

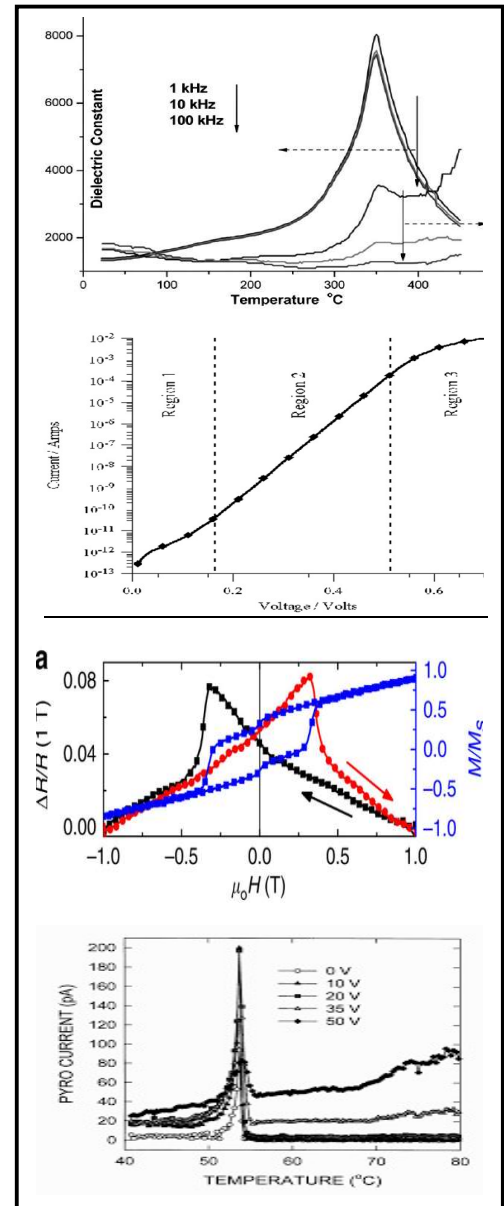
CRYGENIC TEMPERATURE STAGE



ABOUT THE SYSTEM

The **Cryogenic Temperature Stage** is designed to provide user a low-cost solution for **two and four probe measurement** option. The Conventional systems produced require a lot of free flow of LN2 in liquid and gas form. The cost for purchasing the cryogenic equipment is very high in international market. Researchers have always demanded a low-cost cryogenic solution with low consumption of LN2. Therefore, our company have produced this cost-effective cryogenic temperature stage which can undertake various low temperature test at different platforms. The measurement techniques are well defined which makes the system versatile. User can hold the specimen at a desired temperature between **100K – 473K**. The complete system comprises of cryogenic sample holder, temperature controller stage, LN2 Dewar, Vacuum pump and interconnecting cables. Following are the main highlights of the system.

- Temperature Range: **100K – 473K**.
- Specimen: **Thin/ Thick/Bulk**
- Hold Time at any temperature: **1min – 4 Hrs**
- Economics: **Low Initial and Running Cost**



MODEL: 100RT (100K – 473K)

Utility of Cryogenic Temperature Stage:

- DC Resistivity Measurement
- Magneto Resistance
- Hall Measurement
- Dielectric Analysis
- Pyro Electric
- IV Measurements
- Ferroelectric Measurements



CRYOGENIC TEMPERATURE STAGE

TECHNICAL SPECIFICATION

Cryogenic Temperature Stage	100RT
Temperature range	100°K – 273°K
Connections	2/4 Probe
Sample Details	Thin/ Thick/Bulk
Sample Shape	Rectangular / Circular
Sample Dimension	8X8 mm/ 10 mm Dia
Thickness (bulk)	0.1mm to 1mm
Thickness (Film)	10µm to 100µm
Sample Type	Pellet or film etc
Electrode Material	Brass
Heating	Ceramic Heater
Heating Type	DC
Heater Power	25W
Sample Environment	Vacuum
Construction	SS304
Sensor	PT100
Hold Time at any temperature	1min – 4 Hrs
Temperature Stage	Specification
Control	PID Controlled
Power Supply	Thyristor
Accuracy	0.1°K
Resolution	0.1°K
Ramp Rate	1°K – 10°K
Communication	RS232/ USB
Heating/cooling control	HBA
Input	110/220V 50Hz/60Hz
Vacuum Pump	Specifications
Vacuum Pump Type	Monoblock
Suction Rate	50 liters/min
Flow Rate	3.5FCM
Ultimate Vacuum	5 Pa
Power	1/4HP
LN2 Dewar	Specifications
Cryocan	BA07/IRT10
Capacity	8 Litres

(For optional items separate brochure is available)

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