

# GROUND RESISTANCE TESTERS

## GROUND FLEX® FIELD KIT



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### GROUND FLEX® FIELD KIT

Test active tower grounds safely **WITHOUT** de-energizing or disconnecting any cables



SCAN TO LEARN MORE

### Revolutionize Tower Grounding Assessment

#### GROUND TESTER 6472 KIT-500 FT

Includes meter, rechargeable NiMH batteries, optical USB cable, power adapter (110/240) V with power cord 115 V US, (2) 500 ft color-coded leads on spools (red/blue), (2) 100 ft color-coded leads (hand-tied, green/black), (1) 30 ft lead (green), (4) T-shaped auxiliary ground electrodes, (1) 100 ft tape measure, DataView® software, ground tester workbook, user manual on USB drive, (1) carrying bag for meter and (1) carrying bag for kit.

#### GROUND FLEX® FIELD KIT 6474

##### CAT. #2136.03 (Includes Ground Tester 6472 KIT-500 FT)

Includes GroundFlex® Adapter Model 6474, Ground Tester Model 6472, (4) GroundFlex® sensors (16 ft/5 m) with (12) color-coded rings, connection lead, (2) extension leads on H reel (black/green) with color-coded alligator clips, (1) extra black and green alligator clip, (6) BNC extension leads, (1) calibration loop, (3) C-clamps, a carrying case with wheels and handle for meters, carrying bag for meter and kit, (1) inverter 12 V<sub>DC</sub> to 120 V<sub>AC</sub> 200 watt (vehicle use) and user manual.

MODELS	6472 & 6474						
ELECTRICAL							
	3-POINT METHOD	4-POINT & SELECTIVE METHODS	GROUND MEASUREMENT WITH 2 CLAMPS	SOIL RESISTIVITY	GROUND POTENTIAL MEASUREMENT	DC RESISTANCE MEASUREMENT	MEASUREMENTS WITH 6474
Range (Auto-Ranging)	0.09 Ω to 99.9 kΩ	0.011 Ω to 99.99 kΩ	(0.1 to 500) Ω	0.01 Ω to 99.9 kΩ	0.01 mV to 65 V	0.02 Ω to 99.99 kΩ	0.067 Ω to 99.99 kΩ
Resolution	(0.01 to 100) Ω	(0.001 to 10) Ω	(0.01 to 1) Ω	(0.01 to 100) Ω	(0.01 to 10) mV	2 wires: (0.01 to 100) Ω 4 wires: (0.001 to 10) Ω	(0.001 to 10) Ω
Accuracy	± (2% + 1 ct)		± (10% + 1 ct)	± (2% + 1 ct)	± (5% + 1 ct)	± (2% + 2 cts)	± (5% + 1 ct)
No-Load Voltage	(10, 16, 32 or 60) Vrms (Not applicable w / 2-clamp method)					± 16 V <sub>DC</sub>	(10, 16, 32 or 60) Vrms
Measurement Frequency	(41 to 5078) Hz		Auto: 1611 Hz Manual: (128, 1367, 1611, or 1758) Hz	(41 to 128) Hz	(41 to 5078) Hz	DC	(41 to 5078) Hz
Coupling Measurement	Yes	-					
Auxiliary Rod Resistance Measurement	0.14 Ω to 99.9 kΩ		-				0.14 Ω to 99.9 kΩ
Voltage Interference	Maximum 60 V peak						
Soil Resistivity	-		Wenner and Schlumberger		-		
Type of Measurement	3 wires	4 wires	2 clamps	4 wires	3 wires	2 or 4 wires	GroundFlex®
Measurement Current	> 200 mA <sub>AC</sub>		< 26 A <sub>RMS</sub> (w / SR182) < 5 A <sub>RMS</sub> (w / MN82)	> 200 mA <sub>AC</sub>		> 200 mA <sub>AC</sub>	> 200 mA <sub>AC</sub>
MECHANICAL							
Memory / Communication	512-record memory / Optically isolated USB						
Dimensions / Weight	(10.7 x 9.84 x 5.04) in (272 x 250 x 128) mm / Model 6472: 7.05 lb (3.2 kg) / Model 6474: 5.07 lb (2.3 kg)						
SAFETY							
Safety Rating	50 V CAT IV, complies with IEC 61326-1 / IEC 61010 / IEC 61557-1-4-5						

Consult factory for NIST Calibration prices.

# GROUND RESISTANCE TESTERS

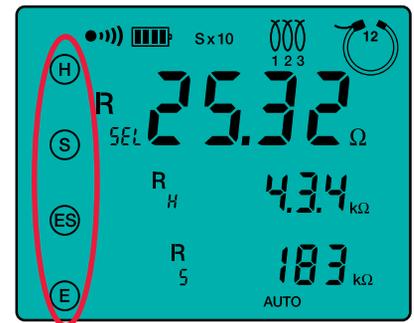
## GROUND FLEX® FIELD KIT

SHOWN: 6474 KIT



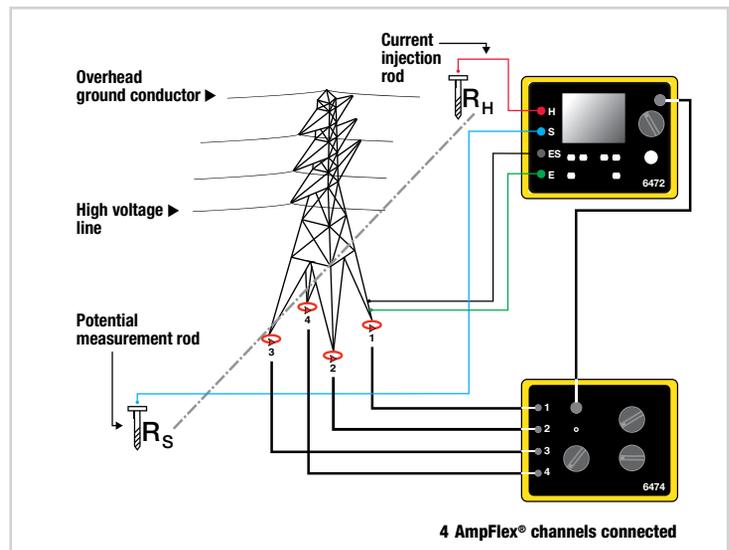
### AUTOMATIC RECOGNITION AND DISPLAY OF INPUT CONNECTIONS TO MATCH TEST

The connections are displayed and flash if incorrect or absent for the test selected.



## FEATURES

- Ground Integrity Measurement
- 3- and 4-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
- 2- and 4-Wire DC resistance measurement (*Bond testing*) with automatic polarity reversal
- 3-Point Earth coupling measurement
- Automatic frequency scan from (41 to 5078) Hz for optimum test accuracy in electrically noisy environments
- Selectable test voltage limit of (10, 16, 32, or 60) V with up to 250 mA of test current
- Automatic recognition of all electrode connections and measurement of their resistance value
- Determines bonding condition of overhead ground conductors
- Auto Power OFF management
- Optically isolated USB communication
- Remote set up and operation of all measurements using DataView® software supplied
- Rechargeable NiMH batteries from wall charger or vehicle power (CAT. #2135.43 needed for vehicle power)
- Rugged dustproof and water-resistant field case (IP53 rated in closed position)
- Includes DataView® software for data retrieval, real-time display, analysis, automatic report generation and system configuration



### GROUND MEASUREMENT ON TOWERS WITH GROUND CABLE

High-voltage lines are usually equipped with a ground cable to allow lightning to discharge to ground via the tower. As all the towers are connected to this conductor, all the tower's resistances are in parallel. This means it is impossible to measure tower resistance using traditional 3-Point methods unless the ground cable is disconnected, which is a dangerous and time-consuming operation.

## ACCESSORIES

#### CAT. #2135.87

GroundFlex® Sensor  
32 ft (10 m)  
(Model 6474 only)



#### CAT. #2135.72

Model SR182  
AC Current Probe  
(Models 6471 & 6472)



#### CAT. #2135.86

Lead – BNC 150 ft (46 m)  
M/F Extension Lead  
(Model 6474 only)



CAT. #

DESCRIPTION

2136.03 GroundFlex® Field Kit Model 6474 (Tower Tester)



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Technical Assistance (800) 343-1391

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