

# GROUND RESISTANCE TESTERS

## MULTIFUNCTION



### MODELS 6422 & 6424

To keep your installation safe, measure the resistance of its connection to earth



MODELS	6422			6424			
<b>ELECTRICAL</b>							
<b>Voltage</b>							
Measurement Range	-			(0.1 to 600) V <sub>AC/DC</sub>			
Resolution	-			0.1 V			
Accuracy	-			± (1 % R + 1 ct)			
<b>Current</b>							
Range	-			(0.5 to 60) A <sub>AC</sub> (requires optional MN72 probe)			
<b>Ground Resistance (2 P Mode)</b>							
Measurement Range	(0.05 to 99.99) Ω, (80 to 999.9) Ω, (0.80 to 9.999) kΩ, (8 to 50) kΩ						
Resolution	(0.01, 0.1, 1, 10) Ω						
Accuracy	± (2 % R + 10 cts), ± (2 % R + 2 cts), ± (2 % R + 1 ct), ± (2 % R + 1 ct)						
<b>Ground Resistance (3 P Mode)</b>							
Measurement Range	(0.50 to 99.99) Ω	(80 to 999.9) Ω	(0.800 to 2.000) kΩ	(0.50 to 99.99) Ω	(80 to 999.9) Ω	(0.800 to 9.999) kΩ	(8 to 50) kΩ
Resolution	0.01 Ω	0.1 Ω	1 Ω	0.01 Ω	0.1 Ω	1 Ω	10 Ω
Accuracy	± (1 % R + 10 cts)	± (1 % R + 2 cts)	± (1 % R + 1 ct)	± (1 % R + 10 cts)	± (1 % R + 2 cts)	± (1 % R + 1 ct)	
Measurement Frequency	(128 or 256) Hz (automatically selected)						
No-load Voltage	± 10 V peak						
Maximum Test Current	20 mA						
Measurement Mode	One shot or continuous						
Data Storage	-			Stores the (52, 62 and 72) % 3 P resistance measurements			
Calculation	-			Calculates average and % deviation of the three saved readings			
<b>GENERAL</b>							
Display	Backlit LCD						
Measurement Mode	2 P (Ω), 3 P (Ω)			V, I, 2 P (Ω), 3 P (Ω)			
Power Supply	(6) AA alkaline batteries			(6) NiMH rechargeable batteries, charging time approximately 6 h			
Battery Life	> 2000 x 3 P earth measurements at 100 Ω			> 1500 x 3 P earth measurements at 100 Ω			
Dimensions	(8.7 x 4.9 x 2.7) in (223 x 126 x 70) mm						
<b>SAFETY</b>							
Safety Rating	EMC: IEC 61326-1; IEC 61010-2-030 / 600 V CAT IV						

Consult factory for NIST Calibration prices.

CAT. #	DESCRIPTION
2135.55	Ground Resistance Tester Model 6422 (Digital, 3-Point)
2135.56	Ground Resistance Tester Model 6422 Kit-150 ft (Digital, 3-Point)
2135.57	Ground Resistance Tester Model 6424 (Digital, 3-Point)
2135.58	Ground Resistance Tester Model 6424 Kit-150 ft (Digital, 3-Point)
2135.59	Ground Resistance Tester Model 6424 Kit-300 ft (Digital, 3-Point)

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### FEATURES

- Simple, one button operation – eliminates errors in testing
- Test button turns green when measurement is stable
- 2 P resistance measurement up to 50 k $\Omega$
- 3 P ground resistance measurement up to 2 k $\Omega$  (Model 6422) up to 50 k $\Omega$  (Model 6424) for highly resistive terrain
- Large back lit digital display – easier to read in all lighting conditions
- Automatic hold function – retains last measurement after the reading stabilizes ensuring the measurement is valid
- Automatic test frequency selection between (128 and 256) Hz, providing stable results in adverse environments
- Powers up in 2 Pole mode – automatically checks the injector lead connection when connected to the H auxiliary rod
- Convenient storage of the three measurements along with the average and % deviation – easily determines proper test results
- Built-in test lead compensation capability – improves the accuracy of low resistance measurements
- 600 V CAT IV rated for a high level of operator safety
- Checks AC/DC voltage (Model 6424)
- Stores (52, 62 and 72) % measurements – eliminates errors in determining the ground resistance (Model 6424)
- Leakage current measurement from 0.5 mA to 60 A (Model 6424)
- Battery recharging via AC adapter, USB or vehicle DC port (Model 6424)
- Color-coded leads and terminals provide fast, error-free connection
- Detects the presence of hazardous voltage and prohibits measurement
- Direct access to all functions, even when wearing work gloves
- Rugged water resistance case, for all terrain use
- Built-in display stand to prop up instrument for seeing the display better when placed on the ground

### ACCESSORIES/REPLACEMENTS

#### CAT. #2135.39

Ground Rod – Set of (2) 14.5 in T-shaped Auxiliary Rods

#### CAT. #2153.06

MN72 AC Current Probe (6424 only)

#### CAT. #5000.92

Calibration Checker



CAT. #5000.92

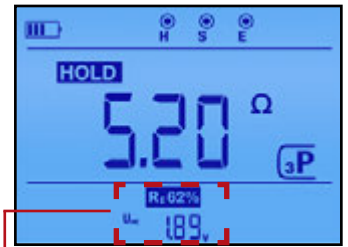


CAT. #2153.06

### FUNCTIONAL DISPLAYS



2 P mode used for continuity and bonding checks – is active when the instrument is turned on.

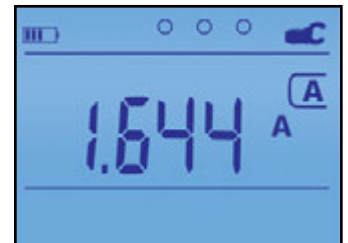


3 P mode used for measuring the resistance of the injector electrode and the test voltage are also displayed.

Model 6424

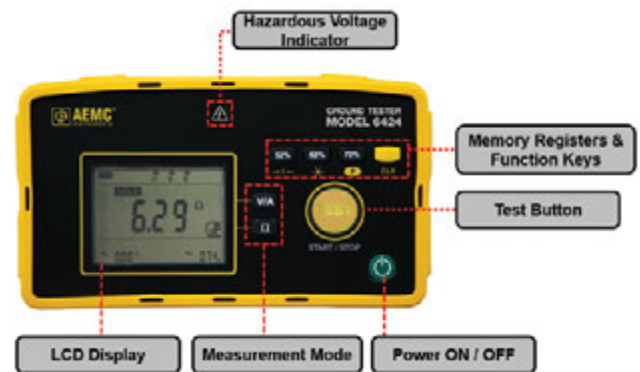


Live voltage is displayed when the V/A function is selected and test leads are connected to AC or DC voltage. (Model 6424)



Leakage current is displayed when the optional MN72 probe is connected and the V/A function is selected. (Model 6424)

### FRONT PANEL - 6424



### PRODUCT INCLUDES

**Models 6422 and 6424:** (2) 150 ft color-coded leads on spools (red/blue), (1) 30 ft lead (green), (2) T-shaped auxiliary ground electrodes, set of (2) 5 ft color-coded (red/blue) leads, (1) 100 ft tape measure, (6) AA rechargeable NiMH batteries, carrying bag and user manual

**Model 6424 also includes:** USB to wall charger, 5 V, 2 A, USB charger cable



**KITS AVAILABLE SHOWN: CAT. #2135.35**

