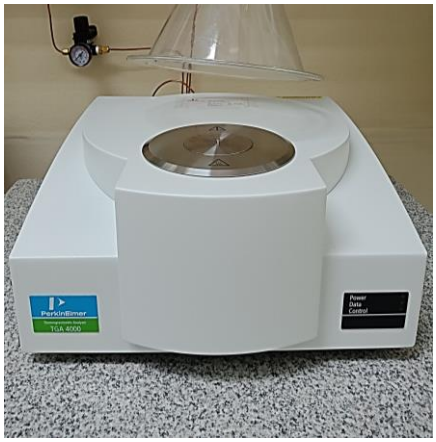
Thermogravimetric AnalyZer (TGA)



Brand: PerkinElmer

Model: TGA 4000

Custodian: Nij kramol

Location: K652 Room, 6th Floor, Chaloemprakiet Building, Phyathai Campus

Technical Description and Specifications			
TGA balance type	Top-loading balance		Easier to use and more robust than other design types
Balance capacity	1500 mg		Larger capacity than other design types
Temperature range	Ambient to 1000 °C		
Scanning rates	0.1 to 200 °C/min		Fast scan means provide faster experiment cycle times
Temperature accuracy	±1 °C		10 runs using curie point reference material
Temperature precision	±0.8 °C		
Sample temperature precision	±0.3 °C @ 300 °C	±0.5 °C @ 900 °C	
Sample to program temperature correlation	±0.5 °C @ 300 °C	±1 °C @ 900 °C	Difference between the set temperature and the actual sample temparature
Balance digital resolution	0.2 µg		
Balance sensitivity	1 µg		
Balance accuracy	±0.02%		10 runs using 100 mg certified reference material
Balance precision	±0.01%		

Baseline dynamic drift	< 50 µg	50 to 1000 °C at 20 °C/min with empty pan
Sample pans	180 µl Ceramic	
Cooling time	1000 °C to 100 °C in under 8 mins	With chiller set to 15 °C and forced air
	1000 °C to 30 °C in under 15 mins	
Atmosphere	Static or dynamic, including nitrogen, argon, helium, carbon dioxide, air, oxygen or other inert or active gases over full temp range.	Inert furnace design allows a wide choice of gas types
Mass flow controller	Included	Monitors and changes purge gas flow rates and pressures and switches sample gases within a program. Sample purge from 0-200 ml/min
User control	Pyris™ Software	
21 CFR Part 11 compliant	Optional	Pyris ES for laboratories subject to regulatory control
Autosampler	Optional, 45-position	
Dimensions	17 x 38 x 41 cm (6.7 x 15 x 16.5 in)	Lab bench footprint remains same with autosampler installed
Weight	12kg/27 lbs (16kg/35 lbs with autosampler)	
Power requirements	100-240 Volts, 50/60Hz	
Hyphenation options	Yes	Evolved Gas Analysis using PerkinElmer TGA-IR, TG-MS, TG-GC-MS