

**FLUKE®**

**1630**  
Earth Ground Clamp

**Users Manual**

PN 2729710  
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## Specifications

### Electrical Specifications

Display	9999 digit liquid crystal display with special symbols
Operating Humidity	Less than 85% RH
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Storage Humidity	Less than 75% RH
Reference Temperature	23 °C ± 5 °C (73 °F ± 9 °F)
Temperature Coefficient	0.1 % X (specified accuracy)/ °C (< 18 °C or > 28 °C)
Operating Temperature	0 °C to +50 °C (+32 °F to +122 °F)
Protective Type	IP23 according to IEC 60529/EN 60529
Category Rating	300 V CAT III/pollution degree 2 and 600 V CAT II
EMC (Emission)	IEC 61000-4-1, IEC 61326-1 class B
EMC (Immunity)	IEC 61000-4-2 8 kV (air) criteria B, IEC 61000-4-3 V/m perf. Criteria A
Range Selection	Auto
Overload Indication	OL
Measurement Frequency	3.333 kHz
Power Requirement	9 V alkaline (type IEC 6F22, NEDA 1604)
Power Consumption	Approx. 40 mA (in Ω function)
Low Battery Indicator	+
Maximum Non-destructive Current	100 A continuous, 200 A (< 10 sec) 50/60 Hz
Accuracy of Calibration Plate	+/- 0.5%
Data Logging Capacity	116 records
Data Logging Interval	1 to 255 seconds

### General Specification

Conductor Size	35 mm (1.38 in) approximately
Dimensions	276 mm (L) x 100 mm (W) X 47 mm (H) 10.8 in (L) x 3.9 in (W) x 1.9 in (H)
Weight	750 g (1.65 lbs)

**Ground Loop Resistance**

Range	Accuracy <sup>[1]</sup> (± % of reading + Ω)
0.025 to 0.250 Ω	± 1.5 % + 0.02 Ω
0.250 to 1.000 Ω	± 1.5 % + 0.002 Ω
1.000 to 9.999 Ω	± 1.5 % + 0.01 Ω
10.00 to 50.00 Ω	± 1.5 % + 0.03 Ω
50.00 to 99.99 Ω	± 1.5 % + 0.5 Ω
100.0 to 200.0 Ω	± 3.0 % + 1.0 Ω
200.1 to 400.0 Ω	± 5.0 % + 5.0 Ω
400.0 to 600.0 Ω	± 10.0 % + 10.0 Ω
600.0 to 1500.0 Ω	± 20.0 %

[1] Loop resistance with no inductance, external field < 200 A/m, external electrical field < 1 V/m, conductor centered.

**Ground Leakage Current mA**

Autorange 50/60 Hz, True rms, crest factor CF <3.5

Range	Accuracy
0.300 to 1.000 mA	± 2.0 % rdg ± 0.05 mA
1.00 to 10.00 mA	± 2.0 % rdg ± 0.03 mA
10.0 to 100.0 mA	± 2.0 % rdg ± 0.3 mA
100 to 1000 mA	± 2.0 % rdg ± 3.0 mA

**Ground Leakage Current A**

50/60 Hz, True rms, crest factor CF <3.5

Range	Accuracy
0.200 to 4.000 A	± 2.0 % rdg ± 0.003 A
4.00 to 35.00 A	± 2.0 % rdg ± 0.03 A