

# Key Technical Data

**NETZSCH**

## LFA 457 MicroFlash®

Standard Sample Holders and Possible Sample Dimension*	Ø6 mm, Ø8 mm, Ø10 mm, 0.1 mm to 6 mm sample thickness Ø12.7 mm, 0.1 mm to 6 mm sample thickness Ø25.4 mm, 0.1 mm to 6 mm sample thickness □6 mm x 6 mm, □8 mm x 8 mm, □10 mm x 10 mm, 0.1 mm to 6 mm sample thickness	
Temperature Range	-125 to 1100°C	
Furnaces	-125°C to 500°C (Helium atmosphere recommended) RT to 1100°C	
Laser	Nd: Glass, Energy: to 18 J, Pulse Width: 0.3 ms	
Sensors	MCT (Mercury Cadmium Telluride), LN <sub>2</sub> -cooled** InSb (Indium Antimonide), LN <sub>2</sub> -cooled**	
Thermal Diffusivity Range	0.01 mm <sup>2</sup> /s to 1000 mm <sup>2</sup> /s	
Thermal Conductivity Range	0.1 W/(m·K) to 2000 W/(m·K)	
Repeatability	Thermal Diffusivity:	±2% (for standard materials)
	Specific Heat:	±3% (for standard materials)
Accuracy	Thermal Diffusivity:	±3% (for most materials)
	Specific Heat:	±5% (for most materials)
Measurement atmosphere	Inert, oxidizing or vacuum (<10 <sup>-2</sup> mbar)	
Utilities	110/230 V 50/60 Hz, 16 A (one 230 V line is required for the PU) Water 1 liter/week, LN <sub>2</sub> 2 liters/day	
Instrument Dimensions	Width: 570 mm, depth: 550 mm, height: 880 mm	

\* Ø12.7 mm recommended, further sample holders for fibers, liquids, molten metals etc. on request

\*\*option: automatic LN<sub>2</sub> refill system