software for Ground Testers**





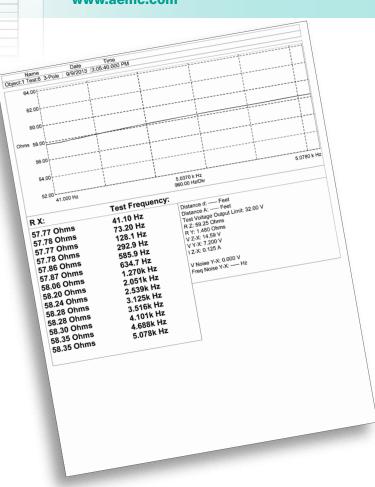
## Configure all functions of the Models 6417, 6471 & 6472

- 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 <sup>©</sup> 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	*	~	<b>√</b>	~	✓	~	<b>√</b>	Digital	Value Displayed	_	_	
6471 Kit 300FT	2135.50														
6472	2135.51				<ul> <li>✓</li> </ul>	~	~	~		~	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	<b>√</b>	<b>√</b>		~				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		<ul> <li>✓</li> </ul>			✓				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.

