

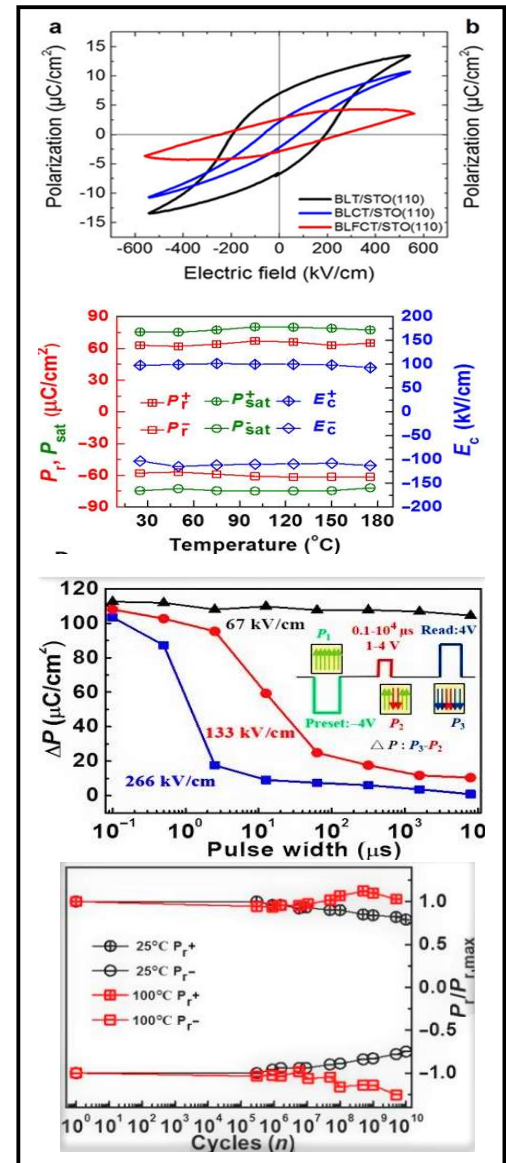
STANDARD PE LOOP FERROELECTRIC TEST SYSTEM



ABOUT THE SYSTEM

The **Standard PE loop Ferroelectric Test system** is a basic model having suitable test facilities for researchers. This model is ideal for researchers who have interest in performing basic task of ferroelectricity. **The Standard PE** is available in **5KV field** option. The **high voltage unit** is fully integrated with main PE unit. This model is designed by our company and its versatile in its specifications and can undertake various tests needed by researchers. The accuracy of this system is precise as low as **0.01 micro coulomb**.

- Hysteresis Frequency Range: **20 Hz – 1KHz**
- **16 Bit** Resolution at **2.5KHz**
- Hysteresis Accuracy: **0.5%**
- Max Data Points: **1200**
- Minimum Pulse Width: **25 μs**
- Maximum Pulse Width: **2.5 ms**
- Leakage Current Resolution: **10nA**
- Fatigue Measurement: **1KHz**



MODEL: 20PE 1KHZ 0.01M

Various tests performed by this model:

- Ferroelectric charge at different frequencies
- Ferroelectric charge at different temperature
- Fatigue measurement

Test options available in other models:

- Remnant hysteresis
- Curve energy
- Single point C/V
- PUND measurement
- General pulse and sample pulse
- DC Poling
- Pyroelectric current measurement
- Electrical Strain vs Field
- ME Coupling Measurement
- Ferroelectric charge at different magnetic field
- Leakage current/Current Density

STANDARD PE LOOP FERROELECTRIC TEST SYSTEM

TECHNICAL SPECIFICATION

MODEL	20PE 1KHZ 0.01M
Field	+ 5 KV
Test Frequency Range Small Signal	20Hz to 1KHz
Test Frequency Range Large Signal (HV amplifier)	20Hz to 1KHz
Wave Form Generator	16 Bit
ADC Resolution	16 Bit Resolution at 2.5 KHz
Minimum Charge Resolution	0.01 μ C
Minimum Dot Size	1 square mm
Maximum Charge Resolution	6 mC (with HV Amp)
Maximum area resolution	50 cm square (with HV Amp)
Maximum Hysteresis Frequency	1KHz
Minimum Hysteresis Frequency	20Hz
Minimum Pulse Width	25 μ s
Maximum Pulse Width	2.5ms
Minimum Pulse Rise Time (10V)	1 μ s
Maximum Delay between Pulse	1s
Internal Clock	40ns
Minimum Leakage Current	10nA
Leakage Current Accuracy	50nA 2.5% 10nA 10%
Input Capacitance	1pf
Maximum Small Signal Cap Freq	1KHz
Minimum Small Signal Cap Freq	20Hz
Fatigue	up to 20 th order of cycles
Resolution	16 Bit (0.01 μ C)
Input Power	220V 5 Amp
Size	Rack Mountable Unit 19 Inches 4U
Temperature Options	Model
Cryogenic Temperature Stage	100RT (96K – 273K)
Temperature Stage	RT250 (RT – 500K)
Resolution	0.1°K
Accuracy	1°K
Data	ASCII
Interface	USB 3.0
Sample Holder	Specifications
Sample Holder	Two Probe Spring Loaded
Construction	SS304 /Teflon
Electrode Material	Brass

(For optional items separate brochure is available)

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