

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 (Δ T) 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~1200°C |
| Temperature Resolution | 0.01°C |
| Temperature Accuracy | ±0.1°C |
| Temperature Repeatability | ±1.5°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(L*W*H) | 512*460*400mm |
| Net Weight | 21.2kg |
| Packing Size(L*W*H) | 660*590*500mm |
| Gross Weight | 37.5kg |