

# Fluke 1621 Basic Earth Ground Tester

## Earth ground tester for resistance measurement



Fluke 1621



N10140

### Hand-held Earth Ground Tester for resistance measurement

The Fluke 1621 is an easy-to-use earth ground tester. For ground resistance testing, the 1621 is the first line of defence in detecting reliable ground connections. The unit features basic ground testing methods including 3-pole Fall-of-Potential as well as 2-pole ground resistance tests. Its convenient size, rugged holster, and large, clear LCD display make it an ideal field earth ground tester, for most electrical grounding work environments. With a simple user interface and intuitive functionality, the Fluke 1621 is a handy grounding tool for electrical contractors, utility test engineers, and earth ground specialists.

- 3-pole Fall-of-Potential earth testing for basic measurements
- 2-pole resistance measurements for added versatility
- Easily capture values with single-button operation
- Ensure accurate measurements with automatic 'noise' voltage detection
- Hazardous voltage warning offers increased user protection
- Clearly read and record data with a large, backlit display
- Instantly be alerted to measurements outside of your set limit, when you use the adjustable limit setting
- Safety rating CAT II 600 V

### Recommended Accessories



**CABLE REEL 50 M**  
Ground/earth wire

**CABLE REEL 25 M**  
Ground/earth wire

**ES-162P3**  
Stake/reel set for 3-pole measurements

**EARTH STAKE**  
Ground/earth stake

**CXT280**  
Extreme Case  
See page 145

### Recommended Kits

Buy more, Save more



### Fluke 1621 Basic Earth Ground Tester Kit

For more details see page 135

### Included Accessories

Fluke-1621: Two Measuring Leads with Alligator Clips - 2 m, Protective Holster, User Manual and CD.

Fluke-1621 Kit: 2 Cable Reels with Wire (1-50 m, 1-25 m), 3 Earth Ground Stakes, 1 Test Lead (red and black 2 m), 2 Alligator Clips, Batteries, User Manual, Hard Carrying Case.

### Ordering Information

**FLUKE-1621** Basic GEO Earth Ground Tester

**FLUKE-1621 KIT** Basic GEO Earth Ground Tester Kit

Contact your local distributor for price and availability.

[www.fluke.com/my/wtb](http://www.fluke.com/my/wtb)

## Specifications

Measuring functions	3-pole earth ground resistance, 2-pole AC resistance of a conductor, Interference voltage
Intrinsic error	Refers to the reference temperature range and is guaranteed for one year
Measuring rate	2 measurements/second
Battery	One 9 volt alkaline (LR61)
Battery condition	LO-BAT is displayed if voltage drops below 6.5 V
Voltagess	Between jacks H/C2 and E/C1 : 250 Veff maximum (effective voltage) Between jacks S/P2 and E/C1 : 250 Veff maximum
Climatic class	VDE/VDI 3540 RZ (conforming to KWG as per DIN 40040, 4/87)
Temperature performance	Working: -10 °C to +50 °C Operating: 0 °C to +35 °C Storage: -20 °C to +60 °C
Temperature coefficient	± 0.1 % of range per degree Kelvin
Size	113 mm x 54 mm x 216 mm including holster
Weight	850 g including standard accessories, volume approximately 600 cm <sup>3</sup>

Note: If the tester is not going to be used, or is being stored for a long period, remove the battery and store separately from the tester to avoid damage from battery leakage.

The four temperature ranges for the tester exists to satisfy European Standards requirements; the instrument can be used over the full working temperature range by using the temperature coefficient to calculate accuracy at the ambient temperature of use. These products are for unpowered installations measuring grounding connections.

### Maximum deviations

Parameter	Influence Factor	Deviation Influence
E <sub>1</sub>	Position	0 %
E <sub>2</sub>	Supply Voltage	0 %
E <sub>3</sub>	Temperature E <sub>3</sub>	2.3 %
E <sub>4</sub>	Serial interference voltage (20 V)	0.6 %
E <sub>5</sub>	Probe and auxiliary probe resistance	10 %

Test Voltage	3.7 kV
Protection Type	IP 40; IEC/EN 60529
Electromagnetic Compatibility	Emission: IEC/EN 61326 Class B Immunity: IEC/EN 61326 Annex C

### R<sub>2</sub> Resistance Measurement

Measuring method	Current-voltage measurement with improved cross-talk attenuation, no compensation of measuring lead resistance, with probe (3-pole) or without probe (2-pole), as per IEC/EN 61557-5
Open circuit voltage	23 to 24 V AC
Short circuit current	> 50 mA AC
Measuring frequency	128 Hz
Maximum permissible overload	250 Veff