

# 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

MODELS	4620	4630	
<b>ELECTRICAL</b>			
Range	20 Ω	200 Ω	2000 Ω
Measurement Range	(0.00 to 19.99) Ω	(20.0 to 199.9) Ω	(200 to 1999) Ω
Resolution	10 mΩ	100 mΩ	1 Ω
Open Voltage	≤ 42 V peak		
Measurement Frequency	128 Hz square wave		
Test Current	10 mA	1 mA	0.1 mA
Accuracy	± 2 % of Reading ± 1 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)

#### 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 Ω for Models 3640, 4500, 4610, 4620 and 4630



### KIT SHOWN

#### 4630 KIT (500 ft)

\*Refer to page 75 for Test Kit descriptions

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)



cover closed cover open

### 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 manual.

# 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	DISPLAY	ADJUSTABLE FREQUENCY	SWEEP FREQUENCY
6422	2135.55	0.05 Ω to 2 kΩ	Battery	✓		—/—		—		Digital	Auto (128 Hz or 256 Hz)	—
6422 Kit 150 FT	2135.56	0.05 Ω to 2 kΩ	Battery	✓		—/—		—		Digital	Auto (128 Hz or 256 Hz)	—
6424	2135.57	0.05 Ω to 50 kΩ	Rechargeable Battery	✓		—/—		—		Digital	Auto (128 Hz or 256 Hz)	—
6424 Kit 150 FT	2135.58	0.05 Ω to 50 kΩ	Rechargeable Battery	✓		—/—		—		Digital	Auto (128 Hz or 256 Hz)	—
6424 Kit 300 FT	2135.59	0.05 Ω to 50 kΩ	Rechargeable Battery	✓		—/—		—		Digital	Auto (128 Hz or 256 Hz)	—
GroundFlex® Field Kit Model 6474	2136.03	0.001 Ω to 99.99 kΩ	Rechargeable Battery	—	✓	✓/—	✓		—	Digital	Auto (41 to 5078) Hz	✓
6471 (SR182 probes not included)	2135.48	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓		✓/✓	✓		✓***	Digital	Auto (41 to 513) Hz	✓
6471	2135.49	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓		✓/✓	✓	✓		Digital	—	✓
6471 Kit 300 FT (with probes)	2135.50	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓		✓/✓	✓	✓		Digital	—	✓
6471 Kit 300 FT (no probes)	2135.60	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓		✓/✓	✓	✓		Digital	Auto (41 to 513) Hz	✓
6471 Kit 500 FT (no probes)	2135.61	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓		✓/✓	✓	✓		Digital	Auto (41 to 513) Hz	✓
6472	2135.51	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓		✓/✓	✓		✓***	Digital	Auto (41 to 5078) Hz	✓
6472 Kit 300 FT	2135.53	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓		✓/✓	✓		✓***	Digital	Auto (41 to 5078) Hz	✓
6472 Kit 500 FT	2135.54	0.001 Ω to 99.99 kΩ	Rechargeable Battery	✓		✓/✓	✓		✓***	Digital	Auto (41 to 5078) Hz	✓
4620	2130.43	(0.0 to 1999) Ω	Battery	✓		✓/—	✓	—		Digital	—	—
4620 Kit 150 FT	2135.19	(0.0 to 1999) Ω	Battery	✓		✓/—	✓*	—		Digital	—	—
4620 Kit 300 FT	2135.20	(0.0 to 1999) Ω	Battery	✓		✓/—	✓	—		Digital	—	—
4620 Kit 500 FT	2135.21	(0.0 to 1999) Ω	Battery	✓		✓/—	✓	—		Digital	—	—
4630	2130.44	(0.0 to 1999) Ω	Rechargeable Battery	✓		✓/—	✓	—		Digital	—	—
4630 Kit 150 FT	2135.22	(0.0 to 1999) Ω	Rechargeable Battery	✓		✓/—	✓*	—		Digital	—	—
4630 Kit 300 FT	2135.23	(0.0 to 1999) Ω	Rechargeable Battery	✓		✓/—	✓	—		Digital	—	—
4630 Kit 500 FT	2135.24	(0.0 to 1999) Ω	Rechargeable Battery	✓		✓/—	✓	—		Digital	—	—

\* 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.

## CLAMP-ON

AEMC MODEL NUMBER	AEMC CATALOG NUMBER	RESISTANCE RANGE	POWER SOURCE	VOLTAGE INDICATION	INDUCTANCE MEASUREMENT- mH	SELETABLE FREQUENCY	ALARM	MEMORY	BLUETOOTH
6416	2141.01	(0.01 to 1500) Ω	Battery	Voltage Displayed (noise icon, buzzer)	✓		3 separate alarms (Ω, V and A)	300 measurements	—
6417	2141.02	(0.01 to 1500) Ω	Battery	Voltage Displayed (noise icon, buzzer)	✓		3 separate alarms (Ω, V and A)	2000 measurements	Yes
6418	2141.03	(0.01 to 1200) Ω	Battery	Noise Icon	—	✓	2 separate alarms (Ω and A)	300 measurements	—