# **GROUND RESISTANCE TESTERS**

Digital Tester

## Models 4620 & 4630

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

#### ► SPECIFICATIONS

over close

| MODELS  | 4620  |                        | 4630  |                         |  |  |  |
|---|---|------------------------|---|-------------------------|--|--|--|
| ELECTRICAL  |   |                        |   |                         |  |  |  |
| Range   | 20Ω   | 200                    | Ω   | 2000Ω                   |  |  |  |
| Measurement Range   | 0.00 to 19.99 $\Omega$  | 20.0 to 1              | 99.9Ω   | 200 to 1999 $\Omega$    |  |  |  |
| Resolution  | 10mΩ  | 100                    | mΩ  | 1Ω                      |  |  |  |
| Open Voltage  | ≤42V peak   | ≤42V                   | peak  | $\leq$ 42V peak         |  |  |  |
| Resistance Measurement<br>Frequency   | 128Hz square wave   | 128Hz square wave      |   | 128Hz square wave       |  |  |  |
| Test Current  | 10mA  | 1m                     | ıΑ  | 0.1mA                   |  |  |  |
| Accuracy  | ±2% of Reading<br>±1ct  | ±2% of Reading<br>±1ct |   | ±5% of Reading<br>±3cts |  |  |  |
| Auxiliary Electrode Influence<br>Max Res. in Current Circuit<br>Max Res. in Voltage Circuit | 3kΩ<br>50kΩ   | 30kΩ<br>50kΩ           |   | 50kΩ<br>50kΩ            |  |  |  |
| Response Time   | Approximately four to eight seconds for a<br>stabilized measurement |                        |   |                         |  |  |  |
| Withstanding Voltage  | 250Vac or 100Vdc  |                        |   |                         |  |  |  |
| Power Source  | Eight C cell batteries<br>Alkaline recomm                           |                        | 120/230V 50/60Hz<br>Rechargeable 9.6V, 3.5 Ah<br>NiMH battery pack (included) |                         |  |  |  |
| Battery Life  | >2000 15-second measurements; L0 BAT indication on LCD              |                        |   |                         |  |  |  |
| Fuse Protection   | 0.1A, >250V, 0.25 x 1.25"; 30kA Interrupt Capacity                  |                        |   |                         |  |  |  |



#### PRODUCT INCLUDES

Soft carrying case, eight 1.5V AA batteries and user manual.

Model 4630 Kit - 500ft shown

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 - 150ft (Model 4620 and Catalog #2135.35) Ground Resistance Tester Model 4620 Kit - 300ft (Model 4620 and Catalog #2135.36) 2135.20 2135.21 Ground Resistance Tester Model 4620 Kit - 500ft (Model 4620 and Catalog #2135.37) 2135.22 Ground Resistance Tester Model 4630 Kit - 150ft (Model 4630 and Catalog #2135.35) Ground Resistance Tester Model 4630 Kit - 300ft (Model 4630 and Catalog #2135.36) 2135.23 Ground Resistance Tester Model 4630 Kit - 500ft (Model 4630 and Catalog #2135.37) 2135.24 Accessories (Optional) 2130.60 Tape Measure (100 ft) 2135.35 Test Kit for 3-Point Testing - 150ft Test Kit for 4-Point Testing - 300ft 2135.36 2135.37 Test Kit for 4-Point Testing - 500ft Ground Test Kit for 3-Point Testing (Supplemental for 4-Point testing - includes two 100ft color-coded 2135.38 leads, one 30ft lead (green), two 14.5" T-shaped auxiliary ground electrodes and soft carrying bag) 2130 59 Calibration Checker –  $25\Omega$  for Models 3640, 4500, 4610, 4620 and 4630

# 2130.43 Ground

tests on bondingColor-coded terminals

► FEATURES

measurements

and interference

press - hold - read

and fault connections

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field case

CATALOG NO.

Ground Integrity<sup>®</sup> Measurement
Measures soil resistivity (4-Point)
Measures ground resistance (2- and 3-Point) Fall-of-Potential method
Step voltage tests and touch potential

Auto-Ranging: automatically selects the optimum resistance range and test current Designed to reject high levels of noise

Extremely simple to operate: connect -

Large easy-to-read backlit display
Battery powered (Model 4620)

battery pack (Model 4630)Rugged dustproof and rainproof

Can also be used for continuity

AC powered with rechargeable NiMH

DESCRIPTION

 LED on faceplate informs operator of high input noise, high auxiliary rod resistance

#### 1 www.aemc.com





### GROUND RESISTANCE TESTER Selection Chart

| AEMC<br>MODEL<br>NUMBER                            | AEMC<br>Catalog<br>Number | RESISTANCE<br>Range  | POWER<br>Source         | 2<br>Point<br>Test   | 3<br>Point<br>Test | 4<br>Point/<br>Selective | SOIL<br>RESISTIVITY<br>TEST | EARTH<br>Coupling | 2<br>Clamp | BONDING     | DISPLAY | VOLTAGE<br>INDICATION                           | INDUCTANCE<br>INDICATION | SWEEP<br>FREQUENCY |
|--|---------------------------|----------------------|-------------------------|--|--------------------|--------------------------|-----------------------------|-------------------|------------|-------------|---------|---|--------------------------|--------------------|
| 6416   | 2141.01                   | 0.01 to<br>1500Ω     | Battery                 | Clamp-On Ground Resistance Tester<br>w/Alarm & Memory                                    |                    |                          |                             | _                 | _          | ✓ **        | Digital | Voltage<br>Displayed<br>(noise icon,<br>buzzer) | ~                        | _                  |
| 6417   | 2141.02                   | 0.01 to<br>1500Ω     | Battery                 | Clamp-On Ground Resistance Tester<br>w/Alarm, Memory & <i>Bluetooth</i><br>communication |                    |                          |                             | _                 | _          | <b>√</b> ** | Digital | Voltage<br>Displayed<br>(noise icon,<br>buzzer) | ~                        | _                  |
| GroundFlex <sup>®</sup><br>Field Kit<br>Model 6474 | 2136.03                   | 0.001Ω to<br>99.99kΩ | Rechargeable<br>Battery | _  | ~                  | ~                        | ~                           | ✓                 | _          | ~           | Digital | Value<br>Displayed                              | _                        | $\checkmark$       |
| 6471<br>(SR182 probes<br>not included)             | 2135.48                   | 0.01 to<br>99.99kΩ   | Rechargeable<br>Battery | ~  | ~                  | ~                        | ~                           | ~                 | ~          | ~           | Digital | Value<br>Displayed                              | _                        | _                  |
| 6471   | 2135.49                   |                      |                         |  |                    |                          |                             |                   |            |             |         |   |                          |                    |
| 6471 Kit<br>300FT                                  | 2135.50                   |                      |                         |  |                    |                          |                             |                   |            |             |         |   |                          |                    |
| 6472   | 2135.51                   |                      |                         |  |                    | ~                        | ~                           | ~                 | ~          | ~           | Digital | Value<br>Displayed                              | _                        | ~                  |
| 6472 Kit<br>300FT                                  | 2135.53                   | 0.01 to<br>99.99kΩ   | Rechargeable<br>Battery | ~  | ~                  |                          |                             |                   |            |             |         |   |                          |                    |
| 6472 Kit<br>500FT                                  | 2135.54                   |                      |                         |  |                    |                          |                             |                   |            |             |         |   |                          |                    |
| 4620   | 2130.43                   | 0.0 to               | Battery                 |  | ~                  | _                        | ~                           |                   |            |             | Digital | LED/Buzzer                                      | _                        | _                  |
| 4620 Kit<br>150FT                                  | 2135.19                   | 1999Ω                |                         | ~  |                    |                          | <b>√</b> *                  |                   | _          | _           |         |   |                          |                    |
| 4620 Kit<br>300FT                                  | 2135.20                   | 0.0 to<br>2000Ω      | Battery                 | ~  | ~                  | _                        | ✓                           | _                 | _          | _           | Digital | LED/Buzzer                                      | _                        | _                  |
| 4620 Kit<br>500FT                                  | 2135.21                   | 0.0 to<br>1999Ω      | Battery                 | ~  | ~                  | _                        | ✓                           | _                 | _          | _           | Digital | LED/Buzzer                                      | _                        | _                  |
| 4630   | 2130.44                   | 0.0 to<br>1999Ω      |                         | ~  | ~                  | _                        | ~                           |                   | _          |             | Digital | LED/Buzzer                                      | _                        | _                  |
| 4630 Kit<br>150FT                                  | 2135.22                   |                      | Rechargeable<br>Battery |  |                    |                          | <b>√</b> *                  |                   |            |             |         |   |                          |                    |
| 4630 Kit<br>300FT                                  | 2135.23                   |                      |                         |  |                    |                          | ~                           |                   |            |             |         |   |                          |                    |
| 4630 Kit<br>500FT                                  | 2135.24                   |                      |                         |  |                    |                          | ~                           |                   |            |             |         |   |                          |                    |
| 3640   | 2114.92                   | 0.0 to<br>1999Ω      | to<br>9Ω Battery        | ~  | ~                  | _                        | _                           | _                 | _          | _           | Digital | LED   | _                        | _                  |
| 3640 Kit<br>150FT                                  | 2135.13                   |                      |                         |  |                    |                          |                             |                   |            |             |         |   |                          |                    |
| 3640 Kit<br>300FT                                  | 2135.14                   |                      |                         |  |                    |                          |                             |                   |            |             |         |   |                          |                    |

\* Performing soil resistivity tests with this kit requires two additional auxiliary electrodes not supplied in the 150ft kit and one additional test lead. \*\* Clamp-on Ground Resistance Tester can measure system continuity inclusive of all bonding points.

