

FLUKE®

1630-2/1630-2 FC

Earth Ground Clamp

Users Manual

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Electrical Specifications

Maximum Voltage to Earth Ground	1000 V
Battery Type	AA alkaline IEC LR6 (x4)
Battery Life	>15 hours in Ground Resistance measurement mode, with backlight turned off, and RF mode turned off
Frequency Range	
Filter OFF40 Hz to 1 kHz
Filter ON40 Hz to 70 Hz
Ingress Protection	IEC 60529: IP30 with jaw closed
LCD	
Digital Reading9999 counts
Refresh Rate4/second
Temperature	
Operating	-.10 °C to +50 °C
Storage	-.20 °C to +60 °C
Operating Humidity	
	.Non condensing (<10 °C)
	≤90 % RH (at 10 °C to 30 °C)
	≤75 % RH (at 30 °C to 40 °C)
	≤45 % RH (at 40 °C to 50 °C)
	(noncondensing)
Altitude	
Operating2000 m
Storage12 000 m
Reference Temperature23 °C ±5 °C (73 °F ±9 °F)
Temperature Coefficient0.15 % x reading/ °C (<18 °C or >28 °C)

Overload Indication	OL
Data Logging Capacity	>2000 data points
Data Logging Interval	1 second to 59 minutes and 59 seconds
Safety	
General	IEC 61010-1: Pollution Degree 2 IEC 61557-1
Measurement	IEC 61010-2-032: CAT IV 600 V / CAT III 1000 V
Current Clamp for Leakage Current Measurements	IEC 61557-13: Class 2, ≤ 30 A/m
Resistance to Earth	IEC 61557-5
Effectiveness of the Protective Measures	IEC 61557-16: cutoff frequency 20 kHz (-3 dB)

Electromagnetic Compatibility (EMC)

International IEC 61326-1: Portable Electromagnetic Environment
CISPR 11: Group 1, Class B, IEC 61326-2-2

Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.

Class B: Equipment is suitable for use in domestic establishments and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

Emissions that exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object.

Korea (KCC) Class A equipment (Industrial Broadcast & Communications Equipment)

Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.

USA (FCC) 47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.

Wireless Radio

Frequency Range 2412 MHz to 2462 MHz

Output Power <10 mW

Radio Frequency Certification FCC ID:T68-FBLE IC:6627A-FBLE

General Specifications

Conductor Size 40 mm approximately

Dimensions (L x W x H) 283 mm x 105 mm x 48 mm

Weight 880 g

Ground Loop Resistance

Frequency of measurement: 3.333 kHz.

Range	Accuracy ^[1] ± (% of reading + Ω)
0.025 Ω to 0.249 Ω	1.5 % + 0.020 Ω
0.250 Ω to 0.999 Ω	1.5 % + 0.050 Ω
1.000 Ω to 9.999 Ω	1.5 % + 0.100 Ω
10.00 Ω to 49.99 Ω	1.5 % + 0.30 Ω
50.00 Ω to 99.99 Ω	1.5 % + 0.50 Ω
100.0 Ω to 199.9 Ω	3.0 % + 1.0 Ω
200.0 Ω to 399.9 Ω	5.0 % + 5.0 Ω
400 Ω to 599 Ω	10.0 % + 10 Ω
600 Ω to 1500 Ω	20.00 %

[1] Loop resistance with no inductance, conductor centered.

AC Leakage Current mA

True rms, crest factor CF ≤3

Range	Resolution	Accuracy ^[1] ± (% of reading + mA)
0.200 mA to 3.999 mA	1 μA	2.0 % + 0.05 mA
4.00 mA to 39.99 mA	10 μA	2.0 % + 0.03 mA
40.0 mA to 399.9 mA	100 μA	2.0 % + 0.3 mA
0.400 A to 3.999 A	1 mA	2.0 % + 3 mA
4.00 A to 39.99 A	10 mA	2.0 % + 30 mA

[1] Applies to signal frequency:
 • 40 Hz to 1 kHz with Filter set to OFF
 • 40 Hz to 70 Hz with Filter set to ON