

PYROELECTRIC MEASUREMENT SYSTEM

MODEL PMSRT800 (RT to 1073K)



ABOUT THE SYSTEM

High temperature Pyroelectric measurement system is designed to measure Pyroelectric of pellets and films over a temperature range RT TO 1073K. The measurement system uses a high temperature sample holder designed and developed by our company. The measurements are done using a Picoammeter which is connected with a PC and temperature controller together. The data recorded automatically for DC resistance in above temperature range.



MODEL PMSRT500 (RT to 873K)

Various tests performed by this model

- Pyro vs temperature at fixed interval
- IV vs temperature at fixed interval
- VI vs temperature at fixed interval

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PYROELECTRIC MEASUREMENT SYSTEM

General Specifications

Picoammeter 6485

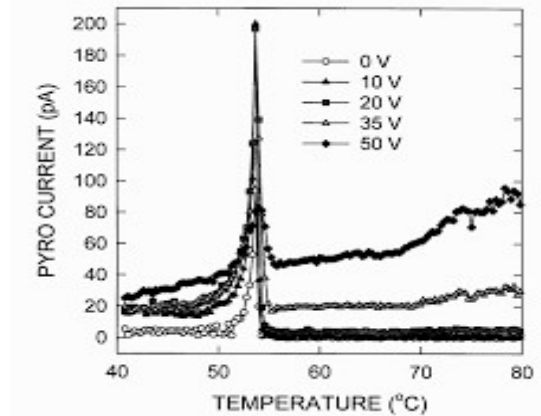
10 fA resolution
5-1/2-digit resolution
<200 μ V burden voltage
Up to 1000 readings/second
Built-in Keithley 485 emulation mode
GPIB and RS-232 interfaces
Analog output

Sample holder

SS Construction
Facility to load bulk pellet and thick film
Inbuilt heating control
Gas purging and vacuum facility

Temperature stage

RT to 1073K
Accuracy 0.1%
Stability 1 degree
PID Controller
USB Interface



System Test Specification

Input Voltage Burden: 200Uv on all ranges expect <mV on 20mA Range

Maximum Input Capacitance: Stable to10nF on all nA ranges and 2uA range; 1uf ON 20uA ranges, and on mA ranges

Maximum Continuous Input Voltage: 220VDC

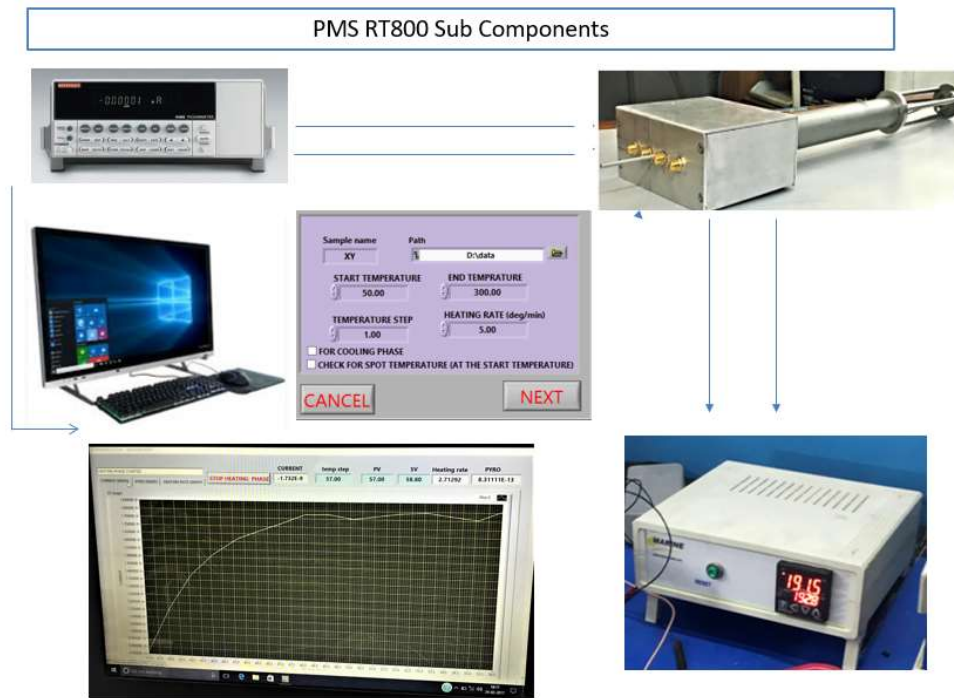
NMRR¹: (50 or 60Hz) :60Db

Isolation (Meter COMMON to chassis): Typically,>5x10¹¹ Ω in parallel with <1nF

Analog output: Scaled voltage output (inverting 2V full scale on all ranges) 3% \pm 2mV 1K Ω impedance

Note – Some specifications are related with optional test indicated above. Those are valid only when particular option is purchased

PYROELECTRIC MEASUREMENT SYSTEM



List of Deliverables

- Sample holder assembly
- Furnace RT to 1073-degree Kelvin
- Sample holder stand
- Temperature controller stage
- Software
- Interconnecting cables and Manual
- Keithley -6485 (Optional)



List of users

- Solid State Lab (SSPL) Delhi
- Delhi University
- RRCAT Indore
- IIT Delhi
- IIT Roorkee
- Shimla university
- Osmania University
- IIT Patna
- Maharaja Agrasen university