

175

Electrical Safety Analyzer

Technical Data



The 175 Electrical Safety Analyzer is ideal for performing quick electrical safety checks on electrical systems, medical devices, and physiological instrumentation.

Small enough to fit in a briefcase, the analyzer works well as a bench-top instrument in the laboratory or a portable testing device in the mobile engineer's toolbox.

With its uncomplicated design, the 175 is simple to use. A single master function switch, directly labeled with the test to be performed, leads the user through a complete measurement procedure. The unit features both IEC601-1 and AAMI test loads. Technicians simply flip a switch to perform leakage measurements to a particular standard.

The analyzer uses simple, yet sophisticated, electronics for true RMS measurement of current and voltage. The 175 also performs dual-lead leakage tests.

Key features

- Portable
- IEC601-1 and AAMI test loads
- Self-switching 120/240 V operation
- Dual-lead testing

Specifications

Operating mains voltage range	90 V ac to 240 V ac
Current capacity for DUT	15 A for 10 minutes
Voltage measurement	
Range	90 V to 240 V
Accuracy	± 3 % of reading ± 1 LSD
Load-current measurement	
Range	1 A to 19.99 A
Accuracy	± 5 % of reading ± 1 LSD
Resistance measurement	
Range	0.01 Ω to 19.99 Ω
Accuracy	± 1 % of reading ± 1 LSD
Resolution	0.01 Ω
Current source	10 mA dc
Leakage-current measurement	
Range	0 μA to 1999 μA
Accuracy	DC and 25 Hz to 1 KHz: ± 1 % of reading ± 1 μA 1 KHz to 100 KHz: ± 2.5 % of reading ± 1 μA 100 KHz to 1 MHz: ± 5 % of reading ± 1 μA
Measurement type	True-rms
Input impedance	1000 Ω per AAMI ES1-1993, IEC601-1
Environmental requirements	
Operating temperature	15 °C to 40 °C (59 °F to 104 °F)
Storage temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Relative humidity	Max 80 % up to 31 °C (88 °F), decreasing linearly to 50 % at 40 °C (104 °F)
General information	
Display	LCD 3.5 digit
Dimensions (LxWxH)	13.3 cm x 18.4 cm x 5.4 cm (5.25 in x 7.25 in x 2.1 in)
Weight	1 kg (2.25 lb)

Ordering information

Model numbers/descriptions
ESA175-US 90-265V Electrical Safety Analyzer

Standard accessories

1751000 Operator's Manual
600/100FG Test Lead 8 ft black

Optional accessories

97148 Soft-Sided Vinyl Carrying Case
600/100FG Chassis Cable, coil cord, 8-foot extended
600/101FG Chassis Cable, coil cord, 16-foot extended
600/200FG External Leakage Cable, coil cord, 8-foot extended
600/201 External Leakage Cable, coil cord, 16-foot extended
1800001 North American 220 V Adapter

About Fluke Biomedical

Fluke Biomedical is the world's leading manufacturer of quality biomedical test and simulation products. In addition, Fluke Biomedical provides the latest medical imaging and oncology quality-assurance solutions for regulatory compliance. Highly credentialed and equipped with a NVLAP Lab Code 200566-6 accredited laboratory, Fluke Biomedical also offers the best in quality and customer service for all your equipment calibration needs.

Today, biomedical personnel must meet the increasing regulatory pressures, higher quality standards, and rapid technological growth, while performing their work faster and more efficiently than ever. Fluke Biomedical provides a diverse range of software and hardware tools to meet today's challenges.

Fluke Biomedical Regulatory Commitment

As a medical test device manufacturer, we recognize and follow certain quality standards and certifications when developing our products. We are ISO 9001 certified and our products are:

- CE Certified, where required
- NIST Traceable and Calibrated
- UL, CSA, ETL Certified, where required
- NRC Compliant, where required

Fluke Biomedical.

Better products. More choices. One company.

Fluke Biomedical

6045 Cochran Road
 Cleveland, OH 44139-3303 U.S.A.

Fluke Biomedical Europe

Science Park Eindhoven 5110
 5692EC Son, The Netherlands

For more information, contact us:

In the U.S.A. (800) 850-4608 or
 Fax (440) 349-2307
 In Europe/M-East/Africa +31 40 267 5435 or
 Fax +31 40 267 5436
 From other countries +1 (440) 248-9300 or
 Fax +1 (440) 349-2307
 Email: sales@flukebiomedical.com
 Web access: www.flukebiomedical.com

©2010 Fluke Biomedical. Specifications subject to change without notice. All OEM company trademarks are implied. Printed in U.S.A. 3/2010 3781210A D-EN-N

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