

Insights... Fast

STA 6000 Simultaneous Thermal Analyzer



The STA 6000 Simultaneous Thermal Analyzer offers performance, reliability and productivity you can depend on.

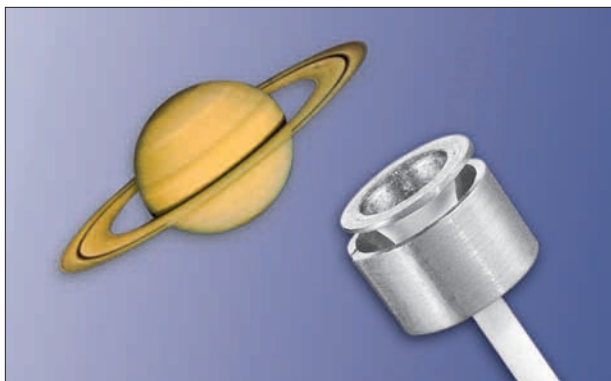
Designed with routine and research applications in mind, the STA 6000 Simultaneous Thermal Analyzer applies leading edge sensor technology to yield higher accuracy and quality results. The patent pending SaTurnA™ sensor and proven compact furnace allows for better temperature control, more consistent measurements and the fastest cool-down time.



If increasing productivity is your goal, the STA 6000 with its easy-to-load vertical system can be equipped with an autosampler that can run an unprecedented 45 samples unattended.

- Simultaneous analysis of TG with DTA mode (ΔT) and DSC (mW) mode for fast enhanced result interpretation
- Innovative patent pending SaTurnA sensor to measure both sample and reference temperature directly for superb performance
- Compact furnace allows better temperature control which leads to more reliable results
- Start experiments as low as 15 °C to capture complete moisture and solvent evaporation
- Integrated mass flow gas control and switching for accurate environmental control
- Fastest cool down time for high productivity
- A fully integrated 45 position autosampler option for unattended operation
- Small footprint for optimal use of your laboratory space
- Operates under powerful Pyris™ software control with 21 CFR 11 option
- Can be combined with a mass spectrometer (MS) or a molecular spectrometer (IR)

SaTurnA Sensor



The STA 6000 applies the innovative patent pending SaTurnA sensor for high quality simultaneous TG and DTA/DSC measurements. It combines the sample pan holder and a precision platinum thermocouple reference ring which is designed to match the thermal characteristics of the sample pan. The advanced sensor is optimized to achieve flat DTA baselines and excellent sensitivity. Both sample and reference temperature are directly measured for best analytical performance. The pan support and reference ring is made of pure platinum which is corrosive resistant for a wide variety of applications.

Specifications

Furnace type	Top loading	Easy loading and unloading in manual and automated mode. Small footprint allows for the best use of your laboratory space
Temperature range	15 °C to 1000 °C	Start experiments below room temperature to capture complete moisture and solvent evaporation
Temperature calibration	Metal standards	
Heating rate ambient to 1000 °C	0.1 to 100 °C /min	
Thermocouples	PT-PT/Rh (Type R)	
Furnace cooling	Forced air and chiller	Fastest cool down for higher productivity
Sample capacity	1500 mg	
Balance design	Single Beam vertical, user exchangeable SaTurnA sensor	Optimized for performance, reliability and productivity
Balance sensitivity	0.1 ug	
Calorimetric accuracy/precision	+/- 2% based on metal standards	
Mass flow control and switch	Integrated	Mass flow gas control and switching for accurate environmental control and high precision analysis
Sample pans	Alumina 180 µl	
Temperature accuracy	< ±0.5 °C	
Temperature reproducibility	< ±0.5 °C	
Cooling rate 1000 °C to 100 °C 1000 °C to 30 °C	under 12 min under 20 min	Fastest cool down for higher productivity
Autosampler	Optional, 45 positions	Run more samples unattended allowing for maximum reproducibility and productivity
Options	Coupling with MS or IR	The combination with a MS or an IR analyzer allows the identification of evolved gases

The data presented in this data sheet are not guaranteed. Actual performance and results are dependent upon the exact methodology used and laboratory conditions. This data should only be used to demonstrate the applicability of an instrument for a particular analysis and is not intended to serve as a guarantee of performance.

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