

### Models 6416 & 6417

Provides high safety level with new ground voltage indication feature

#### SPECIFICATIONS

MODELS	6416 & 6417			
<b>ELECTRICAL</b>				
<b>Ground Resistance</b>	<b>Measurement Range</b>	<b>Resolution</b>	<b>Accuracy (% of Reading)</b>	
Auto-Ranging 1 to 199Ω	0.010 to 0.099Ω	0.001Ω	±1.5% ±0.01Ω	
	0.10 to 0.99Ω	0.01Ω	±1.5% ±0.02Ω	
	1.0 to 49.9Ω	0.1Ω	±1.5% ±0.1Ω	
	50.0 to 99.5Ω	0.5Ω	±2% ±0.5Ω	
	100 to 199Ω	1Ω	±3% ±1Ω	
	200 to 395Ω	5Ω	±5% ±5Ω	
	400 to 590Ω	10Ω	±10% ±10Ω	
	600 to 1150Ω	50Ω	20% approx	
<b>Current Measurement</b>	0.200 to 0.999mA	1μA	±2% ±50μA	
	Auto-Ranging 1mA to 40A	1.000 to 2.990mA	10μA	±2% ±50μA
		3.00 to 9.99mA	100μA	±2% ±100μA
	10.00 to 29.90mA	1mA	±2% ±1mA	
	30.0 to 99.9mA	10mA	±2% ±10mA	
<b>Selectable Measurement Frequency</b>	50, 60, 128 or 2083Hz			
<b>Current Measurement Frequency</b>	47 to 800Hz			
<b>Inductance Measurement</b>	10 to 100μH; 100 to 500μH			
<b>Current Overload</b>	OL displayed above 39.99Arms			
<b>Communication</b>	Bluetooth connection (Model 6417 only)			
<b>Power Source</b>	4x1.5V LR6 (AA) Alkaline batteries or 4 NiMH batteries; Battery life: 12 hours, or 1440 30-second measurements approx.			



\*Model 6417 only

#### FEATURES

- Ground Integrity® Measurement
- Ground voltage indication (warns of possible unsafe conditions)
- Large multi-function bright yellow organic LED display (OLED)
- Selectable test frequency (improves accuracy in inductive environments)
- Clamping diameter of 1.37" (35mm) with large jaw design
- Storage of measurements (Ω and/or A, with time-stamping)  
Model 6416: up to 300 measurements stored  
Model 6417: up to 2000 measurements stored
- View stored measurements on the OLED display or via Bluetooth (Class 2 - communicates up to 30ft) to a PC or the Android™ based mobile application (Model 6417)
- Auto Power OFF function
- Alarm function with adjustable set point and buzzer for quick field checks for volts, amps and ohms
- Rugged Lexan® head and body construction resists breakage
- Alarm settings and stored memory information saved during shutdown
- Includes DataView® software for data storage, real-time display, analysis, report generation and system configuration (Model 6417)
- Noise icon and buzzer alert user to presence of dangerous voltage and current levels
- Designed to EN 61010-1, 600V CAT IV safety standards

#### PRODUCT INCLUDES

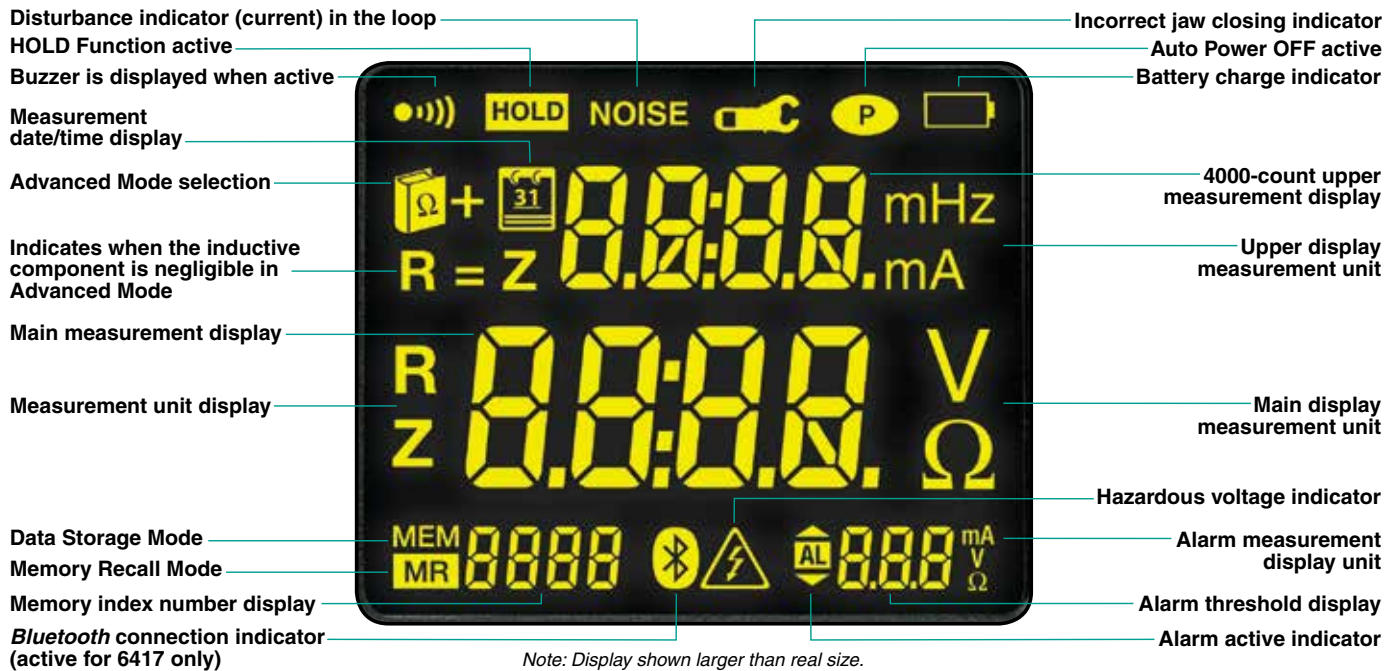
Model 6416 includes a hard carrying case, calibration loop, four 1.5V AA batteries and user manual.

Model 6417 also includes a Bluetooth USB adapter, quick start guide, and a USB drive with DataView® software, ground workbook and user manual.



## Models 6416 & 6417

### Functional Displays



#### Measurement Results



Displays the leakage current and loop impedance at the test frequency

#### Memory Recall Mode



Measurement storage date-time screen

#### Alarm



Indicates voltage/current alarm threshold along with the direction of impedance

#### Ground Voltage



Indicates voltage potential at the point of measurement

#### Current Disturbance



Indicates that the current is greater than 10A

#### Impedance Over Range



Indicates that the impedance is greater than 1500Ω

CATALOG NO.	DESCRIPTION
2141.01	Ground Resistance Tester Model 6416 (Clamp-On, Alarm, Memory)
2141.02	Ground Resistance Tester Model 6417 (Clamp-On, Bluetooth, Alarm, Memory)

# GROUND RESISTANCE TESTER

## Selection Chart

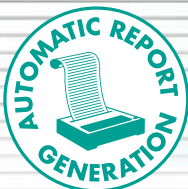
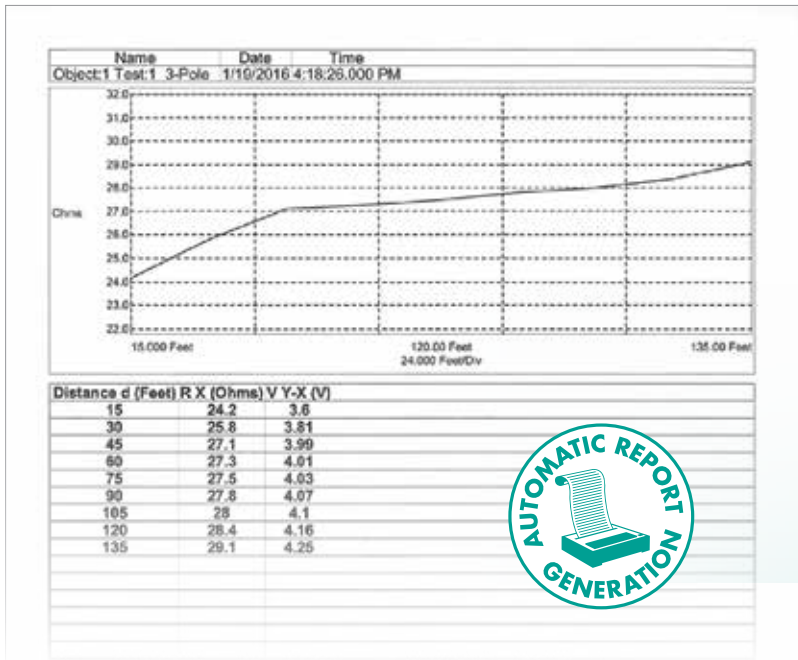
AEMC MODEL NUMBER	AEMC CATALOG NUMBER	RESISTANCE RANGE	POWER SOURCE	2 POINT TEST	3 POINT TEST	4 POINT/ SELECTIVE	SOIL RESISTIVITY TEST	EARTH COUPLING	2 CLAMP	BONDING	DISPLAY	VOLTAGE INDICATION	INDUCTANCE INDICATION	SWEEP FREQUENCY	
6416	2141.01	0.01 to 1500Ω	Battery	Clamp-On Ground Resistance Tester 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 & Bluetooth 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	Rechargeable Battery	—	—	—	—	—	—	—	—	—	—	—	
6471	2135.49			✓	✓	✓	✓	✓	✓	✓	Digital	Value Displayed	—	—	
6471 Kit 300FT	2135.50			—	—	—	—	—	—	—	—	—	—	—	—
6472	2135.51	0.01 to 99.99kΩ	Rechargeable Battery	—	—	—	—	—	—	—	—	—	—	—	
6472 Kit 300FT	2135.53			✓	✓	✓	✓	✓	✓	✓	Digital	Value Displayed	—	✓	
6472 Kit 500FT	2135.54			—	—	—	—	—	—	—	—	—	—	—	—
4620	2130.43	0.0 to 1999Ω	Battery	✓	✓	—	✓	—	—	—	Digital	LED/Buzzer	—	—	
4620 Kit 150FT	2135.19			—	—	—	✓*	—	—	—	—	—	—	—	
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	0.0 to 1999Ω	Rechargeable Battery	—	—	—	✓	—	—	—	—	—	—	—	
4630 Kit 150FT	2135.22			—	—	—	✓*	—	—	—	—	Digital	LED/Buzzer	—	—
4630 Kit 300FT	2135.23			✓	✓	—	✓	—	—	—	—	—	—	—	—
4630 Kit 500FT	2135.24			—	—	—	✓	—	—	—	—	—	—	—	—
3640	2114.92	0.0 to 1999Ω	Battery	—	—	—	—	—	—	—	—	—	—	—	
3640 Kit 150FT	2135.13			✓	✓	—	—	—	—	—	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.

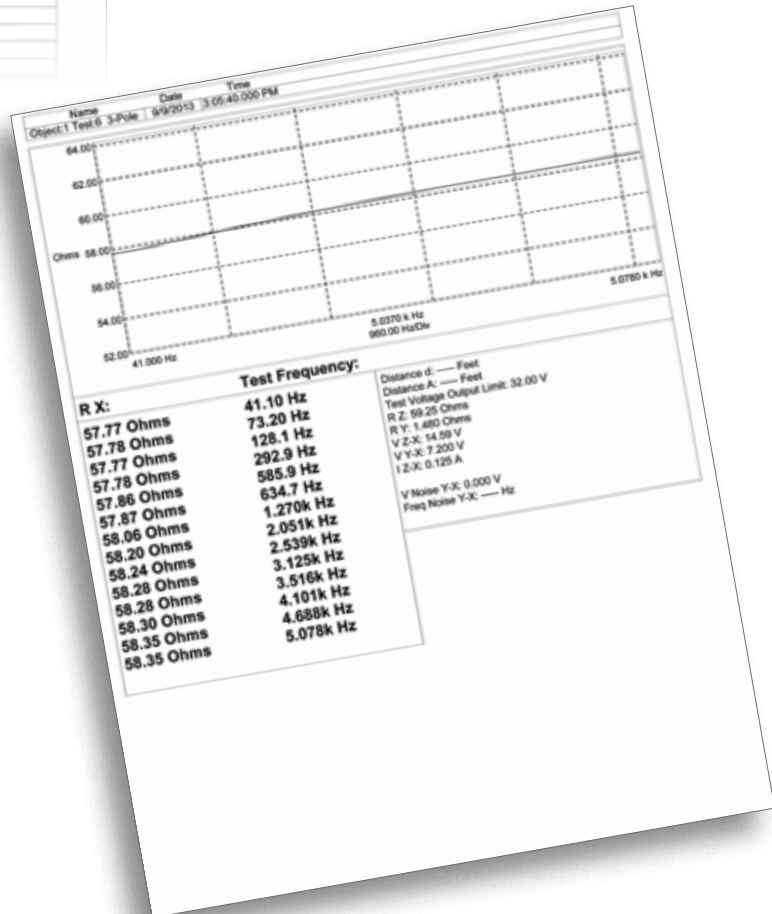
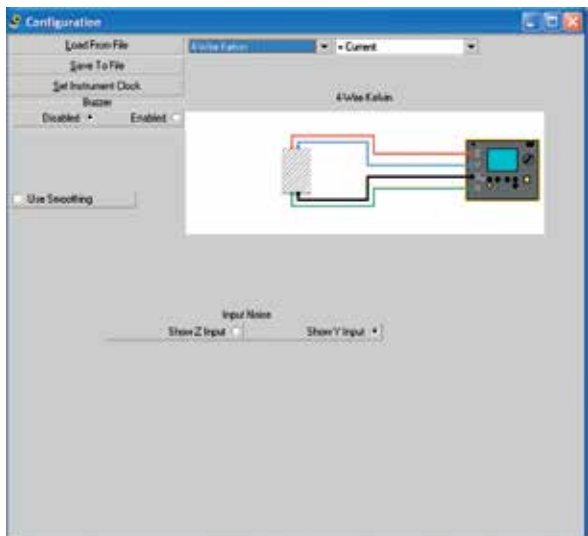
# DataView®

Data Analysis and Reporting Software for Ground Testers



## Configure all functions of 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](http://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.