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Data Sheet

August 12, 2026

FLUKE BIOMEDICAL

Fluke ESA615 Electrical Safety Analyzer

Fluke Biomedical ESA615 Electrical Safety Analyzer The ESA615 is a portable automated electrical safety analyzer for medical equipment testing in the field and in facilities. It combines electrical safety tests with ECG simulation and dual-lead measurements in one instrument, with built-in automated sequences and pass/fail indication against major global standards. The ESA615 is a portable automated electrical safety analyzer for medical equipment testing in the field and in facilities. It combines electrical safety tests with ECG simulation and dual-lead measurements in one instrument, with built-in automated sequences and pass/fail indication against major global standards.



MODEL

**Fluke Biomedical
ESA615**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

ESA615

LISTING

<https://aumictechlabs.com/products/esa615-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fluke ESA615 is a portable electrical safety analyzer engineered for healthcare professionals to perform comprehensive testing on medical equipment in field and in-facility environments. This all-in-one instrument integrates multimeter, electrical safety analyzer, and ECG simulator functions with automated test sequences that ensure compliance with ANSI/AAMI ES1, IEC62353, IEC60601-1, and AS/NZS 3551 standards. Technical Specifications The ESA615 operates on mains supply voltage of 100/115 V ac up to 5000 meters altitude or 230 V ac up to 2000 meters altitude, with 20 A at 120 V current capability. Leakage test accuracy at 120 V ac is $\pm (2.5 \mu\text{A} \text{ or } 1 \text{ LSD, whichever is greater})$ for Isolation, MAP, Direct AP, Alternative AP, and Alternative Equipment

leakage tests. Key Features Automated Compliance Testing: Pre-set test sequences for rapid, accurate assessment against four major global electrical safety standards Measurement Functions: Line voltage, ground wire resistance, insulation resistance, device current, and patient lead leakage tests ECG Simulation: Five applied parts jacks with ECG waveform and dual-lead measurement capability; optional expander box supports up to 12-lead testing Data Management: Wireless communication and removable memory card store up to 100 automated test sequences and 1000 test results User Interface: Push-button operation with large adjustable-contrast display; on-board keypad, external keyboard, and barcode scanner support Portability: Ergonomic integrated handle and tilt stand; CE and CSA certified for field durability Language Support: English, French, German, Spanish, Italian, and Portuguese Power Management: Replaceable mains fuses minimize service downtime Typical Applications Biomedical equipment technicians, clinical engineers, and service professionals use the ESA615 for preventive maintenance, regulatory audits, and troubleshooting of patient-connected medical devices across hospitals and service centers. Compatibility & Integration The instrument's plug-and-play external keyboard and wireless data exchange integrate with existing biomedical service workflows. Memory card compatibility enables seamless transfer of test results to facility documentation systems.

Features & description

From manufacturer datasheet

Features

- Automated test sequences with pass/fail
- Safety analyzer + ECG simulator in one tool
- Barcode / keyboard / keypad data entry
- Languages: EN, FR, DE, ES, IT, PT
- OneQA / Ansur PC automation support
- Ergonomic handle and tilt stand

Applications

- Electrical safety testing of medical devices
- Automated NFPA-99 / IEC 62353 / IEC 60601-1 / AS/NZS 3551 sequences
- ECG waveform simulation and dual-lead tests
- Point-to-point voltage, leakage, and resistance tests

ESA615 Characteristics / Specifications

PARAMETER	VALUE
Model	ESA615
Manufacturer	Fluke Biomedical
Instrument Type	Electrical Safety Analyzer
Alias	ESA615; Fluke ESA615
Standards supported	ANSI/AAMI ES-1 (NFPA-99); IEC 62353 (VDE 751); IEC 60601-1 2nd and 3rd editions; AS/NZS 3551
Functions	electrical safety tests; ECG simulation; dual-lead measurements; point-to-point V/leakage/resistance
Automation	built-in sequences; OneQA; Ansur tether
Form factor	portable handheld/benchtop analyzer with tilt stand Notes Detailed leakage limits, applied-part configurations, and voltage ranges are in the ESA615 datasheet/user manual—confirm firmware version and selected standard on the unit.
Languages	EN, FR, DE, ES, IT, PT

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

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Specifications

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Notes

Detailed leakage limits, applied-part configurations, and voltage ranges are in the ESA615 datasheet/user manual-confirm firmware version and selected standard on the unit.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.