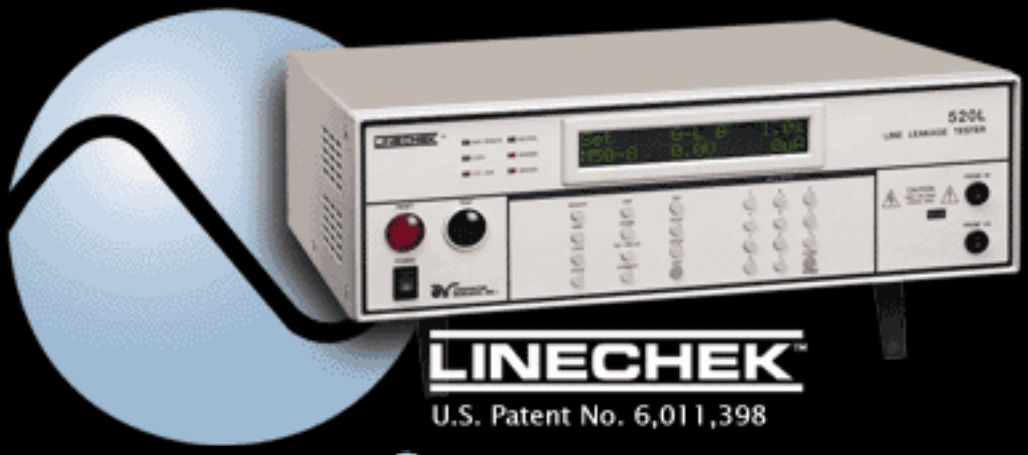
ASSOCIATED RESEARCH, INC.

Instruments for Electrical Safety Compliance Testing



Order Now!

LINECHEK was designed to automate line leakage testing in a production line or laboratory environment for safety agency compliance testing to UL 544, UL 2601, UL 563, UL 3101, IEC 1010, IEC 601-1 and European Norms (EN) to meet the requirements of the Low Voltage Directive, the Medical Directive, and others.

While medical electronic manufacturers have been performing line leakage tests for many years as a "design" or "type" test many have begun performing a line leakage test on 100% of their production lines to ensure quality, for record-keeping and insurance requirements. In addition, with the adoption of new council directives such as the Low Voltage Directive and Medical Directive new European Norms (EN) adopted by the European Community specify not only a Hipot, Insulation Resistance and Ground Bond test but also include a Line Leakage test.

FEATURES/BENEFITS SPECIFICATIONS OPTIONS 3D TOUR

LINECHEK Features & Benefits

Feature **Automatically switches through the 8 most common safety tests**

Benefit No need to manually set up the test or switch test leads around.

Feature **The 5 most common measuring devices are built-in and can be selected through software control**

Benefit A versatile tester that can be set-up to meet multiple specifications without the need for complicated external connections.

Feature **Fully complies with the latest European Norms**

Benefit Complies with the latest EN such as the Low Voltage Directive and Medical directive.

Feature **Available stand-alone or internally switched**

Benefit Model 510L can be used as a stand-alone instrument complete with automated control via PLC, RS-232 or GPIB. Model 520L can be used with other AR safety instruments to form a fully automated system with a SINGLE DUT connection.

Feature **Programmable security password system**

Benefit Avoids tampering with settings by allowing only authorized personnel with a user programmable security password to change test parameters.

Feature **Front panel calibration**

Benefit All calibration is done through a simple user interface from the front panel. No need to open the instrument.

Feature **PLC, RS-232 or GPIB control**

Benefit Provides flexibility for semi-automatic or automatic operation with a choice of communication protocols.

Feature **Microprocessor control with menu driven software**

Benefit Microprocessor control allows for many advanced features such as automatic testing, memories and software control.

Feature **External measurement circuit**

Benefit One external measurement circuit is provided for measurement of other devices.

Feature **Separate current trip points for each test**

Benefit Each test can have a separate trip point for failure analysis.

Feature **50 memories for test storage**

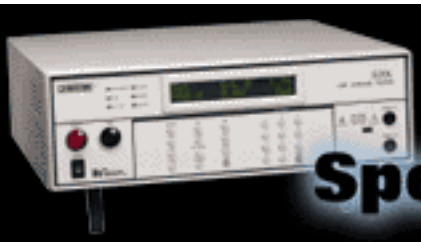
Benefit Parameters only need to be entered once then memorized.

Feature **Ranges from DC to 1 MHz**

Benefit Complies with even the 1 MHz specification for IEC testing.

Feature **Complete with software driver**

Benefit National Instruments LabVIEW® software driver is provided for automated applications to simplify the testing process.



LINECHEK Specifications

INPUT	User Selectable 115 VAC (±15%) 47-63 Hz, Single Phase 230 VAC (±15%) 47-63 Hz, Single Phase			
FUSE	2 Amp 250V Slo-Blo			
CURRENT DISPLAY	**Range:**	0.0 - 29.9 microamps	30 - 999.9 microamps	1000 - 6000 microamps
	Resolution:	0.1 microamp	1 microamp	10 microamps
	Accuracy, DC - 10 kHz:	1.5% Rdg + 5 counts	1.5% Rdg + 5 counts	1.5% Rdg + 2 counts
	Accuracy, 10 kHz - 100 MHz:	±5% Rdg + 5 counts	±5% Rdg + 5 counts	±5% Rdg + 5 counts
CURRENT TRIP	**Range:**	0 - 6000 microamps		
	Resolution:	1 microamp		
	Accuracy, DC - 10 kHz:	1.5% setting + 2 counts		
	Accuracy, 10 kHz - 100 MHz:	5% setting + 5 counts		
DUT POWER	**520L:**	10 Amps maximum		
	510L:	30 Amps maximum		
FAILURE DETECTOR	Audible & Visual			
TIMER	0, 1.0 - 999.9 seconds in 0.1 second increments (0 = constant) Accuracy: 0.1% + 0.1 second			
MEASURING CIRCUITS	Five user selectable internal measurement circuits and one external measurement circuit for UL 544, IEC 601, UL 1563, IEC 1010, IEC 950			
MEMORY	Allows storage of up to 50 groups of different test programs and 8 steps per each memory			
SECURITY	User selectable password to avoid unauthorized access to test setup program			
INTERFACES	**520L:**	Basic PLC, IEEE-488(GPIB), or RS-232 Switching high voltage/high current interface for interconnecting to other AR instruments		
	510L:	Basic PLC, IEEE-488(GPIB), or RS-232		

MECHANICAL	**520L**:	Bench or rack mount (3U height) with tilt up front feet Dimensions: (W x H x D) 16.29 x 5.39 x 19.68 in. (430 x 137 x 500 mm) Weight: 25 lbs. (11.34 kg)
	510L:	Bench or rack mount (2U height) with tilt up front feet Dimensions: (W x H x D) 17 x 3.5 x 16.5 (432 x 88 x 419mm) Weight: 25 lbs. (11.34 kg)

LINECHEK Options

Options: Model 510L	
Part Number	**Description**
1-01	RS232 Interface

Options: Model 520L	
Part Number	**Description**
1-01	RS232 Interface
2-01	LINECHEK to HypotULTRA II Interface Kit
2-02	LINECHEK to QUADCHEK II Interface Kit
2-03	LINECHEK to HypotULTRA II/QUADCHEK II Interface Kit