INSTRUMENTS FOR

ELECTRICAL SAFETY COMPLIANCE TESTING



HIPOT TESTERS

GROUND BOND TESTERS

INSULATION RESISTANCE TESTERS

LINE LEAKAGE TESTERS

MEDICAL TEST SYSTEMS

HV/HC SCANNING MATRICES

SOFTWARE SOLUTIONS

FUNCTIONAL RUN TESTERS

CUSTOM INSTRUMENTS







Fully-Automated Line Leakage Tester

The 620L is a stand alone Line Leakage tester with an enhanced graphic LCD which automates leakage testing in production and laboratory environments. The 620L is configured for up to 40 Amps of current draw for DUT input power. It is designed to test to most safety agency standards for Line Leakage testing. The 620L comes standard with USB and RS-232 interfaces. Ethernet, GPIB, and RS-485 interfaces are also available.

Model 620L - Fully-Automated Line Leakage Tester

Features and Benefits

- Test operators can configure the 620L to perform all eight required Line Leakage tests
- Leakage current readings can be monitored using both PEAK and RMS measurements
- Most common measuring devices are already incorporated into the instrument's intuitive menu system
- 50 Memories with 30 steps per memory can be stored and recalled in any alphanumeric combination
- Compact 3U Rack Mount Design
- Optional Functional Run Testing for additional measurements
- Interconnection to APT Brand AC Power Source

- Interconnection to SC6540
 Modular Scanner provides
 automated control of multiple
 test points
- Graphic LCD and intuitive menu system to simplify the entire testing process
- Patented CAL-ALERT® alerts the operator that the 620L is due for re-calibration
- Handles up to 40 Amp maximum continuous DUT Current
- Optional cold resistance measurement capability
- USB/RS-232, GPIB, Ethernet, or RS-485 automation interfaces available
- Easily Interconnect to any automated Associated Research Hipot Tester
- Autoware Testing Software available for complete Automation Control











Input Specifications

115/230 VAC ± 10%, user selection Voltage

50/60 Hz ± 5% Frequency

2 A Slow Blow 250 VAC Fuse

Line Conditions

Reverse Power

Reverse polarity switch for normal condition **Neutral Switch** Neutral switch on/off selection for single fault Ground Switch Ground switch on/off selection for class I single fault

Probe Settings

Surface to Surface (PH - PL) (PH - L) Surface to Line Ground to Line (G - L)

Leakage Limit Settings

Touch Current

 $0.0 \, \mu A$ - $999.9 \, \mu A$ / $1000 \, \mu A$ - $9999 \, \mu A$ / High/Low Range:

Limit (RMS) 10.00 mA - 20.00 mA

Resolution: $0.1 \,\mu\text{A}/1 \,\mu\text{A}/0.01 \,\text{mA}$

Touch Current

 $0.0 \, \mu A - 999.9 \, \mu A / \, 1000 \, \mu A - 9999 \, \mu A /$ High/Low Range:

Limit (Peak) 10.00 mA - 30.00 mA

Resolution: $0.1 \,\mu\text{A}/1 \,\mu\text{A}/0.01 \,\text{mA}$

Display

Touch Current Display (RMS)

 $0.0 \, \mu A$ - $550 \, \mu A$, frequency DC, 15 Hz - 1 MHz Range:

Resolution: 0.1 µA

DC: $15 \text{ Hz} \le f < 100 \text{ kHz}$: $\pm (2\% \text{ of reading} + 3 \text{ counts})$ Accuracy:

100 kHz \leq f \leq 1 MHz: \pm 5% of reading,

(10.0 µA - 999.9 µA)

 $400~\mu\text{A}$ - $8500~\mu\text{A},~\text{frequency DC},~15~\text{Hz}$ - 1~MHzRange:

Resolution: 1 uA

Accuracy: DC: $15 \text{ Hz} \le f < 100 \text{ kHz}$: $\pm (2\% \text{ of reading} + 3 \text{ counts})$

100 kHz \leq f \leq 1 MHz: \pm 5% of reading,

(10 μΑ - 8500 μΑ)

Range: 8.00 mA - 20.00 mA, frequency DC, 15 Hz - 1 MHz

Resolution: 0.01 mA

DC: 15 Hz \leq f \leq 100 MHz: \pm 5% of reading, Accuracy:

(0.01 mA -20.00 mA)

Touch Current Display (Peak)

Range: 0.0 μA - 550 μA, frequency DC - 1 MHz

Resolution: 0.1 µA

Accuracy: DC: ±(2% of reading +3 counts)

15 Hz \leq f \leq 1 MHZ : \pm 10% of reading +2 μ A

Range: $400 \, \mu A$ - $8500 \, \mu A$, frequency DC - 1 MHz

Resolution: 1 µA

Accuracy: DC: ±(2% of reading +3 counts)

15 Hz < f < 1 MHz: $\pm 10\%$ of reading +2 μ A

8.00 mA - 30.00 mA, frequency DC - 100 kHz Range:

Resolution: 0.01 mA

Accuracy: DC: ±(2% of reading +3 counts)

15 Hz \leq f \leq 100 kHz : \pm 10% of reading +2 counts

Measuring Device Module

UL544NP, UL484, UL923, UL471, UL867, UL697

MD2 UL544P MD3 IEC 60601-1 UL1563 MD4

IEC60990 Fig4 U2, IEC60950-1, IEC60335-1, MD5

IEC60598-1,IEC60065, IEC61010

MD6 IEC60990 Fig5 U3, IEC60598-1

MD7 IEC60950, IEC61010-1 FigA.2 (2 kohm) for Run function

External MD Basic measuring element 1 kohm

MD Voltage Limit 70 VDC

DUT Power

AC Voltage 0.0 - 277.0 V

AC Current 40 A max continuous

AC Voltage 0.0 - 277.0 V Range: High/Low Limit Resolution: 0.1 V/step

AC Voltage Display Range: 0.0 - 277.0 V

Resolution: 0.1 V/step

± (1.5% of reading + 2 counts), 30.0 - 277.0 V Accuracy:

Delay time setting Range: 0.5 - 999.9 sec

Resolution: 0.1 sec

Dwell time setting Range: 0, 0.5 - 999.9 sec (0=Continuous)

Resolution: 0.1 sec

Accuracy: \pm (0.1% of reading + 0.05 seconds)

Failure Protection (Start-Up) - Neutral Voltage Check (Neutral-V)

Over current and ground current check (Line - OC)

General Specifications

Dimension (W x H x D) 16.93 x 5.24 x 11.81

(430 x 133 x 300 mm)

Weight 26.45 lbs (12 kg)

Display 320 X 240 graphic LCD

Mechanical Bench or rack mount with tilt up feet

Memory 50 Memories, 30 steps per each memory

File locations can link 900 steps max

Interface USB/RS232 Standard, Ethernet, GPIB, Data Storage

(RS-485) Optional

Specifications subject to change without notice.

Accredited calibration service available. Includes ISO 17025, ANSI Z540.1-1994, CTL & Denan's Law requirements.

For more information on testing to a specfic standard, refer back to the Common Safety Standard Reference Chart.



To find your nearest representative visit the "Local Sales Offices" section of our web site at www.asresearch.com or call us toll-free at 1-800-858-8378

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