

World's leader in Ferroelectric Technology

Precision LC

Radiant Technologies, Inc.

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.



Features of this system include:

+/- 10V with 100V and 200V options

Min Pulse Width 50 μ s

Min Rise Time @ 5V 40 μ s

5 KHz Internal Fatigue Frequency

External Fatigue Connection

Min Hysteresis Loop 10s

2.0 kHz Max Hysteresis Frequency

Min Resolution Electrometer 305 μ V

Can Interface with Radiant's High Voltage Interface for Testing up to ± 10 kV (with accessories)

Can Measure From $4\mu^2$ up to 58cm^2 from 0.5V to 10,000V Leakage to $<1\text{pA}$

Hardware Features:

Peak Output current 50mA

Virtual Ground Measurement Circuitry

External Sensor for AFM, Piezo and Pyroelectric Measurements

USB Control under Windows™

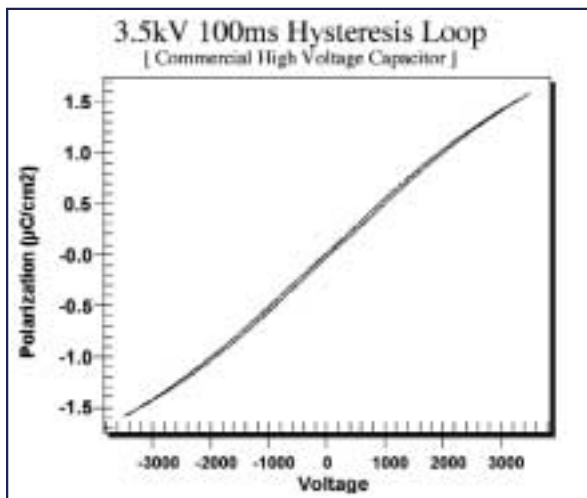
Vision Software Operating System Includes:

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 50 μ s to 1s



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

Optional Features:

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

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					

Dimensions:

Width-17" x Depth-13" x Height-4"

Weight 20lbs

Radiant Technologies, Inc

2835D Pan American Fwy NE

Albuquerque, New Mexico 87120

Tel – 505-842-8007 Fax – 505-842-0366

www.ferrodevices.com e-mail: radiant@ferrodevices.com