

# Ground Resistance Tester Model 3620 & 3620 Kits



Model 3620 shown in  
standard soft carrying case  
Catalog #2114.90



The Analog Ground Resistance Tester Model 3620 performs ground resistance measurements from 0.5 to 1000 $\Omega$  with speed and accuracy.

The Model 3620 features three-terminal operation for Fall-of-Potential earth/ground resistance and also may be used for 2-Point tests.

The large 3.1" logarithmic analog scale is easy to read, with a separate marking for 25 $\Omega$ . A large Press-to-Measure button allows for easy measurements. A manual zero adjust is provided for

accurate readings. Color-coded binding post terminals are easy-to-use with banana plug and spade lug inputs.

The heavy duty ABS case is O-ring sealed against dust and water, and the Press-to-Measure button is also sealed. The Ground Tester Model 3620 is battery powered, for convenient use in remote field applications. Mechanical and safety specifications, such as vibration and drop test, meet or exceed IEC standards, to ensure safe and reliable field use.

The Ground Resistance Tester Model 3620 is the ideal instrument for electrical contractors, power utilities, REAs, telephone and CATV technicians, and inspectors who must check ground to determine compliance with NEC<sup>®</sup>, OSHA and other specifications.

## Features

- Fall-of-Potential method for 2- and 3-Point ground resistance tests
- Direct reading on large analog display 0.5 to 1000Ω and easy 25Ω readings
- Large 3.1" (77mm), easy-to-read scale for accurate readings
- Built-in battery check
- Three color-coded terminals
- Large Press-to-Measure button
- Portable and compact
- Extremely simple to operate: connect – press – read
- Designed to reject high levels of noise and interference
- Double Insulation
- CE Mark

## Applications

- Measuring earth resistance of the type of single rod or small ground grids often found in remote telecommunication switching sites
- Measuring ground electrode resistance of lightning protection equipment
- Measuring the earth electrode resistance of equipment in recreational areas
- Testing electrode resistance of ground rods and grids at new construction sites, when utility supplied power has not been supplied
- Testing earth electrode resistance of grounded towers at cellular phone remote installations

## Specifications

ELECTRICAL	
Range	0.5 to 1000Ω
Resolution	10mΩ
Test Current	10mA
Resistance Measurement Frequency	128Hz square wave
Accuracy	±5% of Reading + 0.1% of galvanometer scale length
Auxiliary Electrode Influence	Rz 3000 times the reading up to 50kΩ Ry 50kΩ
Withstanding Voltage	250Vrms with spikes of 3000VAC or 1000VDC
Power Source	Eight 1.5V "AA" Alkaline batteries
Battery Life	1680 15-second tests (approximately)
Fuse Protection	High breaking capacity 0.1A, >250V, 0.25 x 1.25"
MECHANICAL	
Display	Analog Pivot movement
Connection	Color-coded terminals accept spade lugs with minimum gap of 6mm or standard 4mm banana jacks
Scale	3.1" (77mm) white scale with black pointer; one scale per range
Operating Temperature	14° to 131°F (-10° to 55°C)
Storage Temperature	-40° to 158°F (-40° to 70°C), 0 to 90% RH with batteries removed
Temperature Influence	5% per 10°C
Relative Humidity	20 to 90% maximum
Dimensions	8.7 x 5.4 x 5.9" (220 x 136 x 150mm)
Weight	2 lbs (1.3kg)
Case	Heavy-duty, ABS
Colors	Case safety yellow; Front panel gray
Mechanical Shock	IEC 68-2-27
Vibration Test	IEC 68-2-6
Drop Test	IEC 68-2-32
Environmental	O-ring sealed against dust and water to IP50
SAFETY	
Rating	EN 61010-1, Cat. III, Pollution Degree 2, 24V
Agency Approval	Emission: EN 50081-1 Immunity: EN 50082-1
Double Insulation <input type="checkbox"/>	Yes
CE Mark	Yes

## Ground Kits

*Test Kit for 3-Point testing includes instrument, two 150 ft color-coded leads on spools (red and blue), one 30 ft lead (green), two 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs, 100 ft tape measurer and carrying bag.*  
**Catalog #2135.10**



*Test Kit for 4-Point testing includes instrument, two 300 ft color-coded leads on spools (red and blue), two 100 ft color-coded leads (green and black), four 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs, 100 ft tape measurer and carrying bag.*  
**Catalog #2135.11**



*Test Kit for 4-Point testing includes instrument, two 500 ft color-coded leads on spools (red and blue), two 100 ft color-coded leads (green and black), one 30 ft lead (green), four 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs, 100 ft tape measurer and carrying bag.*  
**Catalog #2135.12**

# Construction



## ORDERING INFORMATION

## CATALOG NO.

<b>Ground Resistance Tester Model 3620</b> (3-Point Analog) .....	<b>Cat. #2114.90</b>
Includes soft carrying case, batteries and user manual	
<b>Ground Resistance Tester Model 3620 Kit – 150 ft</b> .....	<b>Cat. #2135.10</b>
Test Kit for 3-Point testing includes meter, two 150 ft color-coded leads on spools (red and blue), one 30 ft lead (green), two 14.5" T-shaped auxiliary ground electrodes, one set of five fork terminals, 100 ft tape measurer and carrying bag.	
<b>Ground Resistance Tester Model 3620 Kit – 300 ft</b> .....	<b>Cat. #2135.11</b>
Test Kit for 4-Point testing includes two 300 ft color-coded leads on spools (red and blue), two 100 ft color-coded leads (green and black), four 14.5" T-shaped auxiliary ground electrodes, one set of five fork terminals, 100 ft tape measurer and carrying bag.	
<b>Ground Resistance Tester Model 3620 Kit – 500 ft</b> .....	<b>Cat. #2135.12</b>
Test Kit for 4-Point testing includes two 500 ft color-coded leads on spools (red and blue), two 100 ft color-coded leads (green and black), one 30 ft lead (green), four 14.5" T-shaped auxiliary ground electrodes, one set of five fork terminals, 100 ft tape measurer and carrying bag.	
<b>Accessories (Optional)</b>	
25Ω Calibration Checker .....	Cat. #2130.59
Tape Measure (100 ft) .....	Cat. #2130.60
Ground Tester Video/Workbook set .....	Cat. #2130.64



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