Thermogravimetric Analyzer

TGA-1150

Description

- Thermogravimetric analysis is widely used in research and development, process optimization and quality control in various fields such as plastics, rubber, coatings, pharmaceuticals, catalysts, inorganic materials, metal materials and composite materials.

Structural advantages

- Furnace heating adopts double-row winding of customized nickel-chromium wire, which reduces interference and is more resistant to high temperature.
- Tray sensor, made of alloy wire, has the advantages of high temperature resistance, oxidation resistance, corrosion resistance, etc.
- Power supply, circulation cooling part is separated from the host, reducing the influence of heat and vibration on the micro-thermal balance.
- It is easy to operate and has tail gas output port, which is easy to expand and connect infrared equipment.
- The main engine adopts thermal effect of isolated heating furnace on chassis and micro thermal balance.
- The furnace body adopts double heat preservation, with better linearity
- Five test maps can be opened at the same time for comparative analysis
- The gas path can be set with multi-stage automatic switching without manual adjustment.

Features

Controller, software advantages

- It adopts imported ARM processor, with faster sampling speed and processing speed.
- Four-channel sampling AD collects TG signal and temperature T signal.
- Heating control, using PID algorithm, precise control. Multi-stage heating and constant temperature
- USB two-way communication is used between the software and the instrument, which fully realizes remote operation.The parameter setting of the instrument and the running stop of the instrument can be performed through the computer software.
- 7-inch full-color 24bit touch screen, better human-machine interface. TG calibration can be achieved on the touch screen.

Specifications

Model	TGA-1150
Temperature range	RT~1150 ℃
Temperature resolution	0.01 ℃
Temperature fluctuation	±0.01 ℃
Heating rate	0.1~100 ℃/min
Temperature control mode	PID control, heating, constant temperature and cooling
Program control	program setting multi-stage temperature rise and constant temperature, and five sections can be set at the same time
Balance measuring range	0.01mg～3g, can be extended to 50g
Accuracy	0.01mg
Constant temperature time	Arbitrary setting
Resolution	0.1ug
Display method	7-inch large screen LCD display
Atmosphere device	Built in gas flow meter and gas flow control device
Software	Intelligent software can automatically record TG curve for data processing, TG / DTG, mass, percentage coordinates can be arbitrarily switched;Software with automatic adjustment function, according to the map display, automatic extension, scaling
Data interface	Standard USB interface, dedicated software (software upgrades for free from time to time)
Curve scanning	heating scanning and cooling scanning
Cooling time	≤ 15min, 1000 ℃ ~ room temperature;Air cooled cooling device is selected to reduce temperature quickly and improve test
Crucible type	Ceramic crucible, aluminum crucible
Standard substance	one copy
Electricity	AC220/110V,50/60Hz
Dimensions	531*463.5*416 mm
Weight	26kg
Package Dimension (W*D*H)	730*600*510mm
G.W.	40kg

Thermogravimetric Analyzer

TGA-1550

Application

- It is widely used in research and development, process optimization and quality control in various fields such as plastics, rubber, coatings, pharmaceuticals, catalysts, inorganic materials, metal materials and composite materials.

Features
Structural advantages

- The heating of the furnace body is made of custom-made nickel-chromium wire double-row winding, which reduces interference and is more resistant to high temperature.
- Tray sensor, made of alloy wire, has the advantages of high temperature resistance, oxidation resistance, corrosion resistance, etc.
- The power supply and circulation cooling part are separated from the host to reduce the influence of heat and vibration on the micro-thermal balance.
- The upper-opening structure is adopted, which is easy to operate.
- The host adopts water thermostatic device to isolate the thermal influence of the heating furnace body on the chassis and microthermal balance.
- The furnace body can be replaced according to customer requirements.

Features
Controller, software advantages

- Adopts imported ARM processor, faster sampling speed, processing speed.
- The four-way sampling AD collects TG signal and temperature T signal.
- Heating control, using PID algorithm, precise control.Can be multi-stage heating, constant temperature.
- Two-way USB communication is adopted between the software and the instrument to fully realize remote operation, and the parameter setting of the instrument and the operation and stop of the instrument can be performed through the computer software.
- 7-inch full-color 24bit touch screen, better man-machine interface. TG calibration can be realized on the touch screen.

Specifications

Model	TGA-1550
Temperature Range	RT.~1550℃
Temperature Resolution	0.01℃
Temperature Fluctuation	±0.1℃
Heating Rate	0.1~100℃/min
Temperature Control Mode	PID control, heating, constant temperature and cooling
Program Control	Program setting multi-stage temperature rise and constant temperature, and five sections can be set at the same time
Balance Measuring Range	0.01mg ~ 3g, which can be extended to 50g
Precision	0.01mg
Constant Temperature Time	Program control, 0-300min, which can be extended to 72h
Resolution	0.1μg
Display	LCD display
Atmosphere Device	Built-in gas flow meter, including two-way gas switching and flow control
Software	Intelligent software can automatically record TG curve for data processing, TG / DTG, mass, percentage coordinates can be arbitrarily switched;Software with automatic adjustment function, according to the map display, automatic extension, scaling
Gas Path	Can be set with multi-stage automatic switching without manual adjustment.
Data Interface	Standard USB interface, special software (software upgrade for free from time to time)
Electricity	AC220/110V,50/60Hz
Curve Scanning	Heating scanning and cooling scanning
Test Map	Five test maps can be opened at the same time for comparative analysis
Cooling Time	≤15min,1000℃~RT.;Air cooled cooling device is selected to reduce temperature quickly and improve test efficiency
Crucible Type	Ceramic crucible, aluminum crucible
External Dimension	531*463.5*416mm
N.W./G.W.(kg)	26kg/40kg
Package Dimension(W*D*H)(mm)	730*600*480mm