# GROUND RESISTANCE TESTERS MULTI-FUNCTION

# MODELS 6422 & 6424

To keep your installation safe, measure your resistance connection to earth!











## **SPECIFICATIONS**

SPECIFICATION	i o							
MODELS	6422			6424				
ELECTRICAL								
Voltage								
Range	-			0.1-600Vac/dc				
Resolution	-			0.1V				
Accuracy	-			±(1%R + 1ct)				
Current								
Range	-			0.5-60.00Aac (requires optional MN72 probe)				
Resistance (2P Mode)								
Measurement Range	$0.05\text{-}99.99\Omega,80.0\text{-}999.9\Omega\;,0.800\text{-}9.999k\Omega,8.00\text{-}50.00k\Omega$							
Resolution	$0.01\Omega,0.1\Omega,10\Omega$							
Intrinsic Uncertainty	$\pm$ (2%R + 10 ct), $\pm$ (2%R + 2 ct), $\pm$ (2%R + 1 ct), $\pm$ (2%R + 1 ct)							
Ground Resistance (3P	Mode)							
Measurement Range	0.50-99.99Ω	80.0-999.9Ω	0.800-2.000kΩ	0.50-99.99Ω	80.0-999.9Ω	0.800-9.999kΩ	8.00-50.000kΩ	
Resolution	0.01Ω	0.1Ω	1Ω	0.01Ω	0.1Ω	1Ω	10Ω	
Intrinsic Uncertainty	± (1%R + 10ct)	± (1%R + 2ct)	± (1%R + 1ct)	± (1%R + 10ct)	± (1%R + 2ct)	± (1%F	R + 1ct)	
Measurement Frequency	128Hz or 256Hz (automatically selected)							
No-load Voltage	±10 V peak							
<b>Maximum Test Current</b>	20mA							
Measurement Mode	One shot or continuous							
Data Storage	-			Stores the 52%, 62% and 72% 3P resistance measurements				
Calculation	- Calculates average and % deviation of the three saved readings							
GENERAL								
Display	Backlit LCD							
Measurement Mode	2Ρ (Ω), 3Ρ (Ω)			V, I, 2P (Ω), 3P (Ω)				
Power Supply	(6) AA Alkaline batteries			(6) NiMH rechargeable batteries, charging time approx. 6 hrs				
Battery Life	$>$ 2,000 x 3P earth measurements at 100 $\Omega$			>1,500 x 3P earth measurements at 100 $\Omega$				
Dimensions	8.78 x 4.96 x 2.75" (223 x 126 x 70mm)							
SAFETY								
Safety Ratings	EMC: IEC 61326-1; IEC 61010-2-030 / 600 V CAT IV							

CATALOG NO.	DESCRIPTION	
2135.55	Ground Resistance Tester Model 6422 (Digital, 3-Point)	
2135.56	Ground Resistance Tester Model 6422 Kit-150ft (Digital, 3-Point)	
2135.57	Ground Resistance Tester Model 6424 (Digital, 3-Point)	
2135.58	Ground Resistance Tester Model 6424 Kit-150ft (Digital, 3-Point)	
2135.59	Ground Resistance Tester Model 6424 Kit-300ft (Digital, 3-Point)	Ø AEMO®



# **GROUND RESISTANCE TESTERS MULTI-FUNCTION**

#### MODELS 6422 & 6424

#### **FEATURES**

- Simple, one button operation eliminates errors in testing
- Test button turns green when measurement is stable
- 2P resistance/ 3P ground resistance measurement up to  $50k\Omega$  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
- CAT IV 600V rated for a high level of operator safety
- Checks AC/DC voltage and AC leakage current (Model 6424)
- Stores 52, 62 and 72% measurements eliminates errors in determining the ground resistance (Model 6424)
- Leakage current measurement from 0.5mA to 70A (Model 6424)
- Battery recharging via AC adapter, USB or vehicle DC port b (Model 6424)
- Color coded leads and terminals provide fast, error-free connection hook-up
- Detects and prohibits hazardous voltage 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

CATALOG #5000.92

## **FUNCTIONAL DISPLAYS**



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



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

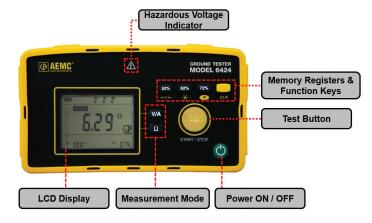


Live voltage is displayed when the V/A function is selected and test leads are connected to AC or DC voltage.



Leakage current is displayed when the optional MN72 probe is connected and the V/A function is selected

### FRONT PANEL - 6424



# ACCESSORIES/REPLACEMENTS

#### Catalog #2135.44

Ground Rod - Set of (2) 17" Stainless Steel T-shaped **Auxiliary Ground Electrodes** 

#### Catalog #2153.06

MN72 AC Current Probe (6424 only)

CATALOG #5000.92

Calibration Checker









SHOWN: CATALOG #2135.35