

技術資料

## Fluke 1623-2 接地電阻測試儀



### 主要功能

- 一種獨特的接地測試儀，可在有樁和無樁的情況下執行快速、準確的測試
- 測試 3 極和 4 極電位降以及 4 極土壤電阻率（帶樁）
- 執行選擇性接地棒測試（一個夾具 + 樁）
- 執行無樁接地棒測試（兩個夾具）
- 具有 IP56 防護等級，適合戶外使用

### 產品概述: Fluke 1623-2 接地電阻測試儀

Fluke 1623-2 接地電阻測試儀可快速準確地執行所有四項接地測試。

Fluke 1623-2 接地電阻測試儀僅使用夾具、僅使用樁或一個夾具和樁來測量接地迴路電阻。通過無樁測試方法，Fluke 1623-2 接地電阻測試儀能夠僅使用電流鉗測量多接地系統的接地迴路電阻。這種技術消除了斷開並聯接地以及為輔助接地樁尋找合適位置的危險且耗時的工作。您可以使用它在您之前未考慮過的地方執行接地測試，例如建築物內部、電力塔上或您無法接觸土壤的任何地方。

保持你的選擇

請記住，無樁測試方法僅在被測建築物或結構存在接地系統的情況下才有效。如果只有一條接地路徑，這在許多住宅應用中很常見，您將需要使用需要樁的電位降測試方法。

## 規格: Fluke 1623-2 接地電阻測試儀

General Specifications	
Display: 1999 digit LCD	Display with special symbols, digit height 25 mm, fluorescent backlight
User interface	Instant measurement through TURN and START one button concept. The only operating elements are rotary switch and START button
Robust, water and dust resistant	Instrument is designed for tough environmental conditions (rubber protective cover, IP56)
Memory	Internal memory storage up to 1500 records accessible via USB port
Temperature Range	
Operating temperature	-10°C to 50°C (14°F to 122°F)
Storage temperature	-30°C to 60°C (-22°F to 140°F)
Temperature coefficient	±0.1% of reading/°C < 18°C > 28°C
Intrinsic error	Refers to the reference temperature range and is guaranteed for 1 year
Operating error	Refers to the operating temperature range and is guaranteed for 1 year
Climatic class	C1 (IEC 654-1), -5°C to +45°C (23° to +115° F), 5% to 95% RH
Protective type	IP56 for case, IP40 for battery door according to EN60529
Safety	Protection by double and/or reinforced insulation. max. 50 V to earth. IEC61010-1: Pollution degree 2
EMC (emission immunity)	IEC61326-1: Portable
Quality system	Developed, designed and manufactured according to DIN ISO 9001
External voltage	V ext, max = 24 V (DC, AC < 400 Hz), measurement inhibited for higher values
V ext rejection	> 120 dB (162dB, 50, 60, 400 Hz)
Measuring time	Typical 6 seconds
Max. overload	250 V rms (pertains to misuse)
Auxiliary power	6 x 1.5 V Alkaline (type AA LR6)
Battery life span	Typical > 3,000 measurements
Dimensions (W x H x D)	250 x 133 x 187 mm (9.75 x 5.25 x 7.35 in)
Weight	1.1 kg (2.43 lb) including batteries 7.6 kg (16.8 lb) incl. accessories and batteries in carrying case
RA 3-Pole Ground Resistance Measurement (IEC 1557-5)	
Switch position	R <sub>A</sub> 3-pole
Resolution	0.001 Ω to 10 Ω
Measuring range	0.020 Ω to 19.99 kΩ
Accuracy	±(2% rdg + 3 d)
Operating error	±(5% rdg + 3 d)
Measuring Principle: Current/Voltage Measurement	

Measuring voltage	Vm = 48 V AC
Short-circuit current	> 50 mA
Measure frequency	128 Hz
Probe resistance ( $R_s$ )	Max 100 kΩ
Auxiliary earth electrode resistance ( $R_h$ )	Max 100 kΩ
Additional error from $R_h$ and $R_s$	$R_h[\text{k}\Omega] \cdot \cdot \cdot R_s[\text{k}\Omega]/R_a[\Omega] \cdot \cdot \cdot 0.2\%$
Monitoring of $R_s$ and $R_h$ with error indicator.	
Automatic range selection.	
Measurement is not performed if the current through the current clamp is too low.	
<b><math>R_a</math> 4-Pole Ground Resistance Measurement (IEC 1557-5)</b>	
Switch position	$R_a$ 4-pole
Resolution	0.001 Ω to 10 Ω
Measuring range	0.020 Ω to 19.99 kΩ
Accuracy	±(2% rdg + 3 d)
Operating error	±(5% rdg + 3 d)
<b>Measuring Principle: Current/Voltage Measurement</b>	
Measuring voltage	Vm = 48 V AC
Short-circuit current	> 50 mA
Measure frequency	128 Hz
Probe resistance ( $R_s + R_{ES}$ )	Max 100 kΩ
Auxiliary earth electrode resistance ( $R_h$ )	Max 100 kΩ
Additional error from $R_h$ and $R_s$	$R_h[\text{k}\Omega] \cdot \cdot \cdot R_s[\text{k}\Omega]/R_a[\Omega] \cdot \cdot \cdot 0.2\%$
Monitoring of $R_s$ and $R_h$ with error indicator.	
Automatic range selection.	
<b>RA 3-Pole Selective Ground Resistance Measurement with Current Clamp (<math>R_a</math> with Clamp)</b>	
Switch position	$R_a$ 3-pole with clamp
Resolution	0.001 Ω to 10 Ω
Measuring range	0.020 Ω to 19.99 kΩ
Accuracy	±(7% rdg + 3 d)
Operating error	±(10% rdg + 5 d)
<b>Measuring Principle: Current/Voltage Measurement (with External Current Clamp)</b>	
Measuring voltage	Vm = 48 V AC
Short-circuit current	> 50 mA
Measure frequency	128 Hz
Probe resistance ( $R_s$ )	Max 100 kΩ
Auxiliary earth electrode resistance ( $R_h$ )	Max 100 kΩ

Monitoring of  $R_s$  and  $R_h$  with error indicator.

Automatic range selection.

Measurement is not performed if the current through the current clamp is too low.

#### RA 4-Pole Selective Ground Resistance Measurement with Current Clamp ( $R_A$ with Clamp)

Switch position	$R_A$ 4-pole with clamp
Resolution	0.001 $\Omega$ to 10 $\Omega$
Measuring range	0.020 $\Omega$ to 19.99 k $\Omega$
Accuracy	$\pm(7\% \text{ rdg} + 3 \text{ d})$
Operating error	$\pm(10\% \text{ rdg} + 5 \text{ d})$

#### Measuring Principle: Current/Voltage Measurement (with External Current Clamp)

Measuring voltage	$V_m = 48 \text{ V AC}$
Short-circuit current	> 50 mA
Measure frequency	128 Hz
Probe resistance ( $R_s$ )	Max 100 k $\Omega$
Auxiliary earth electrode resistance ( $R_h$ )	Max 100 k $\Omega$

Monitoring of  $R_s$  and  $R_h$  with error indicator.

Automatic range selection.

Measurement is not performed if the current through the current clamp is too low.

#### Stakeless Ground Loop Measurement (2 Clamps)

Switch position	$R_A$ 4-pole 2 clamps
Resolution	0.001 $\Omega$ to 10 $\Omega$
Measuring range	0.020 $\Omega$ to 19.99 k $\Omega$
Accuracy	$\pm(7\% \text{ rdg} + 3 \text{ d})$
Operating error	$\pm(10\% \text{ rdg} + 5 \text{ d})$

#### Measuring Principle: Stakeless Measurement of Resistance in Closed Loops Using Two Current Transformers

Measuring voltage	$V_m = 48 \text{ V AC}$
Measure frequency	128 Hz
Noise current ( $I_{EXT}$ )	Max. $I_{EXT} = 10 \text{ A (AC)}$ ( $R_A < 20 \Omega$ )
	Max. $I_{EXT} = 2 \text{ A (AC)}$ ( $R_A > 20 \Omega$ )

Automatic range selection.

The information regarding stakeless ground loop measurements is only valid when used in conjunction with the recommended current clamps at the minimum distance specified.

## 機型



### Fluke 1623-2

#### 接地電阻測試儀

#### 包括：

- 接地電阻測試儀
- 用戶說明書
- 電池
- 快速參考指南
- 兩個測試導線
- USB 傳輸線

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Fluke Corporation  
PO Box 9090, Everett, WA 98206 U.S.A.

更多資訊  
U.S.A. (800) 443-5853  
Europe/M-East/Africa  
+31 (0)40 267 5100  
Canada (800)-36-FLUKE  
其他 +1 (425) 446-5500  
[www.fluke.com/zh-tw](http://www.fluke.com/zh-tw)

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