

Differential Thermal Analyzer



Application:

Differential thermal analysis (DTA) is a technique that measures the temperature difference between a substance and a reference material under programmed temperature control. A DTA curve describes the relationship between the temperature (ΔT) of the sample and reference material as a function of temperature or time. In a DTA experiment, changes in sample temperature are caused by endothermic or exothermic effects of phase transitions or reactions. Examples include phase transitions, melting, crystal structure changes, boiling, sublimation, evaporation, dehydrogenation, fracture or decomposition reactions, oxidation or reduction reactions, lattice structure disruption, and other chemical reactions.

Features:

- * USB bidirectional communication makes operation more convenient.
- * A 7-inch full-color LCD touch screen provides a user-friendly interface.
- * A nickel-chromium alloy sensor is highly resistant to high temperatures, corrosion, and oxidation.
- * A wide temperature range meets the testing needs of various materials.
- * Supporting analysis software enables real-time acquisition of measurement patterns and online analysis.

Technical Parameters:

Model	BK-DTA3320A
Temperature Range	RT~1250°C
Temperature Resolution	0.01°C
Temperature Accuracy	±0.1°C
Temperature Repeatability	±0.1°C
Measuring Range	0 to ±2000μV
DTA Accuracy	0.01μV
Heating Rate	0.1~100°C/min
Atmosphere Control	Automatic switching of internal programs
Data Interface	Standard USB interface with included data cable and operating software
Power Supply	Standard: AC220V 50/60Hz, optional: AC110V 50/60Hz
External Size(W*D*H)	530*460*410mm
Net Weight	22.7kg
Packing Size(W*D*H)	670*595*505mm
Gross Weight	37.6kg

Differential Scanning Calorimeter



Application:

Differential scanning calorimeter can be used to test glass transition temperature, phase transition, melting and thermal enthalpy, product stability, oxidation induction period, specific heat, etc. It is mainly used in the chemical, energy, metallurgy, mining, polymer materials, metal materials and other industries.

Features:

- * Industrial-grade 7-inch touch screen displays rich information.
- * Brand-new metal furnace structure provides a better baseline and higher accuracy.
- * USB communication interface for versatility, reliable and uninterrupted communication, and supports self-recovery.
- * Automatically switches between two atmosphere flow rates with fast switching and short stabilization time. Also includes an additional shielding gas input.
- * Simple and easy-to-use software.

Technical Parameters:

Model	BK-DSC300	BK-DSC300C	BK-DSC300L
Temperature Range	RT~600°C	-40~600°C	-170~600°C (Optional of the liquid nitrogen container); RT~600°C (Not optional of the liquid nitrogen container)
Temperature Resolution	0.001°C		
Temperature Fluctuation	±0.01°C		
Temperature Repeatability	<±1°C		
Heating Speed	0.1~100°C/min		
Cooling Speed	/	-0.1~-40°C/min	-0.1~-60°C/min
Constant Temperature Time	Program setting ≤24h		0~400min
Temperature Control Method	Heating, constant temperature, cooling		
DSC Range	0~±600mW		
DSC Resolution	0.01uW		
DSC Sensitivity	0.001mW		
Gas Flow	0~200mL/min		
Gas Pressure	≤1MPa		
Power Supply	Standard: AC220V 50/60Hz, optional: AC110V 50/60Hz		
External Size(W*D*H)	460*455*255mm	540*455*255mm	540*455*255mm
Net Weight	13.6kg	17.6kg	15.8kg
Packing Size(W*D*H)	620*560*510mm	Main Unit: 620*560*510mm; Accessory: 540*460*835mm	620*560*510mm
Gross Weight	26.9kg	Main Unit: 31.2kg; Accessory: 43.9kg	30.7kg