

OSIS Instrument Solutions 003023748-K

No. 8, Jalan Waterfall 1 48000, Rawang, Selangor Tel: 012-2919329

Email: osis.instrument@qmail.com
Web: www.osis-instrument.com

Thermogravimetric Analysis (TGA)



TGA-601

Overview

Thermogravimetry (TG, TGA) is to observe the change of sample weight with the process of heating under the controlled temperature time. The thermal stability of the mass loss is observed if a thermal event involves loss of a volatile component. It is widely used in research and development, process optimization and quality control of plastics, rubber, coatings, drugs, catalysts, inorganic materials, metal materials and composite materials. The following properties of materials were measured and studied: thermal stability, decomposition process, adsorption and desorption, oxidation and reduction, quantitative analysis of components, influence of additives and fillers, water and volatile matter, reaction kinetics.

Main features:

- 1. The balance is equipped with internal calibration function, which has 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 winding, which reduces interference and is more resistant to high temperature.
- 4. Perfect atmosphere control system, automatic switching of software settings, data directly recorded in the database.
- 5. With advanced Cortex-M3 core arm controller, the operation processing speed is faster and the temperature control is more accurate.
- 6. Uses USB two-way communication to 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, constant temperature programable
- 6. Measurement range of balance: 0.01mg \sim 2G
- 7. Resolution: 0.01 mg
- 8. Constant temperature time: 0 ~ 300min
- 9. Display mode: 24 bit color 7 inch LCD touch screen display
- 10. Atmosphere: inert, oxidizing, reductive, static and dynamic

OSIS Instrument Solutions 003023748-K

No. 8, Jalan Waterfall 1
48000, Rawang, Selangor
Tel: 012-2919329
Email: osis.instrument@gmail.com
Web: www.osis-instrument.com

- 11. Atmosphere device: built in gas flowmeter, including two-way gas switching and flow size control
- 12. Software: intelligent software can automatically record TG curve for data processing and print experimental report
- 13. Data interface: standard USB interface, special software (free software upgrade from time to time)
- 14. Power supply: AC220V 50Hz