



Ground Resistance Tester Model 6416

Cat. #2141.01

Range 0 to 1500Ω, Alarm, Frequency selection, 300 measurement storage

The Ground Resistance Tester Model 6416 measures ground rod and grid resistance and impedance without the use of auxiliary rods. Clamp-on ground resistance testers can be used in multi-grounded systems without disconnecting or de-energizing the ground system under test. The Model 6416 simply clamps around the grounding electrode or conductor and measures the resistance to ground.

Ground Tester | Ground Rod Tester | Earth Ground Tester | Ground Continuity Tester | Ground Wire Tester

Ground Resistance Measurement (Auto-Ranging 1 to 199Ω)

Measurement Range	Resolution	Accuracy
0.010 to 0.099Ω	0.001Ω	±(1.5%Reading +0.01Ω)
0.10 to 0.99Ω	0.01Ω	±(1.5%Reading +0.02Ω)
1 to 49.9Ω	0.1Ω	±(1.5% Reading +0.1Ω)
50.0 to 99.5Ω	0.5Ω	±(2% Reading +0.5Ω)
100 to 199Ω	1Ω	±(3% Reading +1Ω)
200 to 395Ω	5Ω	±(5% Reading +5Ω)
400 to 590Ω	10Ω	±(10% Reading +10Ω)
600 to 1150Ω	50Ω	20% approx
1200 to 1500Ω	50Ω	25% approx

Alarm Adjustable from 1 to 199Ω

Frequency Selection Choice of 50, 60, 128, or 2083Hz for impedance calculation

Maximum Overload Permanent current: 100 max. 50/60Hz
Transient current: (<5s) 200A 50/60Hz

Current Measurement Range (Auto-Ranging)

Measurement Range	Resolution	Accuracy
0.200 to 0.999mA	1μA	±(2% Reading +50μA)
1.000 to 2.990mA	10μA	±(2% Reading +50μA)
3.00 to 9.99mA	10μA	±(2% Reading +50μA)
10.00 to 29.99mA	100μA	±(2% Reading +100μA)
30.0 to 99.9mA	100μA	±(2% Reading +100μA)

For more details, download the datasheet or user manual at www.aemc.com

100 to 299.9mA	1mA	±(2% Reading +1mA)
0.300 to 0.990A	1mA	±(2% Reading +1mA)
1.000 to 2.999A	10mA	±(2% Reading +10mA)
3.00 to 39.99A	10mA	±(2% Reading +10mA)
Loop Inductance Measurement		
Measurement range	Resolution	Accuracy
10 to 100µH	1µH	±(5% Reading +1µH)
100 to 500µH	1µH	±(3% Reading +1µH)
Contact Voltage (Touch Voltage) Calculated		
Measurement range	Resolution	Accuracy
0.1 to 4.9V	0.1V	±(5% Reading +0.1V)
5.0 to 49.5V	0.5V	±(5% Reading +0.5V)
50 to 75.0V	1V	±(10% Reading +1V)
General Features		
Display	OLED, 152 segments 48x39mm	
Memory	300 measurements	
Alarm	3 separate alarms (Ω, V and A)	
Power Source	4x1.5V LR6 (AA) alkaline batteries or 4 NiMH batteries	
Battery Life	12 hours or 1440 30-seconds tests approx	
Jaw Opening	1.38" (35mm) max	
Dimensions	2.16 x 3.74 x 10.31" (55 x 95 x 262mm)	
Weight (with Battery)	2.06 lbs (935g)	
Operating Temperature	-4° to +131°F (-20 to +55°C)	
Storage Temperature	-22° to +158°F (-30 to +70°C)	
Relative Humidity	Up to 90% @ 40°C	
Ingress Protection (IP)	IP 40	
EMC	EN 61326-1	
Safety Compliance	IEC 61010-1, EN 61010-2-30, EN 61010-2-32, Pollution Degree 2, 600V CAT IV	



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