

GROUND RESISTANCE TESTERS

CLAMP-ON

MODEL 6418

Designed for measuring ground impedance on ground rods and bus bars

SPECIFICATIONS

MODEL	6418		
ELECTRICAL			
Ground Resistance Auto Ranging	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% ±0.2Ω
	50.0 to 149Ω	1Ω	±2.5% ±2Ω
	150 to 245Ω	5Ω	±5% ±10Ω
	250 to 440Ω	10Ω	±10% ±20Ω
	450 to 640Ω	10Ω	±15% ±20Ω
650 to 1200Ω	50Ω	±20% Reading +100Ω	
Measurement Frequency	2083Hz		
Current Measurement	0.50 to 9.950mA	50μA	±2% +200μA
	10.00 to 99.90mA	100μA	±2% +100μA
Auto Ranging 1mA to 40A	100.0 to 299.0mA	1mA	±2% ±1mA
	0.300 to 2.990A	10mA	±2% ±10mA
	3.000 to 20.00A	100mA	±2% ±100mA
Current Measurement Frequency	47 to 800Hz		
Current Overload	OL displayed above 19.99Arms		
Power Source	(4) 1.5V LR6 (AA) alkaline batteries or (4) NiMH batteries; Battery life: 12 hours, or 1440 30-second measurements approx.		

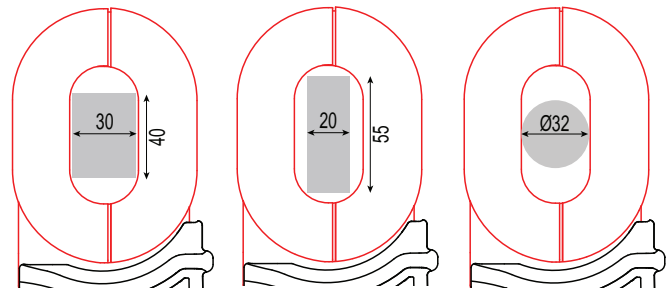
Consult factory for NIST Calibration prices

PRODUCT INCLUDES

Hard carrying case,
5Ω calibration loop,
(4) 1.5V AA batteries,
wrist strap and a
user manual.



CLAMPING CHARACTERISTICS



FEATURES

- Ground Integrity Measurement
- Large multi-function bright yellow OLED (organic LED display) 1.89 x 1.55" (48 x 39mm)
- Clamping diameter accommodates both cable and bus bar
- Storage of measurements (Ω and/or A, with time-stamping)
- Up to 300 measurements stored
- View stored measurements on the OLED display
- Auto Power OFF function
- Auto Hold
- Alarm function with adjustable set point and buzzer for quick field checks for amps and ohms
- Rugged Lexan® head and body construction resists breakage
- Alarm settings and stored memory information saved during shutdown
- Noise icon and buzzer alert user to presence of dangerous current levels
- Designed to EN 61010-1, 100V CAT IV and 150V CATIII safety standards
- Automatic calibration of the jaw gap at power-up

CATALOG NO.

2141.03

DESCRIPTION

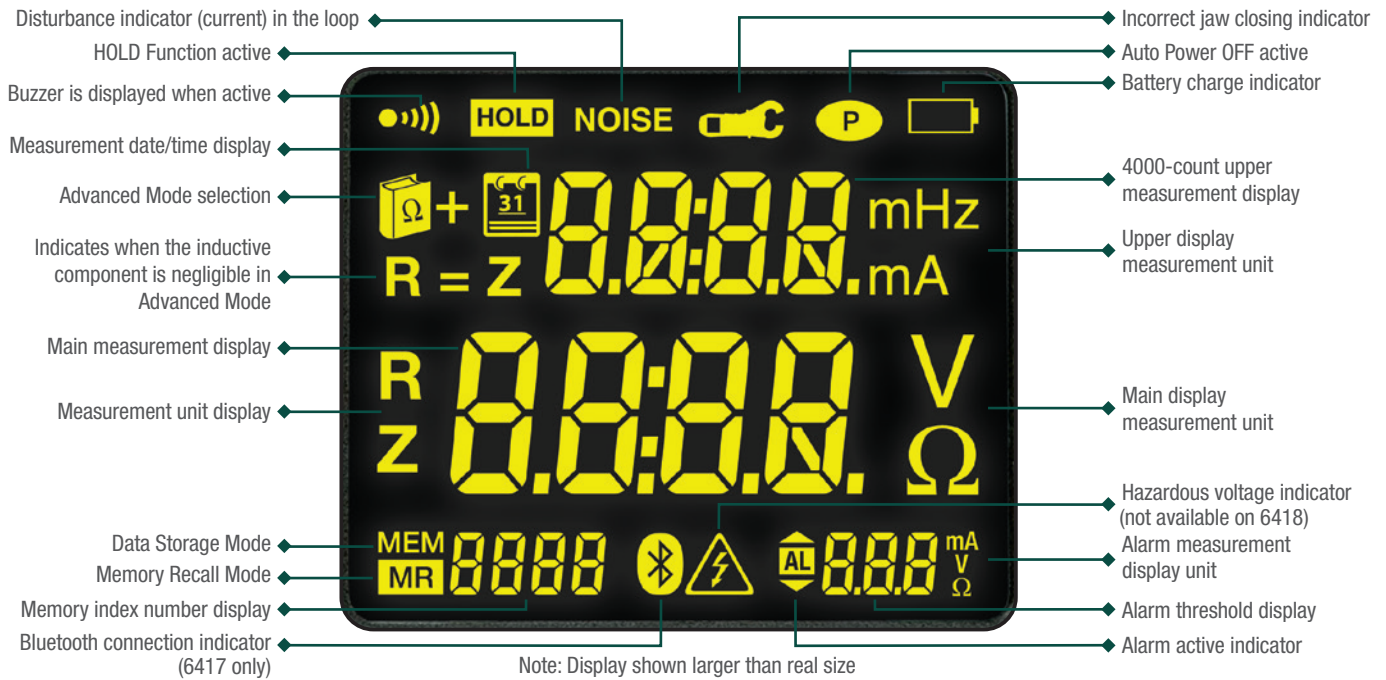
Ground Resistance Tester Model 6418 (Clamp-On, Alarm, Memory, Oblong Jaws)



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FUNCTIONAL DISPLAYS



MEASUREMENT RESULTS



Displays the leakage current and loop impedance at the test frequency

MEMORY RECALL MODE



Measurement storage date-time screen

ALARM



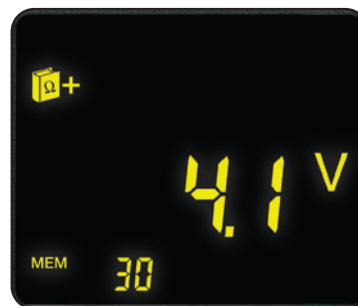
Indicates voltage/current alarm threshold along with the direction of impedance

LOOP DETECTION



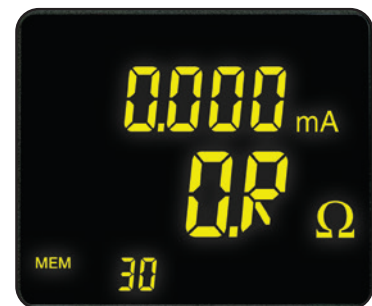
Detects and displays possible false readings associated with metal loops

GROUND VOLTAGE



Indicates voltage potential at the point of measurement

IMPEDANCE OVER RANGE



Indicates that the impedance is greater than 1500Ω

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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 and Memory				-	✓	✓**	Digital	Voltage Displayed (noise icon, buzzer)	✓	-
6417	2141.02	0.01 to 1500Ω	Battery	Clamp-On Ground Resistance Tester w/Alarm, Memory and Bluetooth communication				-	✓	✓**	Digital		✓	-
6418	2141.03	0.01 to 1200Ω	Battery	Clamp-On Ground Resistance Tester w/Alarm and Memory				-	✓	✓**	Digital	Noise Icon	-	-
6422	2135.55	0.05 to 50kΩ	Battery	✓			-			✓	Digital	Noise Icon	-	-
6422 Kit 150FT	2135.56	0.05 to 50kΩ	Rechargeable Battery	✓			-			✓	Digital	Noise Icon	-	-
6424	2135.57	0.05 to 50kΩ	Rechargeable Battery	✓			-			✓	Digital	Noise Icon	-	-
6424 Kit 150FT	2135.58	0.05 to 50kΩ	Rechargeable Battery	✓			-			✓	Digital	Noise Icon	-	-
6424 Kit 300FT	2135.59	0.05 to 50kΩ	Rechargeable Battery	✓			-			✓	Digital	Noise Icon	-	-
GroundFlex® Field Kit Model 6474	2136.03	0.001Ω to 99.99kΩ	Rechargeable Battery	-			✓		-	✓	Digital	Voltage Displayed	-	✓
6471 (SR182 probes not included)	2135.48	0.01 to 99.99kΩ	Rechargeable Battery				✓		✓***	✓	Digital	Voltage Displayed	-	-
6471	2135.49	0.01 to 99.99kΩ	Rechargeable Battery				✓		✓	✓	Digital	Voltage Displayed	-	-
6471 Kit 300FT	2135.50	0.01 to 99.99kΩ	Rechargeable Battery				✓		✓	✓	Digital	Voltage Displayed	-	-
6472	2135.51	0.01 to 99.99kΩ	Rechargeable Battery				✓		✓***	✓	Digital	Voltage Displayed	✓	-
6472 Kit 300FT	2135.53	0.01 to 99.99kΩ	Rechargeable Battery				✓		✓***	✓	Digital	Voltage Displayed	✓	-
6472 Kit 500FT	2135.54	0.01 to 99.99kΩ	Rechargeable Battery				✓		✓***	✓	Digital	Voltage Displayed	✓	-
4620	2130.43	0.0 to 1999Ω	Battery	✓	-		✓		-		Digital	LED/Buzzer	-	-
4620 Kit 150FT	2135.19	0.0 to 1999Ω	Battery	✓	-		✓*		-		Digital	LED/Buzzer	-	-
4620 Kit 300FT	2135.20	0.0 to 1999Ω	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	✓	-		✓		-		Digital	LED/Buzzer	-	-
4630 Kit 150FT	2135.22	0.0 to 1999Ω	Rechargeable Battery	✓	-		✓*		-		Digital	LED/Buzzer	-	-
4630 Kit 300FT	2135.23	0.0 to 1999Ω	Rechargeable Battery	✓	-		✓		-		Digital	LED/Buzzer	-	-
4630 Kit 500FT	2135.24	0.0 to 1999Ω	Rechargeable Battery	✓	-					-		Digital	LED/Buzzer	-

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

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

*** Must purchase an additional (2) SR182 or (2) MN82 accessory clamps