

Differential Scanning Calorimeter

DSC7020

**HITACHI**  
Inspire the Next

# DSC7020

The Next Generation of DSC Technology

## ***Improved Overall Performance***

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- New technology for measurement optimization
- Designed for the widest application range

## ***The New Cooling Systems***

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- The integrated LN<sub>2</sub> gas control unit guarantees cooling efficiency
- The electrical cooling unit helps to reduce following costs

## ***Automatic Gas Control Unit***

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- Mass flow controllers for precise flow control

## ***System Expandability***

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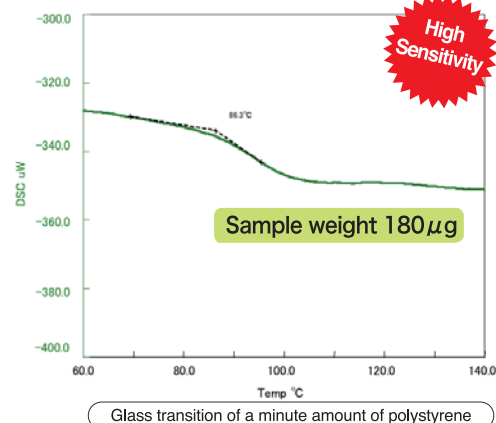
- The optional Auto Sampler, the different Cooling Systems, Sample Observation Unit and UV Irradiation Unit allow configuration for all application needs



## Differential Scanning Calorimeter



DSC system with Auto Sampler unit



### Unsurpassed Baseline Performance

- New furnace design and heater control have drastically improved baseline and sensitivity performance. Low noise level and baseline stability enable measurement and analysis of weak transitions and low mass samples.
- The wide measurement range and the usage of the pressure containers make the instrument suitable for the widest application range including safety evaluations.

### The Full Line of Options

- Hitachi High-Tech Science is known for its precision. The optional Auto Sampler guarantees easy operation and high sample throughput.
- Software controlled mass flow controllers make sure the atmosphere and the flow rates are the desired ones.
- The flexibility of cooling units meets all applications from -170°C to 725°C.

### Auto LN<sub>2</sub> Gas Cooling Unit

Controlled cold nitrogen gas and the improved furnace design are essential for highest cooling efficiency and baseline stability in the wide temperature range from -150°C to 725°C with one cooling system.



### Electrical Cooling Unit

Easy to handle and no following costs at high performance are the key features of this unique cooling system in the temperature range from -70°C to 420°C.



Model name	DSC7020
Heat flow measurement method	Heat flux
Temperature range	-170 to 725°C
Measurement range	±350mW
RMS noise / sensitivity	0.1 μW / 0.2 μW
Scanning rates	0.01 to 100°C/min
Atmosphere	Air, Inert gas flow
Sample containers (option)	○ Open containers (aluminum, platinum, alumina) ○ Low-Pressure sealed Pans (aluminum) ○ High-Pressure sealed Pans (aluminum, silver, stainless steel, stainless steel Gold-plated)
Gas purge control (option)	○ Flow Meter, ○ Gas Controller, ○ Mass Flow Controller
Auto sampler (option)	50 samples; mechanical arm transport
Cooling unit (option)	○ Cooling Can, ○ Auto LN <sub>2</sub> Gas Cooling Unit, ○ Electrical Cooling Unit ○ Auto Air Cooling Unit
Dimensions	420(W) × 620(D) × 320(H)mm. With auto-sampler attached: 420(W) × 620(D) × 620(H)mm

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