

TECHNICAL DATA

Fluke 1507 Insulation Resistance Tester



Key features

- Rugged, compact advanced insulation resistance tester for electrical contractors and industrial and commercial electricians
- Automatically calculates Polarization Index and Dielectric Absorption Ratio
- Makes repetitive tests simple and easy with a Compare (Pass/Fail) function
- Offers multiple insulation test voltages: 50 V, 100 V, 250 V, 500 V, and 1000 V

Product overview: Fluke 1507 Insulation Resistance Tester

The Fluke 1507 is a versatile, compact, handheld insulation tester for advanced industrial and electrical insulation testing. Its multiple test voltages make it the ideal tool for many troubleshooting, commissioning, and preventative maintenance applications.

Take advantage of the 1507 full feature set to easily and quickly perform advanced insulation resistance testing. Its handy size and light weight make it easy to pack and use. Additional features, like the remote probe, save both time and money especially when performing repetitive tests. And its reasonable price and rugged reliability make it an excellent value.

Other useful capabilities:

- Performs insulation tests from 0.01 MΩ to 10 GΩ
- Includes live circuit detection to prevent insulation test if voltage >30 V is detected
- Includes auto-discharge of capacitive voltage for added user protection
- Measures AC/DC voltage from 0.1 V to 600 V and resistance from 0.01 Ω to 20.00 kΩ
- Provides lo-ohms earth-bond continuity (200 mA)
- Simplifies repetitive or hard-to-reach testing with the remote test probe
- Saves battery power with auto power off
- Presents results on a large, backlit display
- Features CAT IV 600 V overvoltage category rating
- Comes with remote probe, test leads, test probes, alligator clips and one-year warranty
- Accepts optional Fluke TPAK magnetic hanging system to free your hands for other work
- Runs on four AA alkaline batteries (NEDA 15 A or IEC LR6) for at least 1000 insulation tests

[Useful resources and rugged tools for Solar professionals](#)

Specifications: Fluke 1507 Insulation Resistance Tester

AC/DC Voltage Measurement		
Accuracy	Range	600.0 V
	Resolution	0.1 V
	50 Hz to 400 Hz u00b11 (% of Rdg + Digits)	u00b11(2% + 3)
Input impedance	3 Mu03a9 (nominal), < 100 pF	
Common mode rejection ratio (1 ku03a9 unbalanced):	> 60 dB at DC, 50 or 60 Hz	
Overload protection	600 V rms or DC	

Earth Bond Resistance Measurement

Range/Resolution	20.00 u03a9	0.01 u03a9
	200.0 u03a9	0.1 u03a9
	2000 u03a9	1.0 u03a9
	20.00 ku03a9	0.01 ku03a9
Accuracy	u00b1(1.5% + 3)	
Overload protection	2 V rms or DC	
Open circuit test voltage	> 4.0 V, < 8 V	
Short circuit current	> 200.0 mA	

Insulation Specifications

Measurement range	0.01 Mu03a9 to 10 Gu03a9	
Test voltage	50 V, 100 V, 250 V, 500 V, 1000 V	
Test voltage accuracy	+ 20%, - 0%	
Short circuit current	1 mA nominal	
Auto discharge	Discharge time < 0.5 second for C = 1 u00b5F or less	
Live circuit indicator	Inhibit test if terminal voltage > 30 V prior to initialization of test	
Maximum capacitive load	Operable with up to 1 u00b5F load	
Measure accuracy	50 V	u00b1(3% + 5)
	100 V	u00b1(3% + 5)
	250 V	u00b1(1.5% + 5)
	500 V	u00b1(1.5% + 5)
	1000 V	u00b1(1.5% + 5) to 2000 Mu03a9, u00b1(10% + 3) above 2000 Mu03a9

General Specifications

Maximum voltage applied to any terminal:	600 V AC rms or DC
Storage temperature	-40u00b0C to 60u00b0C (-40u00b0F to 140u00b0F)
Operating temperature	-20u00b0C to 55u00b0C (-4u00b0F to 131u00b0F)
Temperature coefficient	0.05 x (specified accuracy) per u00b0C for temperatures < 18u00b0C or > 28u00b0C (< 64u00b0F or > 82u00b0F)
Relative humidity	0% to 95% @ 10u00b0C to 30u00b0C (50u00b0F to 86u00b0F)
	0% to 75% @ 30u00b0C to 40u00b0C (86u00b0F to 104u00b0F)
	0% to 40% @ 40u00b0C to 55u00b0C (104u00b0F to 131u00b0F)
Vibration	Random, 2 g, 5-500 Hz per MIL-PRF-28800F, Class 2 instrument
Shock	1 meter drop per IEC 61010-1 2nd Edition (1 meter drop test, six sides, oak floor)
Electromagnetic compatibility	In an RF field of 3 V/M, accuracy = specified accuracy (EN 61326-1:1997)

Safety	Complies with ANSI/ISA 82.02.01 (61010-1) 2004, CAN/CSA-C22.2 NO. 61010-1-04, and IEC/EN 61010-1 2nd Edition for measurement category IV 600 V (CAT IV)	
Certifications	CSA per standard CSA/CAN C22.2 No. 61010.1-04; TUV per standard IEC/EN 61010-1 2nd Edition	
Baeries	Four AA baeries (NEDA 15A or IEC LR6)	
Baery life	Insulation test use:	Tester can perform at least 1000 insulation tests with fresh alkaline baeries at room temperature. These are standard tests of 1000 V into 1 Mu03a9 with a duty cycle of 5 seconds on and 25 seconds off.
	Resistance measurements:	Tester can perform at least 2500 earth bond resistance measurements with fresh alkaline baeries at room temperature. These are standard tests of 1 u03a9 with a duty cycle of 5 seconds on and 25 seconds off.
Size (H x W x L)	5.0 x 10.0 x 20.3 cm (1.97 x 3.94 x 8.00 in)	
Weight	550 g (1.2 lb)	
IP rating	IP40	
Altitude	Operating	2000 m CAT IV 600 V, 3000 m CAT III 600 V
	Non-operating (storage)	12,000 m
Over-range capability	110% of range	
Included accessories	TL224 Test Leads, TP74 Test Probes, clips PN 1958654 (red) and PN 1958646 (black), holster and remote probe	

Ordering information



Fluke 1507

Fluke 1507 Insulation Resistance Tester

Includes:

- Remote probe
- Test leads
- Test probes
- Alligator clips
- User documentation

Optional accessories

Fluke C101 Hard Case

Description

Heavy duty waterproof tool case with diced-foam interior

Fluke TL81A Deluxe Electronic Test Lead Kit

Ideal for testing electronic equipment and offers versatility with modular test probes, alligator clips, test clips and more.

Fluke C25 Large Soft Case for DMMs

Fits most mid-sized multimeters, process and temperature meters.

Fluke TL225 SureGrip™ Stray Voltage Adapter Test Lead Kit

Electricians know that when you are measuring electrical installations there often appears to be a voltage, even if you know the wires are non energized.



Fluke. *Keeping your world up and running.®*

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

For more information call:
In the U.S.A. (800) 443-5853
In Canada (800) 36-FLUKE
From other countries +1 (425) 446-5500
www.fluke.com

©2025 Fluke Corporation.
Specifications subject to change without notice.
01/2025

**Modification of this document is not permitted
without written permission from Fluke Corporation.**