

EXSTAR

TG/DTA7000

SERIES

Thermo
Gravimetry
Differential
Thermal
Analyzer



The New Standard in Horizontal Differential TG/DTA
The new Bench Mark in TG/DTA

The Horizontal Digital Dual Beam System

Drift free baseline, unrivalled stability and low noise level

New balance control electronics

- Drift free baseline
- Wide measurement range
- Low noise, highly sensitive TG-Signal

New temperature control electronics

- Highly accurate heating and cooling profiles
- Precise temperature readings

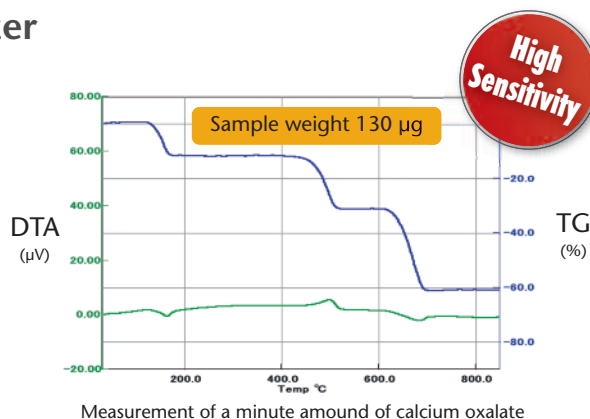
Low mass – low heat capacity furnace

- Fast heating and cooling rates
- Front stream cooling gas flow
- High throughput measurements

Optimized reaction gas control

- Mass flow controller for reaction gases
- High precision flow rate control
- Rapid atmosphere exchange

Thermo Gravimetry / Differential Thermal Analyzer



New Balance Control Technology The Horizontal Digital Dual Beam System

The newly developed "Digital Horizontal Differential System" guarantees the highest baseline stability and the lowest noise levels ever seen in TG/DTA Analysis.

The highly sophisticated digital analysis of the weight and dta difference of the dual beam balance allows it to correct any environmental influences such as furnace and detector positions and thermal expansion of the beams. Even minor weight changes of low sample masses can be measured and analyzed without any time consuming baseline corrections.

New temperature control functions

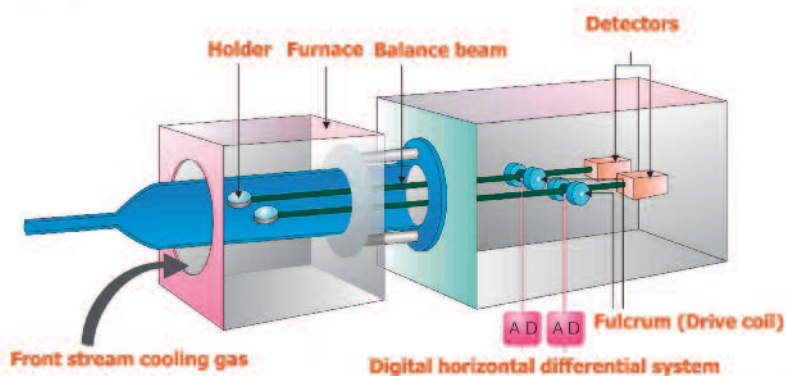
This revolutionary temperature control circuit minimises the temperature difference between program and sample temperature. The heating and cooling rate accuracy further improves the quality of the DTA and TG signal and guarantee high precision temperature readings.

Reduced inner dimensions

The technological improvements have made it possible to reduce the volume of the balance housing by 2/3 compared to the previous models. The benefits are the possibility of achieving an inert atmosphere without evacuation and a rapid atmosphere exchange after gas switching.

The New Cooling Method "Front Stream cooling gas flow"

The gas flows around the furnace have been optimised to increase the cooling efficiency. This drastically reduces cooling time and therefore the overall measurement time which leads to higher sample throughput.



Model name	TG/DTA7200		TG/DTA7300
Balance system	Horizontal differential type		
Temperature range	Ambient to 1000°C		Ambient to 1500°C
TG range	± 400mg		
TG RMS noise / sensitivity	0.1µg / 0.2µg		
DTA range	± 1000µV		
DTA RMS noise / sensitivity	0.03µV / 0.06µV		
Scanning rates	0.01 to 150°C / min		0.01 to 100°C / min
Maximum sample weight	200mg		
Atmosphere	Air, inert gas flow; decompression (to 1.3Pa)		
Purge gas flow rate	0 to 100ml / min		
Cooling time	From 1000°C to 50°C within 12 minutes		
Gas purge control (option)	Gas Controller, Mass Flow Controller		
Auto sampler (option)	50 samples; mechanical finger transport		
Dimensions	420 (W) x 600 (D) x 315 (H) mm. With auto-sampler attached: 420 (W) x 600 (D) x 640 (H) mm		



SII NanoTechnology Inc.

RBM Tsukiji Bldg. Shintomi 2-15-5, Chuo-ku Tokyo 104-0041, Japan
Tel.: +81-3-6280-0062 · Fax: +81-3-6280-0073
<http://www.siint.com>

For maintenance service and consumables:

Epolead Service Inc.

RBM Tsukiji Bldg. Shintomi 2-15-5, Chuo-ku Tokyo 104-0041, Japan
Tel.: +81-3-5540-7300 · Fax: +81-3-5540-7320



Thermal Analysis & Surfaces Solutions
Pfungstweide 21

61169 Friedberg - Germany

Internet: www.thass.net

E-Mail: info@thass.net