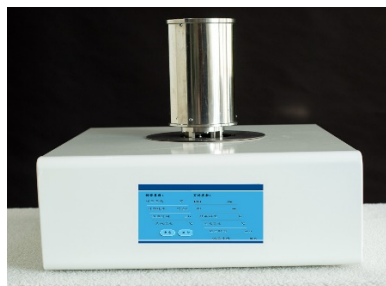


Simultaneous Thermal Analysis (STA)



STA-1250

Overview

Simultaneous thermal analysis combines TGA with DTA or DSC. The information of TG, DTA or DSC can be obtained synchronously by using the same sample in the same measurement.

The following characteristics of materials were measured and studied:

- ~ DSC: melting, crystallization, phase transformation, reaction temperature and heat, combustion heat, specific heat, etc.
- ~ TGA: thermal stability, decomposition, oxidation-reduction, adsorption desorption, content of free water and crystal water, calculation of component proportion, etc.

Main features:

1. The balance has its own internal calibration function, with better accuracy and repeatability.
2. The advanced alloy sensor is more corrosion-resistant, oxidation-resistant and highly sensitive.
3. The furnace body is heated by precious metal alloy wire, which reduces interference and is more resistant to high temperature.
4. Perfect atmosphere control system, automatic switch of software settings, data directly recorded in the database.
5. With Cortex-M3 core arm controller, the operation processing speed is faster and the temperature control is more accurate.
6. Adopt USB two-way communication, fully realize intelligent operation.
7. Use 7-inch 24bit color full-color LCD touch screen to display the status and data of the instrument in real time.
8. It adopts the top opening structure and is easy to operate. It is very difficult to move the furnace body upward to place the sample, which is easy to cause damage to the sample rod.
9. Automatically generate test report and print it. The software has built-in test record, data processing and report format, and automatically issues test report.

Technical parameters:

1. Temperature range: room temperature ~ 1250 °C
2. Temperature resolution: 0.01 °C
3. Temperature fluctuation: ± 0.1 °C
4. Heating rate: 0.1 ~ 100 °C / min
5. Temperature control mode: Heating and constant temperature programable
6. Measurement range of balance: 0.01mg ~ 2G
7. Resolution: 0.01 mg

8. DSC range: 0 ~ \pm 500MW
9. DSC resolution: 0.01mw
10. Constant temperature time: 0 ~ 300min
11. Display mode: 24 bit color 7 inch LCD touch screen display
12. Atmosphere: inert, oxidizing, reducing, static, dynamic
13. Atmosphere device: built in gas flowmeter, including two-way gas switching and flow size control
14. Software: intelligent software can automatically record TG curve for data processing and print experimental report
15. Data interface: standard USB interface with special featured software
16. Power supply: AC220V 50Hz