

# Electrical Safety Analyzer

## LKG 601



The LKG 601, Electrical Safety Analyzer is an extremely easy to use portable Electrical Safety Analyzer designed specifically for testing non-ECG equipment. Ground resistance, leakage current, and instrument current test measurements are displayed on its large LCD.

With its unique operating features, the LKG 601 out performs all other basic analyzers. To insure accuracy, each test has calibrated test points. The accessible instrument fuse solves the maintenance problems of built-in fuses. The selectable test load provides testing flexibility. Comprehensive pacer analyzer available.

For the routine electrical safety testing of all your electrical equipment, the LKG 601 is simply the best selection.

### Measures

- Ground Resistance
- Case Leakage Current
- Earth Leakage Current
- Instrument Current

Complies with AAMI/ESI 1993

### Features:

- Easy to use
- Fast, Accurate & Portable
- Large LCD
- Accessible Line Fuse
- Test Loads AAMI / IEC601
- Calibrated Test Points
- 15 and 20 Amp capability

### Specifications:

<b>Display:</b>	LCD 3 ½ digits
<b>Measures:</b>	Ground Resistance, Leakage Current, Int. & Ext. Instrument Current.
<b>Operating Voltage:</b>	110VAC or 220VAC (Option)
<b>Measurement Range:</b>	Resistance: 0 -1999 Milli Ohms, Leakage Current: 0 -1999 uA Instrument Current: 0 -19.99 A
<b>Accuracy:</b>	Resistance: $\pm 2\% \pm 1$ LSD, Leakage: $\pm 1\%$ FS DC to 1 kHz $\pm 1$ LSD $\pm 2\%$ FS DC 1 kHz to 100 kHz $\pm 4\%$ FS 100 kHz to 1 MHz Instrument Current: $\pm 2\% \pm 1$ LSD
<b>Dimensions:</b>	6 x 3.25 x 2.25in (15.24 x 8.26 x 5.72 cm)
<b>Weight:</b>	1 lbs (0.9kg)

### Ordering Information:

Part Number	Description
510	LKG 601 Safety Analyzer
510-Case	Carrying Case



110 Toledo Street, Farmingdale, NY 11735, Phone: 631-531-0100, Fax: 631-531-0101

[www.Netech.org](http://www.Netech.org) 1-800-547-6557 (US)

# Electrical Safety Analyzer

# LKG 610



The **LKG 610**, Electrical Safety analyzer is designed to test any piece of medical equipment. The full featured analyzer is microprocessor controlled and has a full set of ten leads.

The **LKG 610** measures line voltage, outlet polarity, device current, earth leakage current, chassis resistance, and case leakage current. In addition it performs lead ISO tests and point-to-point measurements.

Tests are quickly and easily performed when the appropriate test function key is pushed. Measurements results are presented on the large LCD display and measurements units are clearly indicated by an LED. Large switches change the polarity, open and close neutral, and lift the ground. Ten universal lead connectors accept both snaps and any size posts.

Calibrated test points are available to ensure performance accuracy and repeatability. Either the AAMI and IEC 601 test loads may be selected. The receptacle is fused with an accessible 20 A fuse and the tester is fused internally. The comprehensive **LKG 610** provides the best combination of features, performance, and value of any portable electrical safety analyzer.

## Features

- Fast, Accurate, and Portable
- Easy to Use
- Large LCD Display
- Accessible Line Fuse
- Calibrated Test Points
- Selectable Test Loads
- 15 and 20 Amp Capability
- Point-to-Point Testing
- Use any Test Cable
- 10 Lead Universal Connector
- Complies with AAMI/ESI 1993
- LED Unit of Measure Indicator

## Measures

- Outlet Polarity
- Line Voltage
- Cord Resistance
- Case Leakage Current
- Earth Leakage Current
- Leads Leakage Current
- Leads ISO Test
- Instrument Current
- Point-to-Point Measurement

## Ordering Information:

### Part Number

535  
510-Case

### Description

LKG 610 Safety Analyzer  
Carrying Case



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# Electrical Safety Analyzer

## MultiPro 2000



**MULTI-PRO 2000**, Electrical Safety Analyzer is a microprocessor based, full function electrical safety analyzer with a built-in 12 lead ECG Simulator.

The combination instrument is designed to test the electrical safety of all types of medical equipment by hospital and field service biomedical technicians.

In addition, the built-in ECG Simulator allows performance testing of all ECG equipment makes this unit the Cadillac of electrical safety analyzers.

The digital circuitry of the compact **MULTI-PRO 2000**, Electrical Safety Analyzer eliminates all mechanical switching and delivers unmatched testing accuracy. The menu driven soft keys provide fast and easy operation. Measurements results and menus are presented on the large LCD display.

The instrument tests wall outlet polarity and measures line voltage, instrument current, chassis resistance, chassis leakage current, and leads leakage current. It also performs lead isolation testing and point-to-point testing. Calibrated test points are available for verifying its performance.

The ECG Simulator displays a normal sinus rhythm waveform with 13 amplitude and 14 rate selections. Square, Sine, and Triangle waveforms for performance testing are available with 14 frequency and 13 amplitude selections.

Optional software is available to store measurements and to interface to a Palm Pilot or independent printer.

The **MULTI-PRO 2000**, Electrical Safety Analyzer is a light weight, compact, rugged, versatile tool that easily performs electrical safety testing to the requirements of both in-house and field biomedical service technicians.

### Features:

- Micro Processor Controlled
- Menu Driven
- Compact, Lightweight, Rugged
- Accurate, and Reliable
- 12 Lead ECG and Performance Waveforms
- 20 Ampere Rating
- Quick and Easy to Operate
- Serial Interface for Palm or Printer

### Measurements:

- Receptacle Polarity
- Line Voltage
- Chassis Resistance
- Leakage Current
- Leads Leakage
- Isolation Current
- Point to Point Testing

[Quick print Function to Save Test Data And Print Results](#)



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# Electrical Safety Analyzer

# MultiPro 2000

## Specifications:

- „ **Line Voltage:** Range: 1 to 300 V,  
Accuracy:  $\pm 2\% + 1\text{ V}$
- ” **Leakage Current:** Range: 0 to 2500  $\mu\text{A}$  auto ranging  
Accuracy: DC to 100 KHz:  $\pm 2\% \text{ FS} \pm 1\text{ Digit}$   
100 KHz to 1 MHz:  $\pm 4\% \text{ FS} \pm 1\text{ Digit}$
- ” **Resistance:** Range: 0 to 2500 mW, auto ranging  
Accuracy:  $\pm 2\% \text{ FS} \pm 1\text{ Digit}$
- ” **Device Current:** Range: 0 to 20 A  
Accuracy:  $\pm 2\% \text{ FS} \pm 1\text{ Digit}$
- ” **General**
  - ECG Simulator
    - 12 Lead Normal Sinus Rhythm and Pulse Waveforms:  
Amplitude: 13 selectable steps 0.1, 0.2, 0.3, 0.4, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0 and 4.5 mV
    - Rate: 14 selectable steps, 30, 60, 70, 80, 90, 100, 120, 150, 180, 210, 240, 270, 300, and 350 BPM
  - Performance Waveforms:  
Square, Triangle, and Sine
  - Display: 2 Line 48 characters Display
  - Controls: ON/OFF Power Switch, Sixteen Tactile Feel Keys.  
Ten Color Coded ECG Jacks, Two Input Jacks  
RS 232 Serial Port connection
- Physical Dimensions: Size: 10.25 x 6.25 x 2.5 inches (26.00x 15.9 x 6.4 cm)  
Weight: 4 lbs (1.8 kg)
- Power Requirements: 110 VAC 50-60 Hz, 20 A / 220 VAC 50-60 Hz, 10A
- Environmental Operating Temperature: 59° to 95° F (15° to 35° C)  
Storage Temperature: 32° to 122° F (0° to 50° C)

## Ordering Information:

Part Number	Description
550	MultiPro 2000 Safety Analyzer
551	Carrying case (Soft)
553	Kelvin Cable
503	External Test Cable

For Product updates and  
Accessories please visit our web  
<http://www.ElectricalSafetyAnalyzer.com>



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