

## TGA 2 Specifications

Temperature data	Small furnace (SF)
Temperature range	RT to 1100 °C
Temperature accuracy <sup>1)</sup>	± 1 K
Temperature precision <sup>1)</sup>	± 0.4 K
Heating rate <sup>2)</sup>	0.02 to 250 K/min
Cooling time	20 min (1100 to 100 °C)
Cooling time with helium <sup>2)</sup>	≤ 10 min (1100 to 100 °C)
Sample volume	≤ 100 µL

### Special modes

Automation	optional	
MaxRes		
TGA-MS, TGA-FTIR, TGA-GC/MS, TGA-Micro GC/MS		
Vacuum		
TGA-Sorption	no	optional

Balance data	XP1	
Measurement range	≤ 1 g	
Resolution	1.0 µg	
Weighing accuracy	0.005%	
Weighing precision	0.0025%	
Repeatability	< 0.001 mg	
Typical Minimum Weight <sup>3)</sup>	0.19 mg	
Typical Minimum Weight USP <sup>3,4)</sup>	1.9 mg	
Internal ring weights	2	
Blank curve reproducibility	better than ± 10 µg over the whole temperature range	

### Dimensions

Width/depth/height	52/63/28 cm (62.5 cm with sample changer)
Weight	40 kg (44 kg with sample changer)
Power supply	230 V, 60 Hz, 6 A or 115 V, 50 Hz, 12 A

### Approvals

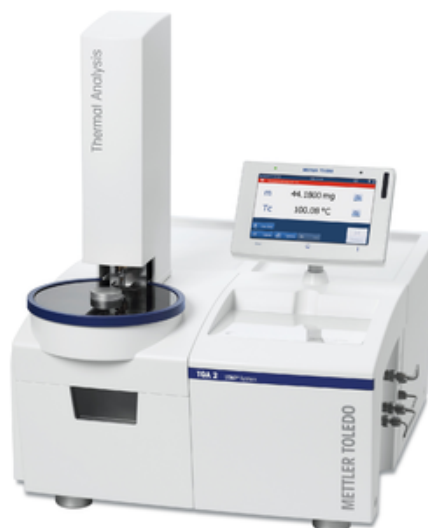
IEC/EN61010-1:2001, IEC/EN61010-2-010:2003  
 CAN/CSA C22.2 No. 61010-1-04  
 UL Std No. 61010A-1  
 EN61326-1:2006 (class B)  
 EN61326-1:2006 (Industrial environments)  
 FCC, Part 15, class A  
 AS/NZS CISPR 22, AS/NZS 61000.4.3  
 Conformity mark: CE

<sup>1)</sup> based on Curie reference substances

<sup>2)</sup> depends on instrument configuration

<sup>3)</sup> depends on instrument environment and condition

<sup>4)</sup> USP = United States Pharmacopeia



## DSC 3 Specifications

### Temperature data

Temperature range	air cooling	RT to 700 °C (400 W)
	cryostat cooling	-50 to 700 °C
	IntraCooler	-100 to 700 °C
	liquid nitrogen cooling	-150 to 700 °C
Temperature accuracy <sup>1)</sup>		± 0.2 K
Temperature precision <sup>1)</sup>		± 0.02 K
Furnace temperature resolution		± 0.00006 K
Heating rate <sup>2)</sup> RT to 700 °C		0.02 to 300 K/min
Cooling rate <sup>2)</sup>		0.02 to 50 K/min
Cooling time	air cooling	9 min (700 to 100 °C)
	cryostat cooling	5 min (100 to 0 °C)
	IntraCooler	5 min (100 to 0 °C)
	liquid nitrogen cooling	15 min (100 to -100 °C)

### Calorimetric data

Sensor type		FRS 5+
Sensor material		Ceramic
Number of thermocouples		56
Signal time constant		1.8 s
Indium peak (height to width)		17
TAWN	resolution	0.12
	sensitivity	11.9
Measurement range	at 100 °C	± 350 mW
	at 700 °C	± 200 mW
Resolution		0.04 µW
Digital resolution		16.8 million points

### Sampling

Sampling rate	maximum 50 values/second
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### Special modes

ADSC	standard
IsoStep™	optional
TOPEM™	
Automation	
Photocalorimetry	

### Approvals

IEC/EN61010-1:2001, IEC/EN61010-2-010:2003  
 CAN/CSA C22.2 No. 61010-1-04  
 UL Std No. 61010A-1  
 EN61326-1:2006 (class B)  
 EN61326-1:2006 (Industrial environments)  
 FCC, Part 15, class A  
 AS/NZS CISPR 22, AS/NZS 61000.4.3  
 Conformity mark: CE

Specifications and approvals for the IntraCooler option are only valid for systems with Huber coolers.

<sup>1)</sup> based on metal standards

<sup>2)</sup> depends on instrument configuration

