

# GROUND RESISTANCE TESTERS

## CLAMP-ON



### MODELS 6416 & 6417

Provides high safety level with new ground voltage indication feature

## SPECIFICATIONS

MODELS	6416 & 6417		
ELECTRICAL			
Ground Resistance  Auto-Ranging 0.01 to 1499Ω	Measurement Range	Resolution	Accuracy (% of Reading)
	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
1200 to 1500Ω	50Ω	25% approx	
Current Measurement  Auto-Ranging 1mA to 40A	0.200 to 0.999mA	1μA	±2% ±50μA
	1.000 to 2.990mA 3.00 to 9.99mA	10μA	±2% ±50μA
	10.00 to 29.90mA 30.0 to 99.9mA	100μA	±2% ±100μA
	100.0 to 299.0mA 0.300 to 0.990A	1mA	±2% ±1mA
	1.000 to 2.990A 3.00 to 39.99A	10mA	±2% ±10mA
Selectable Measurement Frequency	50, 60, 128 or 2083Hz		
Current Measurement Frequency	47 to 800Hz		
Inductance Measurement	10 to 100μH; 100 to 500μH		
Current Overload	OL displayed above 39.99Arms		
Communication	Bluetooth connection (Model 6417 only)		
Power Source	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 retrieval, 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.



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)



Technical Assistance (800) 343-1391

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# GROUND RESISTANCE TESTERS

## CLAMP-ON

### Functional Displays



#### MEASUREMENT RESULTS



#### MEMORY RECALL MODE



#### ALARM



#### LOOP DETECTION



#### GROUND VOLTAGE



#### IMPEDANCE OVER RANGE



# GROUND RESISTANCE TESTERS

## 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												
4630	2130.44	0.0 to 1999Ω	Rechargeable Battery	✓	✓	—	✓	—	—	—	Digital	LED/Buzzer	—	—
4630 Kit 150FT	2135.22						✓*							
4630 Kit 300FT	2135.23													
4630 Kit 500FT	2135.24						✓							

\* 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.