Ground Resistance Testers

MODELS 6422, 6424

Strategic Advantages

- Two instruments in one test Ground and Bonds
- Low cost, great performance and feature rich
- One button connect press read operation eliminates testing errors
- CAT IV 600V rated highest safety rated Ground Testers on the market
- Storage of 3 measurements along with average and % deviation – easily determine proper test results (Model 6424)
- Automatic frequency adjustments improves accuracy
- Automatic continuity and resistance check of the H electrode
- Voltage and current measurement capability (Model 6424)
- IP65 dust proof, weather-resistant and flame retardant – works in all environments



(provides the ability to test most systems)

Our products are backed by over 130 years of experience in test and measurement equipment, and encompass the latest international standards for quality and safety.

2 Technical Hotline: (800) 343-1391

www.aemc.com



GROUND RESISTANCE TESTERSMULTI-FUNCTION

MODELS 6422 & 6424

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











These new Ground Resistance Testers are both economical and feature rich. They are ideal for testing commercial, residential and light industrial grounding systems. Their innovative design simplifies the process and provides reliable results eliminating confusion in setting it up correctly. A simple one button connect - press - read operation is all that is needed. The Model 6424 is capable of storing and calculating the measurements from the simplified 62% test method and displaying the average and % deviation which is important in determining correct pole spacing for the test.

E SSS H Effective resistance areas (no overlap) 52% 62% 72% Reading variation STORAGE REGISTERS V/A Ω

FEATURES

- Simple, one button operation eliminates errors in testing
- Test button turns green when measurement is stable
- 2P resistance measurement up to 50 kΩ
- 3P ground resistance measurement up to 2 k Ω (Model 6422) and up to 50 k Ω (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
- CAT IV 600 V 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



GROUND RESISTANCE TESTERS MULTI-FUNCTION

MODELS 6422 & 6424

SPECIFICATIONS

SI LUII IUATIUN							
MODELS	6422			6424			
ELECTRICAL							
Voltage							
Range	-			0.1-600 Vac/dc			
Resolution	-			0.1 V			
Accuracy		-		±(1 %R + 1 ct)			
Current							
Range	-			0.5-60.00 Aac (requires optional MN72 probe)			
Resistance (2P Mode)							
Measurement Range	(0.05-99.99) Ω, (80.0-999.9) Ω , (0.800-9.999) kΩ, (8.00-50.00) kΩ						
Resolution	$(0.01, 0.1, 1, and 10) \Omega$						
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	(0.50-99.99) Ω	(80.0-999.9) Ω	(0.800-2.000) kΩ	(0.50-99.99) Ω	(80.0-999.9) Ω	(0.800-9.999)kΩ	(8.00-50.000) kΩ
Resolution	0.01 Ω	0.1 Ω	1 Ω	0.01 Ω	0.1 Ω	1 Ω	10 Ω
Intrinsic Uncertainty	± (1 %R + 10 ct)	± (1 %R + 2 ct)	± (1 %R + 1 ct)	± (1 %R + 10 ct)	± (1 %R + 2 ct)	± (1 %F	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% 3P resistance measurements			
Calculation	- Calculates average and % deviation of the three saved readings						ved 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 h			
Battery Life	$>$ 2,000 x 3P earth measurements at 100 Ω			>1,500 x 3P earth measurements at 100 Ω			
Dimensions	(8.78 x 4.96 x 2.75) in (223 x 126 x 70) mm						
SAFETY							
Safety Ratings	EMC: IEC 61326-1; IEC 61010-2-030 / 600 V CAT IV						

ACCESSORIES/REPLACEMENTS

Catalog #2135.39

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

Catalog #2153.06

MN72 AC Current Probe (6424 only)

CATALOG #5000.92 Calibration Checker











SHOWN: CATALOG #2135.35

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)





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