



DIFFERENTIAL SCANNING CALORIMETER LDSC-A12

Differential Scanning Calorimeter LDSC-A12 is a compact and tabletop type fully automatic controlled unit. Features -150 to 550°C of temperature range with 0.1 to 80°C/min of heating rate and 1 to 20°C/min of cooling rate. Designed with metal furnace body and 7-inch touch screen display, has liquid nitrogen refrigeration cooling and 3 sets of thermocouples for efficient operation. Adopted with indirect conduction method for heating and automatic switching of 2-channel atmosphere flow, comes with software control and USB interface for convenient operation and easy data analysis.

Features

- ❑ A compact and tabletop type fully automatic controlled unit
- ❑ -150 to 550°C of temperature range with 0.001°C resolution
- ❑ 0.1 to 80°C/min of heating rate and 1 to 20°C/min of cooling rate
- ❑ Metal furnace body with 7-inch touch screen display
- ❑ Liquid nitrogen refrigeration cooling and 3 sets of thermocouples
- ❑ Indirect conduction method for heating, high stability and uniformity
- ❑ Automatic switching of 2-channel atmosphere flow, short stabilization time
- ❑ Software control and USB interface, easy and convenient data analysis
- ❑ Ideal to determine the inner heat transition relating to temperature and heat flow

Application

Differential Scanning Calorimeter is used for the identification of various physical properties and thermal transitions of polymeric materials across polymer development, performance testing & quality control etc.

Specifications

| Model | LDSC-A12 |
|------------------------|-----------------|
| Temperature range | -150°C to 550°C |
| Temperature resolution | 0.001°C |

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| Temperature fluctuations | $\pm 0.001^{\circ}\text{C}$ |
| Temperature repeatability | $\pm 0.1^{\circ}\text{C}$ |
| Constant temperature range | Program setting ≤ 24 hr |
| Dynamic heat flow range (DSC range) | 0 to ± 600 mW |
| Heating rate | 0.1 to $80^{\circ}\text{C} / \text{min}$ |
| Cooling rate | 1 to $20^{\circ}\text{C} / \text{min}$ (For instant cool only, cannot be Isothermal below RT, and if heating up, the rate can be controlled) |
| DSC noise | 0.01 μW |
| DSC resolution | 0.01 μW |
| DSC accuracy | 0.01 μW |
| Control Mode | Rising temperature, constant temperature (full-automatic) |
| Curve scanning | Rising scan, cooling scan |
| Gas flow control | Embedded digital flow meter and Software control, automatic changing |
| Atmosphere control gas | Nitrogen, Oxygen (auto-switch) |
| Gas flow-rate | 0 to 300 ml/min |
| Gas pressure | 0.2 MPa |
| Cooling device | Liquid nitrogen refrigeration |
| Thermocouples | 3 sets |
| Parameter standard | With standard material, with calibration function, the user may correct temperature and heat enthalpy |
| Display | 7 inches LCD touch screen display |
| Data interface | Standard USB connector |
| Power supply | AC 220 V/50 Hz |
| Dimension (W×D×H) | 680×620×550 mm |
| Weight | 38 kg |

Standard Accessories

| Accessories no. | Accessories Name |
|-----------------|------------------------------|
| 1 | Aluminum crucibles × 100 pcs |
| 2 | Ceramic crucibles × 100 pcs |
| 3 | Pure tin grains × 1 bag |