

13 Technical data

13.1 Power supply

Voltage	100 V – 130 V, $\pm 10\%$ 200 V – 240 V, $\pm 10\%$
Frequency	50 Hz – 60 Hz
Power consumption (devices with aluminum thermoblock)	max. 700 W
Power consumption (devices with silver thermoblock)	max. 540 W
Overvoltage category	II (IEC 61010-1)
Degree of pollution	2
Protection class	1

13.2 Weight/dimensions

Dimensions	Width: 25.0 cm (9.8 inch) Depth: 41.0 cm (16.1 inch) Height: 32.0 cm (12.6 inch) Height with heated lid open: 44.5 cm (17.5 inch)
Dimensions (devices with a thermoblock with 64+32 wells)	Width: 25.0 cm (9.8 inch) Depth: 41.0 cm (16.1 inch) Height: 33.0 cm (13.0 inch) Height with heated lid open: 44.5 cm (17.5 inch)
Weight (Master variant)	11.0 kg (24.3 lb)
Weight (eco variant)	10.5 kg (23.2 lb)

13.3 Ambient conditions

General operation	15 °C – 35 °C up to 70 % relative humidity up to 2 000 m NN (approx. 80 kPa)
Storage	-20 °C – 70 °C up to 85 % relative humidity

13.4 Application parameters

Mastercycler nexus gradient, Mastercycler nexus gradient eco	
Thermoblock	Universal block, aluminum
Sample capacity	<ul style="list-style-type: none"> • 96 × 0.1 mL PCR tubes • 96 × 0.2 mL PCR tubes • 71 × 0.5 mL PCR tubes • one 96-well PCR plate (unskirted, semi-skirted, skirted; standard and low-profile)
Thermoblock temperature control range	4 °C - 99 °C
Ramp rate (measured on the thermoblock)	max. 3°C/s
Thermoblock temperature homogeneity (with the gradient function switched off) at 35°C at 90°C	≤ 0.3 °C ≤ 0.4 °C
Control accuracy (with the gradient function switched off)	±0.2°C
Gradient range	max. 20°C
Gradient temperature control range	30 °C - 99 °C
Heated lid temperature control range	37 °C - 110 °C
Mastercycler nexus, Mastercycler nexus eco	
Thermoblock	Universal block, aluminum
Sample capacity	<ul style="list-style-type: none"> • 96 × 1 mL PCR tubes • 96 × 2 mL PCR tubes • 71 × 0.5 mL PCR tubes • one 96-well PCR plate (unskirted, semi-skirted, skirted; standard and low-profile)
Thermoblock temperature control range	4 °C - 99 °C
Ramp rate (measured on the thermoblock)	max. 3°C/s
Thermoblock temperature homogeneity at 35°C at 90°C	≤ 0.3 °C ≤ 0.4 °C
Control accuracy	±0.2°C
Gradient range	–
Gradient temperature control range	–
Heated lid temperature control range	37 °C - 110 °C