



Features



Fluke 1623

- One-button measurement concept
- 3- and 4-pole earth ground measurement
- 4-pole soil resistivity testing
- Selective testing, no disconnection of ground conductor (1 clamp)
- Stakeless testing, quick ground loop testing (2 clamps)
- Measuring frequency 128 Hz

Fluke 1625

- 3- and 4-pole earth ground measurement
- 4-Pole soil resistivity testing
- 2-pole resistance measurement AC
- 2- and 4-pole resistance measurement DC
- Selective testing, no disconnection of ground conductor (1 clamp)
- Stakeless testing, quick ground loop testing (2 clamps)
- Earth impedance measurement at 55 Hz
- Automatic frequency control (AFC) (94, 105, 111, 128 Hz)
- Measuring voltage switchable 20/48V
- Programmable limits, settings
- Continuity with buzzer

Specifications

RA 3-pole ground resistance measurement (IEC 1557-5)	
Measuring Voltage	Fluke 1623 $V_m = 48 \text{ V ac}$ Fluke 1625 $V_m = 20/48 \text{ V ac}$
Short circuit current	Fluke 1623 $> 50 \text{ mA}$ Fluke 1625 250 mA ac
Measure frequency	Fluke 1623 128 Hz Fluke 1625 94, 105, 111, 128Hz
Resolution	Fluke 1623 0.001Ω to 10Ω Fluke 1625 0.001Ω to 100Ω
Measuring range	Fluke 1623 0.001Ω to $19.99 \text{ k}\Omega$ Fluke 1625 0.001Ω to $299.9 \text{ k}\Omega$
Intrinsic error	Fluke 1623 $\pm (2 \% \text{ of reading} + 3 \text{ digit})$ Fluke 1625 $\pm (2 \% \text{ of reading} + 2 \text{ d})$
Operating error	Fluke 1623 $\pm (5 \% \text{ of reading} + 3 \text{ d})$ Fluke 1625 $\pm (5 \% \text{ of reading} + 5 \text{ d})$

RA 4-pole ground resistance measurement (IEC 1557-5)

Measuring Voltage	Fluke 1623 V _m = 48 V ac Fluke 1625 V _m = 20/48 V ac
Short circuit current	Fluke 1623 > 50 mA Fluke 1625 250 mA ac
Measure frequency	Fluke 1623 128 Hz Fluke 1625 94, 105, 111, 128Hz
Resolution	Fluke 1623 0.001 Ω to 10 Ω Fluke 1625 0.001 Ω to 100 Ω
Measuring range	Fluke 1623 0.001 Ω to 19.99 kΩ Fluke 1625 0.001 Ω to 299.9 kΩ
Intrinsic error	Fluke 1623 ± (2 % of reading + 3 d) Fluke 1625 ± (2 % of reading + 2 d)
Operating error	Fluke 1623 ± (5 % of reading + 3 d) Fluke 1625 ± (5 % of reading + 5 d)

RA 3-pole ground resistance measurement with current clamp

Measuring Voltage	Fluke 1623 V _m = 48 V ac Fluke 1625 V _m = 20/48 V ac
Short circuit current	Fluke 1623 > 50 mA Fluke 1625 250 mA ac
Measure frequency	Fluke 1623 128 Hz Fluke 1625 94, 105, 111, 128Hz
Resolution	Fluke 1623 0.001 Ω to 10 Ω Fluke 1625 0.001 Ω to 10 Ω
Measuring range	Fluke 1623 0.001 Ω to 19.99 kΩ Fluke 1625 0.001 Ω to 29.99 kΩ
Intrinsic error	Fluke 1623 ± (7 % of reading + 3 d) Fluke 1625 ± (7 % of reading + 2 d)
Operating error	Fluke 1623 ± (10 % of reading + 5 d) Fluke 1625 ± (10 % of reading + 5 d)

RA 4-pole selective ground resistance measurement with current clamp

Measuring Voltage	Fluke 1623 V _m = 48 V ac Fluke 1625 V _m = 20/48 V ac
Short circuit current	Fluke 1623 > 50 mA Fluke 1625 250 mA ac
Measure frequency	Fluke 1623 128 Hz Fluke 1625 94, 105, 111, 128Hz
Resolution	Fluke 1623 0.001 Ω to 10 Ω Fluke 1625 0.001 Ω to 10 Ω
Measuring range	Fluke 1623 0.001 Ω to 19.99 kΩ Fluke 1625 0.001 Ω to 29.99 kΩ
Intrinsic error	Fluke 1623 ± (7 % of reading + 3 d) Fluke 1625 ± (7 % of reading + 2 d)
Operating error	Fluke 1623 ± (10 % of reading + 5 d) Fluke 1625 ± (10 % of reading + 5 d)

Stakeless ground loop measurement

Measuring Voltage	Fluke 1623 V _m = 48 V ac Fluke 1625 V _m = 20/48 V ac
Measure frequency	Fluke 1623 128 Hz (125 Hz on request) Fluke 1625 94, 105, 111, 128Hz
Noise current (I_{ext})	Fluke 1623 Max. I _{ext} = 10 A (ac) (RA < 20 Ω) Max. I _{ext} = 2 A (ac) (RA < 20 Ω) Fluke 1625 Max. I _{ext} = 3 A
Resolution	Fluke 1623 0.001 Ω to 0.1 Ω Fluke 1625 0.001 Ω to 10 Ω
Measuring range	Fluke 1623 0.001 Ω to 199.9 kΩ Fluke 1625 0.001 Ω to 29.99 kΩ
Intrinsic error	Fluke 1623 ± (7 % of reading + 3 d) Fluke 1625 ± (7 % of reading + 2 d)
Operating error	Fluke 1623 ± (10 % of reading + 5 d) Fluke 1625 ± (10 % of reading + 5 d)

Environmental Specifications	
Working temperature	-10 °C to +50 °C
Operating Temperature	0 °C to +35 °C
Nominal temperature	+18 °C to +28 °C
Storage Temperature	Fluke 1623 -20 °C to +60 °C Fluke 1625 -30 °C to +60 °C
Climatic class	C1 (IEC 654-1), -5 °C to + 45 °C, 5 % to 95 % RH
Protection type	IP56 for case, IP40 for battery door according to EN 60529

Safety Specifications	
Safety Rating	CAT II, 300 V

Mechanical & General Specifications	
Display	Fluke 1623 1999 digit LCD – display with special symbols, digit height 25 mm, fluorescent backlight Fluke 1625 2999 Digit LCD – 7 segment liquid crystal display with special symbols and backlight
Size	133 mm x 187 mm x 250 mm
Weight	Fluke 1623 + 1625 1.1 kg (including batteries)
Warranty	Two years
Battery Life	Fluke 1623 Typical > 3000 measurements Fluke 1625 Typical 3000 measurements (RE+RH ≤ 1 kΩ) Typical 6000 measurements (RE+RH ≤ 10 kΩ)

Fluke 1623	Basic GEO Earth Ground Tester <ul style="list-style-type: none"> ● Fluke 1623 tester ● 2 test leads ● Batteries ● Users manual
Fluke 1625	Advanced GEO Earth Ground Tester <ul style="list-style-type: none"> ● Fluke 1625 tester ● 2 test leads ● Batteries ● Users manual