

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 |
|----------------------------|--|--|--------------------------|
| ELECTRICAL | | | |
| 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 | — |