

TECHNICAL DATA

# Fluke 1630 Ground Resistance Meter



## Key features

- A compact, rugged clamp meter that enables non-intrusive leakage current measurement for earth ground loop testing
- Features a wide ground loop resistance range, from 0.025  $\Omega$  to 1500  $\Omega$
- Measures ground leakage current, from 0.2 mA to 1000 mA, without needing to disconnect
- Measures AC current from 0.2 A to 30 A

## Product overview: Fluke 1630 Ground Resistance Meter

### Fluke 1630 Earth Ground Clamp Meter uses stakeless method to simplify ground loop testing

The clamp-on ground testing technique provided by the Fluke 1630 simplifies ground loop testing and enables non-intrusive leakage current measurement without breaking the circuit. Its compact and rugged design makes the Fluke 1630 easy to use in small places and harsh environments. Handy features like “display hold” and continuity testing with an audible alarm, ensures additional convenience.

### Stakeless testing system

The Fluke 1630 uses the stakeless testing method, which eliminates the need to disconnect parallel ground rods and find suitable locations for placing auxiliary ground stakes. This saves time and enables users such as industrial and utility electricians, and field service electricians and contractors, to perform earth ground loop tests in locations where it is not possible to use other techniques, such as inside buildings or on power pylons. With the stakeless testing method, earth ground stakes are no longer necessary. The Fluke 1630 Earth Ground Clamp is clamped around the earth ground rod or the connecting cable. A known voltage is induced by one half of the clamp and the current is measured by the other half. The tester automatically determines the ground loop resistance at this grounding connection.

### Other useful capabilities:

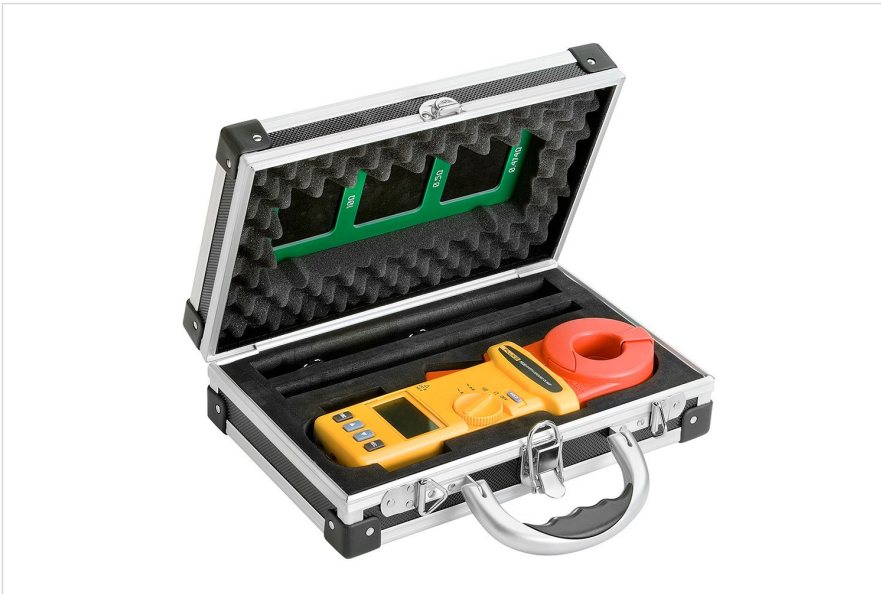
- Provides a large jaw opening of 35 mm (1.38 in) for tests on ground conductors and/or equipotential bus bars
- Offers user-defined HI/LO Alarm limits for rapid measurement evaluation
- Includes a handy 'display hold' button to capture readings in hard-to-reach places
- Automatically records and stores measured values with time saving memory function
- Provides automatic self calibration to ensure correct measurements every time
- Provides overload protection to 200 A
- Delivers  $\geq 8$  hours battery life (continuous operation)
- Comes with a carrying case and resistance test loop

## Specifications: Fluke 1630 Ground Resistance Meter

General Specifications	
Operating error	Refers to the operating temperature range and is guaranteed for 2 years
Storage temp. range	-20°C to 60°C (-4°F to 140°F)
Reference temp. range	23°C $\pm$ 5°C (73°F $\pm$ 9°F)
Storage humidity	< 75% R <sub>n</sub>
Operating humidity	< 85% R <sub>n</sub>
Display	999 digital LC display with special symbols
Protection	IP30 according to IEC 529/EN 60529
Safety	300 V, CAT III pollution degree 2 IEC 61010-1 and IEC 61010-2-032
Weight	750 g (1.165 lbs)
Conductor size	35 mm (1.38 in) approximately
Dimension (L x W x D)	276 x 100 x 47 mm (10.8 x 3.9 x 1.9 in)
Emission	IEC 1000 4-2, IEC 61326-I class B
Immunity	IEC 61000-4-2, 8 kV (air) criteria A
	IEC 61000-4-3, 3 V/m performance criteria A
Range selection	Auto
Overload indicator	"OL" on display
Measuring time	0.5 sec
Measuring frequency	3.333 kHz
Battery type	9 V alkaline (type IEC 6 LR 61)
Battery life	$\geq 8$ hours (continuous operation)
Power consumption	40 mA
Low battery indication	Display symbol
Ground Loop Resistance (Autorange)	
Range	<b>Accuracy</b> ( $\pm$ % of reading $\Omega$ )
0.025 - 0.250 $\Omega$	$\pm 1.5\%$ rdg $\pm 0.02 \Omega$

0.250 - 9.999 $\Omega$	$\pm 1.5\%$ rdg $\pm 0.05 \Omega$
10.00 - 99.99 $\Omega$	$\pm 2.0\%$ rdg $\pm 0.3 \Omega$
100.0 - 199.9 $\Omega$	$\pm 3.0\%$ rdg $\pm 1.0 \Omega$
200.0 - 400.0 $\Omega$	$\pm 5.0\%$ rdg $\pm 5 \Omega$
400.0 - 600.0 $\Omega$	$\pm 10\%$ rdg $\pm 10 \Omega$
600.0 - 1500 $\Omega$	$\pm 20\%$
Loop resistance with no inductance, external magnetic field < 50A/m, external electrical field < 1 V/m, conductor centered.	

## Ordering information



### **Fluke 1630**

Fluke 1630 Earth Ground Clamp Meter

Includes:

- Rugged carrying case with shoulder strap
- Resistance test loop
- 9 V battery
- User's manual

**Fluke.** *Keeping your world up and running.®*

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