



# DIFFERENTIAL SCANNING CALORIMETERS

DSC works on the principle of differential scanning calorimetry. It is used to measure the amount of heat absorbed or released by the sample while heating or cooling. The difference in energies of the sample and reference is measured as the function of temperature, while both are subjected to the precisely controlled temperature. It is widely used in the pharmaceutical sector for drug development and discovery, for glass transitions, fusion and crystallization phenomenons.

Used in Polymer Development, Performance Testing, Quality Control, Crystallization Process, Glass Transition Temperature, Oxidation Induction Time (OIT), Reaction Heat, Heat Enthalpy, Melting Point, Phase Transition.

### LTTAN8-6 DIFFERENTIAL SCANNING CALORIMETER

The sensor is made of imported e- couple with high sensitivity. Signal acquisition circuit shielding protection, strong anti-interference, high baseline stability.

It is a touch screen type, which can be used for glass transition temperature test, phase transition test, melting and enthalpy test, product stability and oxidation induction period test.

Wide range of application.

#### **SPECIFICATIONS**

Model	LTTAN8-6
Temperature range	Room temperature ~ 600 °C air cooling
Temperature resolution	0.01°C
Temperature fluctuation	± 0.01°C
Temperature repeatability	± 0.1°C
Heating rate	0.1~100°C/min
Constant temperature time	program setting ≤ 24
DSC range	0~±600mW
DSC resolution	0.01 uW
DSC accuracy	0.001 mW
Working power supply	Ac220 v 50 Hz
Atmosphere control gas	nitrogen, oxygen
Gas flow	0-300 mL/min
Display mode	24 bit color, 7 inch LCD touch screen display
Data interface	standard USB interface
Packaging Dimensions	64x55x60 cm
Gross weight	32 Kgs

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### LTTAN8-7 DIFFERENTIAL SCANNING CALORIMETER

Industrial grade 7-inch touch screen with rich display information

New metal furnace structure, better baseline and higher accuracy

Indirect conduction mode is adopted for heating, which has high uniformity and stability, reduces pulse radiation, and is superior to the traditional heating mode

USB communication interface has strong universality, reliable and uninterrupted communication, and supports self recovery connection function

Automatic switching of two-way atmosphere flow, fast switching speed and short stability time. At the same time

The software is simple and easy to operate

#### **SPECIFICATIONS**

Model	LTTAN8-7
Temperature range	40 °C ~ 600 °C
Temperature resolution	0.01°C
Temperature fluctuation	± 0.01°C
Temperature repeatability	± 0.1°C
Heating rate	0.1~100°C/min
Constant temperature time	program setting ≤ 25
DSC range	0~±800mW
DSC resolution	0.01 uW
DSC accuracy	0.001 mW
Working power supply	Ac220 v 50 Hz
Atmosphere control gas	nitrogen, oxygen
Gas flow	0-300 mL/min
Gas pressure	0.3 MPa
Display mode	24 bit color, 7 inch LCD touch screen display
Data interface	standard USB interface

## LTTAN8-8 DIFFERENTIAL SCANNING CALORIMETER

Industrial level 7-inch touch screen, display information rich

New furnace body structure, can be matched with a variety of refrigeration devices

USB communication interface, strong versatility, reliable communication, support self recovery connection function

Automatic switching of two-way atmosphere flow, fast switching speed and short stable time. At the same time, a protective gas input is added

The software is simple and easy to operate

#### **SPECIFICATIONS**

Model	LTTAN8-8
Temperature range	-150 °C ~ 600 °C
Temperature resolution	0.01°C
Temperature fluctuation	± 0.01°C
Temperature repeatability	± 0.1°C

Heating rate	0.1~80°C/min
Constant temperature time	0~400
DSC range	0~±600mW
DSC resolution	0.001 uW
DSC accuracy	0.001 mW
Working power supply	Ac220 v 50 Hz
Atmosphere control gas	nitrogen, oxygen
Cooling equipment	Nitrogen cooling
Gas flow	0-300 mL/min
Gas pressure	0.2 MPa
Display mode	24 bit color, 7 inch LCD touch screen display
Data interface	standard USB interface

### LTTAN8-9 DIFFERENTIAL SCANNING CALORIMETER

New designed oven structure ensures high resolution and good stability of base line;

Air flow meter may control the air flow rate accurately; the test data can be recorded into the database directly

The instrument is bilateral control, may be controlled by both main frame and software. User-friendly interface, easy operation.

Using Cortex-M3 kernel ARM controller, faster processing speed, more temperature control

USB two-way communication, more convenient operation

Adopt 7 inch 24bit full-color LCD touch screen, more friendly interface

Using professional alloy sensor, more corrosion resistance, oxidation resistance

#### **SPECIFICATIONS**

Model	LTTAN8-9
Temperature range	RT ~ 600°C
Temperature resolution	0.01°C
Temperature fluctuation	± 0.01°C
Temperature repeatability	± 0.1°C
Heating rate	0.1~100°C/min
DSC range	0~±600mW
DSC resolution	0.01 uW
DSC accuracy	0.01 mW
Atmosphere control	automatic switching
Display mode	25 bit color, 7 inch LCD touch screen display
Data interface	standard USB interface

### LTTAN8-10 DIFFERENTIAL SCANNING CALORIMETER

7-inch touch screen with rich display information

New ceramic furnace structure, better baseline and higher precision

Indirect conduction mode is adopted for heating, which has high uniformity and stability, reduces pulse radiation and is superior to traditional heating mode

USB communication interface, universal, reliable and uninterrupted communication, support self recovery connection function

Automatic switching of two-way atmosphere flow, fast switching speed and short stable time. At the same time, a protective gas input is added

The software is simple and easy to operate

#### **SPECIFICATIONS**

Model	LTTAN8-10
Temperature range	RT ~ 1100°C
Temperature resolution	0.01°C
Temperature fluctuation	± 0.01°C
Temperature repeatability	± 0.1°C
Heating rate	0.1~100°C/min
Constant temperature time	Program setting
DSC range	0~±800mW
DSC resolution	0.01 uW
Working power supply	Ac220 v 50 Hz
Atmosphere control gas	nitrogen, oxygen
Gas flow	0-300 mL/min
Gas pressure	≤1MPa
Display mode	24 bit color, 7 inch LCD touch screen display
Data interface	standard USB interface



**Labtare Analytical Instruments** 

Email: info@labtare.com | Website: labtare.com