# **GROUND RESISTANCE TESTERS DIGITAL TESTERS**

# MODELS 4620 & 4630

Both models will perform over 2000 measurements for the 15 second tests between recharging or battery replacement

# **SPECIFICATIONS**

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MODELS	4620		4630					
ELECTRICAL								
Range	20 Ω	200	Ω	2000 Ω				
Measurement Range	(0.00 to 19.99) Ω	(20.0 to 19	99.9) Ω	(200 to 1999) Ω				
Resolution	10 mΩ	100 n	ιΩ	1 Ω				
Open Voltage	≤ 42 V peak							
<b>Measurement Frequency</b>	128 Hz square wave							
Test Current	10 mA	1 m/	4	0.1 mA				
Accuracy	± 2 % of Re	ading ± 1 d	ct	± 5 % of Reading ± 3 cts				
Aux Electrode Influence Max Res Current Circuit	3 kΩ	30 kΩ		50 kΩ				
Max Res Voltage Circuit	50 kΩ							
Response Time	Approximately four to eight seconds for a stabilized measurement							
Withstanding Voltage	250 Vac or 100 Vdc							
Power Supply	(8) C cell batteries (included); Alkaline recommended		(120/230) V, (50/60) Hz Rechargeable 9.6 V, 3.5 A·h NiMH battery pack (included)					
Battery Life	> 2000 15-second measurements; LO BAT indication on LCD							
Fuse Protection	0.1 A, > 250 V, (0.25 x 1.25) in; 30 kA Interrupt Capacity							

Consult factory for NIST Calibration prices

### ACCESSORIES/REPLACEMENTS

#### Catalog #2130.60

Tape Measure (100 ft)

#### Catalog #2135.35\*

Test Kit for 3-Point Testing - 150 ft

#### Catalog #2135.36\*

Test Kit for 4-Point Testing - 300 ft

#### Catalog #2135.37\*

Test Kit for 4-Point Testing - 500 ft

#### Catalog #5000.14

AC Power cord (4630)

#### KIT SHOWN 4630 KIT (500 ft)

\*Refer to page 75 for Test Kit descriptions

### Catalog #2135.38

Ground Test Kit for 3-Point Testing (Supplemental for 4-Point testing - includes (2) 100 ft color-coded leads, (1) 30 ft lead (green), (2) 14.5 in T-shaped auxiliary ground electrodes and soft carrying bag)

#### Catalog #2130.59

Calibration Checker 25  $\Omega$  for Models 3640, 4500, 4610, 4620 and 4630













# **FEATURES**

- · Ground Integrity Measurement
- · Measures soil resistivity (4-Point)
- Measures ground resistance (2- and 3-Point) Fall-of-Potential method
- Step voltage tests and touch potential measurements
- Auto-Ranging: automatically selects the optimum resistance range and test current
- Designed to reject high levels of noise and interference
- Extremely simple to operate: connect/press/hold/read
- · LED on faceplate informs operator of high input noise, high auxiliary rod resistance and faulty connections
- Large easy-to-read backlit display
- Battery powered (Model 4620)
- AC powered with rechargeable NiMH battery pack (Model 4630)
- · Rugged dustproof and watertight field case
- Color-coded terminals

## PRODUCT INCLUDES

(8) C-cell batteries (4620) or rechargeable 9.6 V NiMH battery pack (4630), AC power cord (4630), and user

CATALOG NO.	DESCRIPTION
2130.43	Ground Resistance Tester Model 4620 (Digital, 4-Point, Battery Powered)
2130.44	Ground Resistance Tester Model 4630 (Digital, 4-Point, Rechargeable Battery)
2135.19	Ground Resistance Tester Model 4620 Kit – 150 ft (Model 4620 and Catalog #2135.35)
2135.20	Ground Resistance Tester Model 4620 Kit – 300 ft (Model 4620 and Catalog #2135.36)
2135.21	Ground Resistance Tester Model 4620 Kit – 500 ft (Model 4620 and Catalog #2135.37)
2135.22	Ground Resistance Tester Model 4630 Kit – 150 ft (Model 4630 and Catalog #2135.35)
2135.23	Ground Resistance Tester Model 4630 Kit – 300 ft (Model 4630 and Catalog #2135.36)
2135.24	Ground Resistance Tester Model 4630 Kit – 500 ft (Model 4630 and Catalog #2135.37)





# **GROUND RESISTANCE TESTERS SELECTION CHART**

AEMC Model Number	AEMC CATALOG NUMBER	RESISTANCE RANGE	POWER SOURCE	2 3 POINT POINT TEST 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 1500) Ω	Battery	Clamp-On Ground Resistance Tester w/Alarm and Memory				<b>√</b>	<b>√</b> **	Digital	Voltage	<b>✓</b>	_
6417	2141.02	(0.01 to 1500) Ω	Battery	Clamp-On Ground Resistance Tester w/Alarm, Memory and Bluetooth communication				<b>√</b>	<b>√</b> **	Digital	Displayed (noise icon, buzzer)	✓	_
6418	2141.03	(0.01 to 1200) Ω	Battery	Clamp-On Ground Resistance Tester w/Alarm and Memory				<b>√</b>	<b>√</b> **	Digital	Noise Icon	_	
6422	2135.55	0.05 Ω to 50 kΩ	Battery	✓ -					✓	Digital	Noise Icon	ı –	
6422 Kit 150 FT	2135.56	0.05 Ω to 50 kΩ	Rechargeable Battery	✓ -					✓	Digital	Noise Icon	_	
6424	2135.57	0.05 Ω to 50 kΩ	Rechargeable Battery	✓ -					✓	Digital	Noise Icon	_	
6424 Kit 150 FT	2135.58	0.05 Ω to 50 kΩ	Rechargeable Battery	✓ -					<b>√</b>	Digital	Noise Icon	_	
6424 Kit 300 FT	2135.59	$0.05~\Omega$ to $50~\text{k}\Omega$	Rechargeable Battery	✓ -					<b>√</b>	Digital	Noise Icon	_	
GroundFlex <sup>®</sup> Field Kit Model 6474	2136.03	0.001 $\Omega$ to 99.99 k $\Omega$	Rechargeable Battery	- ✓				_	<b>✓</b>	Digital	Voltage Displayed	_	✓
6471 (SR182 probes not included)	2135.48	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓				<b>√</b> ***	<b>√</b>	Digital	Voltage Displayed	_	<b>√</b>
6471	2135.49	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓				✓	✓	Digital	Voltage Displayed	_	✓
6471 Kit 300 FT (with probes)	2135.50	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓				<b>✓</b>	<b>√</b>	Digital	Voltage Displayed	_	✓
6471 Kit 300 FT (no probes)	2135.60	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓				<b>✓</b>	<b>√</b>	Digital	Voltage Displayed	_	✓
6471 Kit 500 FT (no probes)	2135.61	0.001 $\Omega$ to 99.99 k $\Omega$	Rechargeable Battery	✓				<b>✓</b>	<b>✓</b>	Digital	Voltage Displayed	_	✓
6472	2135.51	$0.001~\Omega$ to $99.99~\text{k}\Omega$	Rechargeable Battery	✓				<b>√</b> ***	<b>√</b>	Digital	Voltage Displayed	_	✓
6472 Kit 300 FT	2135.53	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓				<b>√</b> ***	✓	Digital	Voltage Displayed	_	✓
6472 Kit 500 FT	2135.54	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓				<b>√</b> ***	✓	Digital	Voltage Displayed	_	✓
4620	2130.43	(0.0 to 1999) Ω	Battery	✓	-	✓		_		Digital	LED/Buzzer	_	
4620 Kit 150 FT	2135.19	(0.0 to 1999) Ω	Battery	✓	_	<b>√</b> *		_		Digital	LED/Buzzer	_	
4620 Kit 300 FT	2135.20	(0.0 to 1999) Ω	Battery	<b>✓</b>	_	<b>✓</b>	_			Digital	LED/Buzzer	_	
4620 Kit 500 FT	2135.21	(0.0 to 1999) Ω	Battery	✓	_	✓	_			Digital	LED/Buzzer	_	
4630	2130.44	(0.0 to 1999) Ω	Rechargeable Battery	✓	- 🗸			_		Digital	LED/Buzzer	-	
4630 Kit 150 FT	2135.22	(0.0 to 1999) Ω	Rechargeable Battery	✓	_	<b>√</b> *	<b>√</b> *		-		LED/Buzzer	_	
4630 Kit 300 FT	2135.23	(0.0 to 1999) Ω	Rechargeable Battery	✓	_			_		Digital	LED/Buzzer	_	-
4630 Kit 500 FT	2135.24	(0.0 to 1999) Ω	Rechargeable Battery	<b>√</b>	-			_		Digital	LED/Buzzer	_	

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





<sup>\*\*</sup> Clamp-on Ground Resistance Tester can measure system continuity inclusive of all bonding points.

<sup>\*\*\*</sup> Must purchase an additional (2) SR182 or (2) MN82 accessory clamps.