














Technical Specifications	Mastercycler® pro	Mastercycler® pro S	Mastercycler® pro 384	Mastercycler® nexus gradient	Mastercycler® nexus	Mastercycler® nexus eco**
						
Thermoblock	Aluminum	Silver	Aluminum	Aluminum	Aluminum	Aluminum
Sample Capacity	96 × 0.2 ml PCR tubes or 1 × 96-well PCR plate		1 × 384-well PCR plate	96 × 0.2 mL PCR tubes or 1 × 96-well PCR plate or up to 71 × 0.5 mL PCR tubes		
Temperature control range of the block	4–99 °C			4–99 °C		
Temperature control mode	Fast, Standard, Safe			Fast, Standard, Safe		
Heating technology of the block	Peltier elements, Triple Circuit Technology			Peltier elements, Triple Circuit Technology		
Gradient block	over 12 columns		over 24 columns	over 12 columns	–	–
Gradient range	1–20 °C	1–24 °C	1–20 °C	1–20 °C	–	–
Gradient temperature range	30–99 °C			30–99 °C	–	–
Lid temperature range	37–110 °C			37–110 °C		
Lid descent and closing pressure	vapo.protect technology with Thermal Sample Protection			flexlid technology with Thermal Sample Protection		
Block homogeneity: 20 °C–72 °C 95 °C	≤ ±0.3 °C ≤ ±0.4 °C			≤ ±0.3 °C ≤ ±0.4 °C		
Block temperature accuracy	± 0.2 °C			± 0.2 °C		
Heating rate*	ca. 4 °C/s	ca. 6 °C/s	ca. 4 °C/s	ca. 3 °C/s		
Cooling rate*	ca. 3 °C/s	ca. 4.5 °C/s	ca. 3 °C/s	ca. 2 °C/s		
Interfaces	Centronics, USB, CAN in, CAN out			USB, Ethernet, CAN in, CAN out	CAN in, CAN out	
Dimensions (W × D × H)	26 × 41.5 × 37 cm			25 × 41.2 × 32.1 cm		
Weight	18.5 kg (40.8 lbs)			11 kg (24.2 lbs)	10.5 kg (23.1 lbs)	
Power supply	230 V, 50–60 Hz			230 V, 50–60 Hz		
Max. power consumption	950 W			700 W	700 W	
Sound power levels	≤ 56 dB[A]			< 40 dB[A]		

* Heating and cooling rates measured at block





** Unit can only be operated via a Mastercycler nexus unit (including flat, X1 versions) with control and display panel
Product appearance and/or specifications are subject to change without notice.

Mastercycler® nexus gradient eco**	Mastercycler® nexus flat	Mastercycler® nexus flat eco**	Mastercycler® nexus GSX1	Mastercycler® nexus SX1	Mastercycler® nexus GSX1e**	Mastercycler® nexus SX1e**
						
Aluminum	Aluminum	Aluminum	Silver	Silver	Silver	Silver
96 × 0.2 mL PCR tubes or 1 × 96-well PCR plate or up to 71 × 0.5 mL PCR tubes	4 slides or equivalent		96 × 0.2 ml PCR tubes or 1 × 96-well PCR plate			
	4–99°C		4–99°C			
Fast, Standard, Safe			Fast, Standard, Safe			
Peltier elements, Triple Circuit Technology			Peltier elements, Triple Circuit Technology			
over 12 columns	–	–	over 12 columns	–	over 12 columns	–
1–20 °C	–	–	1–20 °C	–	1–20 °C	–
30–99 °C	–	–	30–99 °C	–	30–99 °C	–
	37–110 °C		37–110 °C			
flexlid technology with Thermal Sample Protection			flexlid technology with Thermal Sample Protection			
	≤ ±0.3 °C		≤ ±0.3 °C			
	≤ ±0.4 °C		≤ ±0.4 °C			
	± 0.2 °C		± 0.2 °C			
	ca. 3 °C/s		ca. 5 °C/s			
	ca. 2 °C/s		ca. 3.5 °C/s			
CAN in, CAN out	USB, Ethernet, CAN in, CAN out	CAN in, CAN out	USB, Ethernet, CAN in, CAN out		CAN in, CAN out	
	25 × 41.2 × 32.1 cm		25 × 41.2 × 32.1 cm			
10.5 kg (23.1 lbs)	11 kg (24.2 lbs)	10.5 kg (23.1 lbs)	11.2 kg (24.7 lbs)		10.7 kg (23.6 lbs)	
	230 V, 50–60 Hz		230 V, 50–60 Hz			
700 W	700 W	700 W	540 W		540 W	
	≤ 40 dB[A]		≤ 40 dB[A]			

G: Gradient block

S: Silver block

e: Eco version, needs to be connected to a Mastercycler nexus with control and display panel

Mastercycler® nexus GX2	Mastercycler® nexus X2	Mastercycler® nexus GX2e**	Mastercycler® nexus X2e**
			
Aluminum	Aluminum	Aluminum	Aluminum
64/32 × 0.2 mL PCR tubes or up to 64 × 0.5 mL PCR tubes			
4–99 °C			
Fast, Standard, Safe			
Peltier elements, Triple Circuit Technology			
over 8 columns	–	over 8 columns	–
1–20 °C	–	1–20 °C	–
30–99 °C	–	30–99 °C	–
37–110 °C			
flexlid technology with Thermal Sample Protection			
≤ ±0.3 °C			
≤ ±0.4 °C			
± 0.2 °C			
ca. 3 °C/s			
ca. 2 °C/s			
USB, Ethernet, CAN in, CAN out		CAN in, CAN out	
25 × 41.2 × 33 cm			
11 kg (24.2 lbs)		10.7 kg (23.6 lbs)	
230 V, 50–60 Hz			
700 W		700 W	
< 40 dB[A]			



Frost & Sullivan® European PCR Instrumentation Green Excellence Award 2012

»Based on its recent analysis of the PCR instrumentation market, Frost & Sullivan recognizes Eppendorf with the 2012 European Green Excellence Award for its Mastercycler nexus. This eco-friendly instrument offers exceptional power-saving capability, e.g. by a standby feature and the amount of power consumed overall.«

Ordering information	International Order no.	North America Order no.
Mastercycler® nexus 2		
Mastercycler® nexus GX2	6336 000.015	38-6336000023
Mastercycler® nexus X2	6337 000.019	38-6337000027
Mastercycler® nexus GX2e*	6338 000.012	38-6338000020
Mastercycler® nexus X2e*	6339 000.016	38-6339000024
Mastercycler® nexus with silver block		
Mastercycler® nexus GSX1	6345 000.010	38-6345000028
Mastercycler® nexus SX1	6346 000.013	38-6346000021
Mastercycler® nexus GSX1e*	6347 000.017	38-6347000025
Mastercycler® nexus SX1e*	6348 000.010	6348000029
Mastercycler® nexus with universal block		
Mastercycler® nexus gradient	6331 000.017	38-6331000025
Mastercycler® nexus	6333 000.014	38-6333000022
Mastercycler® nexus gradient eco*	6334 000.018	38-6334000026
Mastercycler® nexus eco*	6332 000.010	38-6332000029
Mastercycler® nexus with flat block		
Mastercycler® nexus flat	6335 000.011	38-6335000020
Mastercycler® nexus flat eco*	6330 000.013	38-6330000021
Complete Mastercycler® pro packages		
Mastercycler® pro and Control Panel	6321 000.515	38-950040015
Mastercycler® pro S and Control Panel	6325 000.510	38-950040025
Mastercycler® pro 384 and Control Panel	6324 000.516	38-950040035
Individual Mastercycler® pro modules		
Control Panel, incl. connection cable	6320 000.007	38-950030050
Mastercycler® pro**	6321 000.019	38-950030010
Mastercycler® pro S**	6325 000.013	38-950030020
Mastercycler® pro 384**	6324 000.010	38-950030030
Accessories		
CAN_BUS connection cable, 50 cm	5341 612.006	38-950014008
CAN_BUS connection cable, 150 cm	5341 611.000	38-950014016
Self test dongle	6320 071.001	38-950030040
Temperature Verification System with 96 well sensor plate	6328 000.006	38-6328000006
Temperature Verification System with 384 well sensor plate	6328 000.014	38-6328000014
CycleManager pro, incl. installation manual, online help, and connection cable	5349 810.001	38-950017007
CycleManager pro, incl. installation manual, online help	5349 820.007	38-950017202

* To run a Mastercycler® nexus with the suffix »eco« or »ek«, a Mastercycler® nexus model without such a suffix is needed. Up to 2 units with the suffix »eco« or »ek« can be connected to a Mastercycler® nexus without such a suffix.

** A Control Panel or CycleManager pro software (both sold separately) is required for operation. CAN_Bus connection cables are required to link cyclers together as a network.

Ordering information	International Order no.	North America Order no.
0.1 mL Eppendorf PCR Tubes		
PCR Tube Strips 0.1 mL, without caps (10 × 12 pieces)	0030 124.804	0030124804
PCR Tube Strips 0.1 mL + Cap Strips, domed (10 × 12 pieces each)	0030 124.812	0030124812
PCR Tube Strips 0.1 mL + Cap Strips, flat (10 × 12 pieces each)	0030 124.820	0030124820
0.2 mL Eppendorf PCR Tubes		
0.2 mL PCR Tubes, thinwalled with hinged lid (1000 tubes)	0030 124.332	951010006
8tube strip, for 0.2 mL PCR Tubes (10 × 12 pieces)	0030 124.359	951010022
0.5 mL Eppendorf PCR Tubes		
0.5 mL PCR Tubes, thinwalled with lid (500 tubes)	0030 124.537	0030124537
Cap Strips, Racks, Films & Foils		
Cap Strips, domed (10 × 12 pieces)	0030 124.839	0030124839
Cap Strips, flat (10 × 12 pieces)	0030 124.847	0030124847
PCR Rack, 10 pcs.	0030 124.545	0030124545
Heat Sealing Film, 100 pcs.	0030 127.838	0030127838
Heat Sealing Foil, 100 pcs.	0030 127.854	0030127854
PCR Film (adhesive), 100 pcs.	0030 127.781	0030127781
PCR Foil (adhesive), 100 pcs.	0030 127.790	0030127790
twin.tec PCR Plates		
Eppendorf twin.tec® PCR Plate 96, skirted, clear 25 pcs.	0030 128.648	951020401
Eppendorf twin.tec® PCR Plate 96, semi-skirted, clear 25 pcs.	0030 128.575	951020303
Eppendorf twin.tec® PCR Plate 96, unskirted low profile, clear 20 pcs.	0030 133.307	0030133307
Eppendorf twin.tec® PCR Plate 96, unskirted low profile, clear (divisible) 20 pcs.	0030 133.358	0030133358
Eppendorf twin.tec® PCR Plate 96, unskirted low profile, blue (divisible) 20 pcs.	0030 133.382	0030133382
Eppendorf twin.tec® PCR Plate 96, unskirted (250 µL), clear, 20 pcs.	0030 133.366	0030133366
Eppendorf twin.tec® PCR Plate 96, unskirted (250 µL), clear (divisible) 20 pcs.	0030 133.374	0030133374
Eppendorf twin.tec® PCR Plate 96, unskirted (250 µL), blue (divisible) 20 pcs.	0030 133.404	0030133404
Eppendorf twin.tec® PCR Plate 384, clear, 25 pcs.	0030 128.508	951020702
Eppendorf twin.tec® <i>microbiology</i> PCR Plate 96, skirted, clear, 10 pcs.	0030 129.300	0030129300
Eppendorf twin.tec® <i>microbiology</i> PCR Plate 96, semi-skirted, clear, 10 pcs.	0030 129.326	0030129326
Eppendorf twin.tec® <i>microbiology</i> PCR Plate 384, clear, 10 pcs.	0030 129.342	0030129342
Eppendorf twin.tec® PCR Plates 96 LoBind, semi-skirted, colorless, 25 pcs.	0030 129.504	0030129504
Eppendorf twin.tec® PCR Plates 96 LoBind, skirted, colorless, 25 pcs	0030 129.512	0030129512

For order numbers of additional twin.tec PCR Plates, please visit www.eppendorf.com/pcr

Your local distributor: www.eppendorf.com/contact

Eppendorf AG · 22331 Hamburg · Germany
eppendorf@eppendorf.com · www.eppendorf.com

www.eppendorf.com/mastercycler