

# Multi-Function Ground Resistance Tester Model 6472



Model 6472

SPECIFICATIONS	
<b>MODEL</b>	<b>6472</b>
<b>ELECTRICAL</b>	
<b>3-Point Measurement</b>	
Range (Auto-Ranging)	0.09 $\Omega$ to 99.9k $\Omega$
Resolution	0.01 $\Omega$ to 100 $\Omega$
Test Voltage	Nominal 16 or 32VRMS user selectable
Resistance Measurement Frequency	41 to 5078Hz user selectable or automatic selection
Test Current	Up to 250mA
Accuracy	$\pm 2\%$ of Reading + 1ct @ 128Hz
<b>Soil Resistivity 4-Point Measurement</b>	
Test Method	Wenner or Schlumberger selectable with automatic calculation of test results in $\Omega$ -meters, $\Omega$ -cm or $\Omega$ -feet
Range (Auto-Ranging)	0.01 to 99.99k $\Omega$ ; $\rho$ Max: 999k $\Omega$ m (display in k $\Omega$ ft is not possible)
Resolution	0.01 to 100 $\Omega$
Test Voltage	16 or 32V user selectable
Frequency	From 41 to 128Hz selectable
<b>External Voltage Measurement</b>	
Range (Auto-Ranging)	0.1 to 65.0VAc/DC – DC to 440Hz
Accuracy	$\pm 2\%$ of Reading + 1cts
<b>Resistance Measurement (Bond Testing)</b>	
Measurement Type	2-Pole (with lead resistance compensation) or 4-Pole (Kelvin sensing) user selectable
Range (Auto-Ranging)	2-Pole 0.01 $\Omega$ to 99.9k $\Omega$ ; 4-Pole 0.001 $\Omega$ to 99.99k $\Omega$
Accuracy	$\pm 2\%$ of Reading + 2cts
Test Voltage	16Vdc (+, - or auto polarity)
Test Current	Up to 250mA max
<b>Data Storage</b>	
Memory Capacity	512 test results
Communication	Optically Isolated USB
<b>Power Source</b>	9.6V rechargeable battery pack
<b>Recharging Source</b>	110/220 50/60Hz external charger with 18Vdc, 1.9A output or 12V vehicle power

## Features

- 2- and 4-Wire Bond Resistance/Continuity Measurement (DC Resistance) with automatic polarity reversal
- 3-Point Fall-of-Potential measurement with manual or automatic frequency selection
- 4-Point soil resistivity measurement with automatic calculation of Rho ( $\rho$ ) and user selection of the Wenner or Schlumberger test method
- 3-Point earth coupling measurement
- Measures Ground Resistance using the 2 clamp method (selective ground testing)
- Measures Ground Impedance at frequencies up to 5kHz to test lightning strike protection
- Manual and automatic frequency scan from 40 to 5078Hz for optimum test accuracy in electrically noisy environments
- Selectable test voltage of 16 or 32V up to 250mA of test current
- Auto-off power management
- Automatic recognition of all electrode connections and their resistance value
- Stores up to 512 complete test results
- Optically isolated USB communication
- Remote set up and operation of all measurements using DataView<sup>®</sup> software
- Automatic report generation including the fall of potential plot
- Rechargeable NiMH batteries from wall charger or vehicle power
- Rugged dustproof and rainproof field case
- Includes DataView<sup>®</sup> software for data storage, real-time display, analysis, report generation and system configuration

## Description

The Model 6472 measures from 0.01 to 99.99k $\Omega$  and is auto-ranging, automatically seeking out the optimum measurement range, test frequency and test current.

Easy-to-use – Simply connect the leads, select test mode, press Start and read the results. Up to 512 test results can be stored in internal memory for recall to the display or downloaded to a PC via DataView<sup>®</sup> software.

The large LCD is easy-to-read and indicates ground electrode resistance, test voltage, current and frequency as well as individual electrode resistance, battery status and more.

The Model 6472 is Cat IV rated to 50V and is over voltage protected to more than 250VAc against accidental live connection to live circuits. The voltage is also displayed on screen. In the event of a system fault, the Model 6472 can withstand 250VAc.

Additional features of the Model 6472 include; manual and automatic test frequency selection from 40 to 5078Hz; user selectable 3 or 4-Pole Fall of Potential or 4-Pole Soil Resistivity test methods and user selectable 2-Wire or 4-Wire Bond Resistance test method.

The Model 6472 is powered by 9.6V, 3.5 Ah NiMH rechargeable batteries. An external recharger powered from 120/230V, 50/60Hz is included and provides for testing while recharging. The Model 6472 can also be vehicle powered from an optional 12V battery adapter. (Cat. #2135.42)

## Large Display!

### 4-Point Bond Test



The 4-Point Bond test displaying lead connections, bond resistance test results, test voltage and current.

### 3-Point Fall-of-Potential Test



The 3-Point Fall-of-Potential test displaying test lead connection, grounding electrode resistance, test voltage and frequency.

### Frequency Selection Test



The Frequency selection screen displays selected test frequency and voltage for the test as well as lead connection.

### Data Storage



Memory Recall displays test results stored at a specific memory location.

### Schlumberger Test



The Schlumberger test displays test lead connection, soil resistivity ( $\rho$ ) test results, test electrode resistance and more.

NOTE: More information for each test is available by scrolling through the displays.

### Wenner Test



The Wenner test displays test lead connection, soil resistivity ( $\rho$ ) test results, electrode spacing and resistance.

## Current Probe accessory options

(For use in two probe and selective ground testing methods)

AC Current Probe  
Model MN82  
Catalog #2135.71



AC Current Probe  
Model SR182  
Catalog #2135.72



## DataView® Software for Model 6472



DataView® is included with the Model 6472.

- Configure all functions and parameters from your PC
- Display and analyze real-time data on your PC
- Customize views, templates and reports to your exact needs
- Create and store a complete library of configurations that can be uploaded to the Model 6472 as needed
- Zoom in and out and pan through sections of the graph to analyze the data
- Download, display and analyze recorded data
- Print reports using standard or custom templates you design



Includes meter, rechargeable NiMH batteries, optical USB cable, power adapter 110/240V with power cord 115V US, two 500 ft color-coded leads on spools (red/blue), two 100 ft color-coded leads (hand-tied, green/black), one 30 ft lead (green), four T-shaped auxiliary ground electrodes, set of five spaded lugs, one 100 ft AEMC® tape measure, DataView® software, ground tester workbook CD, carrying bag for meter, carrying bag for kit, product warranty and registration card and a user manual.

Catalog #2135.54

CATALOG NO.	DESCRIPTION
2135.51	Ground Resistance Tester Model 6472 (2-Point, 3-Point, 4-Point, Bond Test, Digital, Rechargeable Battery, DataView® software)
2135.52	Ground Resistance Tester Model 6472 Kit – 150 ft (Model 6472 and Catalog #2135.35)
2135.53	Ground Resistance Tester Model 6472 Kit – 300 ft (Model 6472 and Catalog #2135.36)
2135.54	Ground Resistance Tester Model 6472 Kit – 500 ft (Model 6472 and Catalog #2135.37)
<b>Accessories (Optional) Reference to page 21 for Model 6472 Kits Catalog #2135.35, #2135.36 &amp; #2135.37</b>	
2135.71*	AC Current Probe Model MN82 for use with Model 6472
2135.72*	AC Current Probe Model SR182 for use with Model 6472

\*2 probes required for two clamp testing method.

