

SPECIFICATIONS

This product was developed to provide a general purpose DSC especially with a broad temperature range (-150 °C – 1750 °C) to cover high temperature applications. Furthermore emphasis was placed on an extremely stable baseline and high reproducibility. The design allows manual and automatic operation. The conception of the cell guarantees maximum mechanical and chemical resistance.

DSC PT 1600

Temperature range	-150 °C up to +1750 °C *
Heating and cooling rates	0.001 K/min up to 50 K/min
Temperature accuracy	+/- 0.2 K
Temperature precision	+/- 0.01 K
Digital Resolutin	16.8 million points
Resolution	0.3 µW **
Atmospheres	Inert, oxidizing (static, dynamic)
Measuring range	+/- 2.5 mW up to +/- 250 mW
Calibration materials	included
Calibration:	recommended 6 month interval
Crucibles	ceramic, graphite and metal crucibles in various sizes
Measurement principle	Heat Flux
Footprint	62 cm x 55 cm
Connection	USB-interface
Standards	According to DIN EN ISO 11357-1 - -6, ASTM D3418, ASTM E1356
Software	
Platform	Microsoft software package
Licensing	no limitations
Calibration	Including calibration routines
Optional equipment	
Gas dosing system	Manual gas dosing system, Automatic gas dosing system, Mass-Flow-Controller
Cooling option	Peltier-Cooling-Option, Intracooler, LN2-Cooling-Option (automatic or manual)
Software AddOns	Temperature modulation, user expandable Database

*depending on device configuration

**depending on thermocouple selection

DSC – Differential Scanning Calorimeter

DSC-sensors:	E / K / S / B
DSC resolution:	0,3 / 0,4 / 1 / 1,2 μ W
DSC-RMS-noise:	1 / 6 / 17,6 / 22,5 μ W

DTA – Differential Thermal Analysis

DTA-resolution:	0,03 nV
DTA-measuring ranges:	250 / 2500 μ V