



# DIFFERENTIAL THERMAL ANALYZER BANA-101

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DTA: Differential Thermal Analysis is a technique which can measure the temperature difference and temperature relationship between the sample and the reference material in the process of controlling temperature. Differential thermal analysis curves can describe the relationship of the temperature difference  $\Delta T$  changes with the temperature or time between the sample and the reference material. During the

DTA experiment, the sample temperature changes due to the endothermic or exothermic effect of the phase transition or reaction. Such as, phase transition, melting, crystalline structure transition, boiling, sublimation and evaporation, dehydrogenation, cleavage reaction or decomposition reaction, oxidation or reduction reaction, the destruction of lattice structure and the other chemical reaction.



1. The main control chip of the instrument adopts Cortex-M3 core ARM controller, which has faster operation speed and more accurate temperature control.
2. USB two-way communication makes the operation more convenient.
3. Adopt 7 inch 24bit color LCD touch screen, the interface is more friendly.
4. Adopt Ni Cr alloy sensor, more resistant to high temperature, corrosion and oxidation.

## SPECIFICATIONS

Model	BANA-101
Temperature range	Room temperature ~ 1150°C
Measuring range	0 ~ ±2000 μV
DTA precision	±0.1 μV
Heating rate	0.1 ~ 80°C/min
Temperature resolution	0.1°C
Temperature accuracy	±0.1°C
Temperature repeatability	±0.1°C
Temperature control	Temperature rise: program control (adjustable as per parameter needs); Constant temperature: program control (arbitrarily set time)
Body Structure	Cover structure replaces traditional lifting furnace, ensuring high precision and easy operation
Atmosphere control	Automatic switching of internal programs
Data interface	Standard USB connector, supports data transfer and software operation
Display	24-bit color, 7-inch LCD touch screen display
Parameters of Standard	Equipped with reference substances and key calibration function (user can correct temperature)
Baseline adjustment	Users can adjust baseline by changing slope and intercept
Work power	AC 220V 50Hz
Alt Name	Differential Thermal Analyzer



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