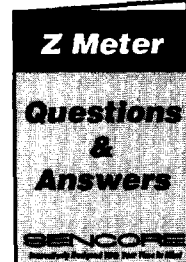
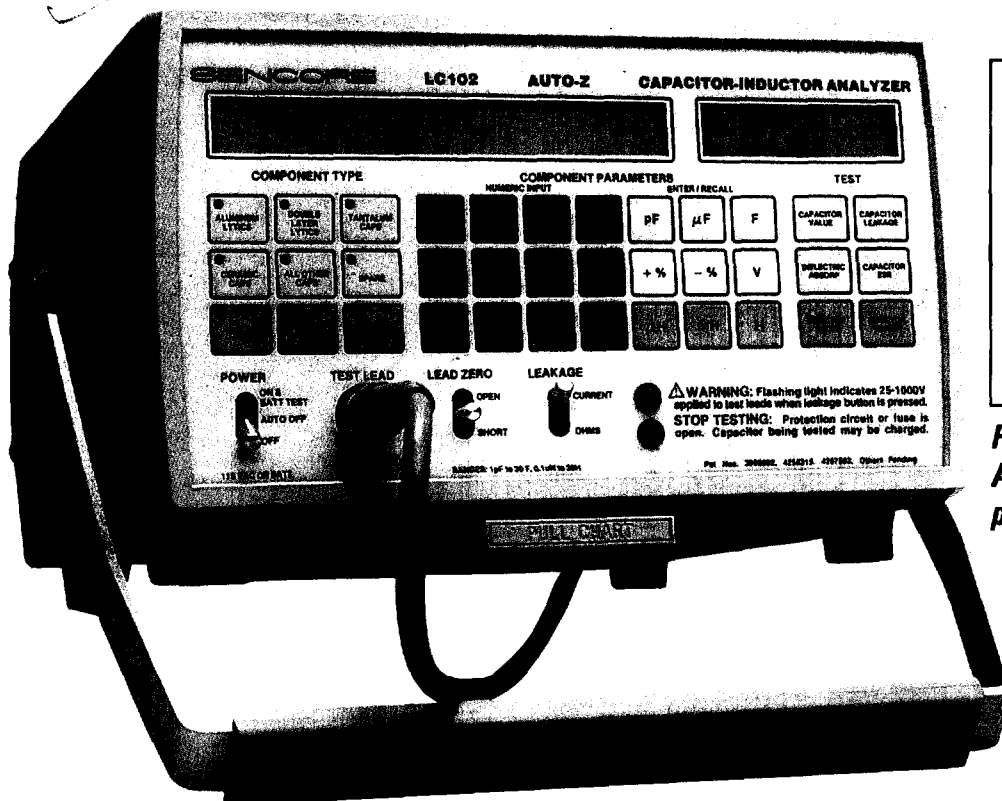


# LC102 AUTO-Z™ Automatic Capacitor/Inductor Analyzer



A \$39.95 Value!

**Receive the "Z Meter Question And Answer Book" FREE with the purchase of the LC102 AUTO-Z.**

**\$1895**

U.S. Funds  
On GSA Contract  
Five Patents

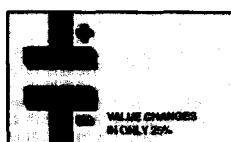
IEEE 481  
SUP-COMPATIBLE

RS232  
Compatible

**LC102 AUTO-Z—The Z Standard; Helps You Quickly, Dynamically, Portably, And Automatically Find Any Defective Capacitor Or Inductor That Other Testers Miss, Anywhere, Without Calculations, Look-up Tables, Or Errors**

- Analyzes Capacitors For:
  - ✓ Value From 1 pF to 20 F
  - ✓ Leakage With 1 kV Applied
  - ✓ Dielectric Absorption
  - ✓ Series Resistance (ESR)
- Analyzes Inductors From 1  $\mu$ H to 20 Henrys For Opens, Shorts, Value, And Even One Shorted Turn
- Analyzes SCRs, Triacs, High Voltage Resistors, And Transmission Lines As An Added Bonus
- Makes All Tests, Compares Results To EIA Standards And Tells You "Good" Or "Bad"—Automatically
- Portable; 9-Hour Battery Operation For Remote Sites—AC Operation For Your Bench

## Value Changes In Only 25%



Measures capacitors from 1 pF to 20 farads, to locate

problems caused by value change—even finds the small critical value changes that make troubleshooting tough.

## Leakage Develops In 40%



With leakage tests to 1000 volts, you can locate problems

(with .01 microamp resolution) in ceramic and tantalum capacitors that other testers can't find.

## Dielectric Absorption (D/A) In 25%



Dielectric Absorption is the capacitor's inability to completely discharge—the capacitor acts like a battery that changes the circuit's bias voltage.

## Equivalent Series Resistance (ESR) In 10%



ESR is the equivalent series resistance in a capacitor's leads and internal connections. ESR worsens as the capacitor ages, causing problems in high-frequency circuits such as switching power supplies.

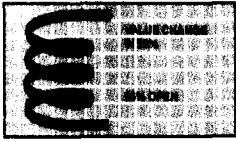
**Order Direct 1-800-SENCORE (736-2673)**

To Order, Simply Return The Order Card—Call For Financing Information.

**Call For A 10 Day Tech Tape Preview**



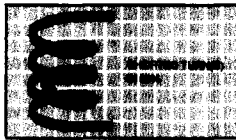
## Inductor Value Changes In 25% And Opens In 25%



Other than opens, value changes are particularly difficult to isolate without

an analyzer. Usually the value change is small, caused by the failure of a few turns, or perhaps is associated with insulation failure which affects one turn.

## Shorted Turns In 50%



A shorted turn will cause only a small change in a coil's resistance,

making it almost impossible to detect with an ohmmeter or ordinary tester. Just one shorted turn can cause a circuit to fail.

## Analyze Capacitors, Coils, And High-Voltage Components,

**Automatically:** The LC102 AUTO-Z is microprocessor controlled for speed and accuracy, with extended ranges to meet all your cap/coil testing needs. Enter the value, rated voltage, and tolerance—the AUTO-Z makes the readings, compares to EIA tables stored in memory, and displays if the component is good or bad.

### Supplied Accessories:

- (1) 39G219 Test Lead
- (1) 39G144 Test Lead Adapter
- (1) 39G201 Test Button Hold Down Rod
- (1) 64G37 Test Lead Mounting Clip
- (1) PA251 Power Adapter

See Page 29 For Optional Accessories.

## Protects You And Your Instrument From Charged Capacitors:

An audible and visual alert warns you if the AUTO-Z's internal discharge circuit fails or the test lead fuse blows.

**Portable—Use In The Shop, Field, Or Factory:** The LC102 packs full inductance, capacitance and resistance analyzing power into a lightweight, portable (battery and AC) package. It's designed with CMOS logic, LCD technology and automatic shut-off for long battery life (operates nine hours on a single charge).

## New DM115 Z Meter Dynamic

**Demonstrator:** Helps you evaluate the AUTO-Z in your application by providing samples of good and bad capacitors, inductors, SCRs, and transmission lines. An informative booklet covers Z Meter operation, step-by-step, plus explains how and why each component fails.

The LC102 AUTO-Z meets all the LCR component analyzing challenges new technology can bring; call today **1-800-SENCORE** for more information.

## LC102 Specifications

**CAPACITORS:** (Out of Circuit): 1.0 pF to 19.99 F in 12 automatically selected ranges. Accuracy:  $\pm 1\%$ ,  $\pm 1$  pF,  $\pm 1$  digit up to 1990 uF,  $\pm 5\%$  from 1990 uF to 19.99 F. Leakage: .01 uA to 19.99 mA fully autoranged,  $\pm 5\%$ ,  $\pm 1$  digit. Voltages: DC voltages from 1.0 V to 999.9 in 0.1 V steps.

**DIELECTRIC ABSORPTION:** Percentage of stored to total charge,  $\pm 5\%$  of reading.

**ESR:** 0.10 ohms to 1999 ohms fully autoranged,  $\pm 5\%$ ,  $\pm 1$  digit.

**INDUCTANCE (In or out of circuit):** 0.10 uH to 19.99 H fully autoranged,  $\pm 2\%$ ,  $\pm 1$  digit; Ringing Test: Dynamic Quality Test

**GENERAL:** Power: 105-130 VAC, 60 Hz with supplied PA251 or with optional BY234 battery pack. 9 hours on one charge. Shuts off in 15-20 minutes when the instrument isn't in use. Protection: Input fuse, voltage  $>1.5$  V ties up the front panel. Audible and visual alarms tell you if input fuse is open or discharge circuit fails. Size: 6" x 9" x 11.5" (15.2 x 22.9 x 29.1 cm) HWD. Weight: 7.6 lbs (3.6 kg) with battery.

