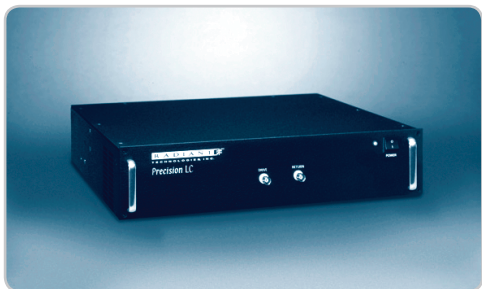




2835D Pan American Fwy NE
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Tel: (505) 842-8007
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radiant@ferrodevices.com

The Precision LC is Radiant's answer to a growing need for affordable characterization equipment. The Precision LC is an ideal general purpose tester for the University research laboratory



Hardware Features:

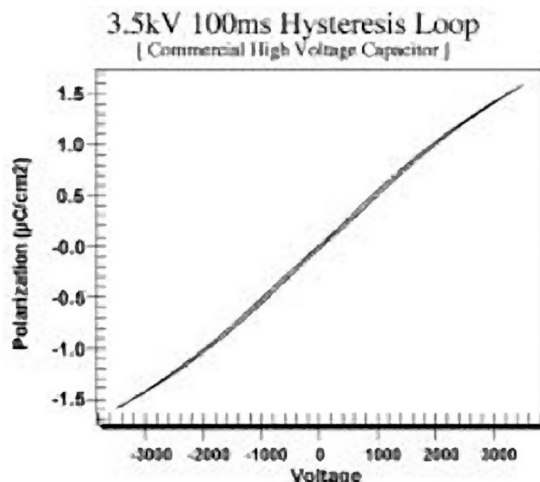
- » Peak Output current 50mA
- » Virtual Ground Measurement Circuitry
- » External Sensor for AFM, Piezo and Pyroelectric

Features of this system include:

- » +/- 10V with 100V and 200V options
- » Min Pulse Width 50µs
- » Min Rise Time @ 5V 40µs
- » 5 KHz Internal Fatigue Frequency
- » External Fatigue Connection
- » Min Hysteresis Loop 10s
- » 2.0 kHz Max Hysteresis Frequency
- » Min Resolution Electrometer 305µV
- » Can Interface with Radiant's High Voltage Interface for Testing up to ±10kV (with accessories)
- » Can Measure From 4µ2 up to 58cm2 from 0.5V to 10,000V Leakage to <1pA

Measurements

- » USB Control under Windows™
- » Vision Software Operating System Includes: Hysteresis, Leakage, Charge, Retain, Resist, Fatigue, C(V), PUND, Imprint, and Leakage Current
- » Custom Test Profiles
- » Networking features allow researchers to share data from anywhere in the world
- » Continuously variable pulse widths from 50µs to 1s



3.5kV Hysteresis Loop of Commercial High Voltage Capacitor made with Paraelectric Material



Hardware Specifications

HARDWARE SPECIFICATIONS	Voltage Test	High Voltage Limit	External Sensor Channels	Independent Voltage Sources					
	10 V/	10 kV	2	1					
Optional	100 V/200 V								
MEASUREMENT SPECIFICATIONS	DRIVE DAC	Output Voltage Resolution	Min Pulse Width	Min Rise Time @ 5V	Maximum Internal Fatigue Frequency	External Fatigue	Peak Output Current	Max Hysteresis Frequency	Min Hysteresis Period
	12 bits	4.88 μ V	50 μ s	40 μ s	5 kHz	Yes	50 mA	2 kHz	10 s
System Ranges									
SYSTEM HARDWARE	RETURN ADC	Integrator Voltage Range	Sense Capacitors	Maximum Amplification	Minimum Amplification				
	16 bits	\pm 10 V	100 pF, 1.1 nF, 5.8 nF	1	0.001				
MINIMUM RESOLUTION	Integrator Voltage Divisions	Minimum Voltage Resolution	Minimum Sense Cap Charge	Correction for Amplification					
	32768	305 μ V	30.5 fC	30.5 fC					
MAXIMUM MEASURABLE CHARGE	Maximum Voltage Resolution	Maximum Sense Cap Charge	Correction for Amplification	Range with Precision 10kV HVI					
	10 V	58 nC	58 μ C	5.8 mC					

Windows™ is a trademark of Microsoft Corporation

Optional Features:

- » Piezoelectric Measurements
- » Pyroelectric Measurements
- » High Voltage testing up to 10kV

Dimensions:

- » Width-17" x Depth-13" x Height-4"
- » Weight 20lbs