

Product specification

MNT · High-end cryostat

Item No.: 10160000 230 V, 50/60 HZ
 Item No.: 10162000 115 V, 60 HZ



Specifications

All temperature specifications refer to an ambient temperature of +20 °C and a relative humidity of 60 %.

General

Nominal power	230 V AC ±10 %	115 V AC ±10 %
Nominal frequency	50 / 60 Hz	60 Hz
Power draw chamber	860 VA	
Power draw chamber and object cooling	1,380 VA	
Max. current for 5 sec	17 A	35 A
Protective class ⁽¹⁾	I	
Fuses	2 x T 10 A	2 x T 20 A
Pollution class ⁽¹⁾	2	
Overcurrent protective class	II	
Max. heat energy chamber cooling	860 J/s	
Max. heat energy chamber and object cooling	1,380 J/s	
Operating temperature range	+10 to +35 °C	
Operating humidity	max. rel. 80 % non-condensing	
Storage temperature range	+5 to +55 °C	
Storage humidity	max. rel. 80 % non-condensing	

⁽¹⁾ According to IEC 1010, EN 61010

Cryo chamber

Temperature range	0 °C down to -35 °C, selectable in 1 K steps, environment: 20 °C	
Cooling power	636 W	514 W
Switch off pressure	25 bar	
Current	3.69 A	6.45 A
Cooling gas	R 449 A, 320 g	

Object cooling (optional)

Temperature range	0 °C down to -50 °C ±3 K, selectable in 1 K steps, environment: 20 °C	
Cooling power	193 W	278 W
Switch off pressure	25 bar	
Current	1.69 A	3.06 A
Cooling gas	R 449 A, 50 g	

Chamber defrost

Automatic defrost	window must be closed; hot gas defrost, time selectable, 1 - 3 times / 24 h or manual defrost on request
Automatic stop	at -5 °C chamber temperature / +20 °C evaporator temperature

Freezing bar

Minimum temperature	10 K below chamber temperature
Number of positions	24 (standard) resp. 21 + 2 (version incl. quick freeze positions)
Quick freeze positions	2 (optional), down to -55 °C (cooling)



Microtome

Type	rotary microtome, integrated, motorized feed, motorized cutting*
Thickness range	0.5 – 100 µm
Thickness settings	0 – 2 µm in 0.5 µm steps 2 – 20 µm in 1 µm steps 20 – 50 µm in 2 µm steps 50 – 100 µm in 5 µm steps
Horizontal movement	28 mm
Vertical movement	58 mm
Retraction during upward stroke	0 – 200 µm, freely selectable (defined steps)
Trimming	0.5 – 750 µm, freely selectable (defined steps)
Specimen orientation	8° (x and y axes), 360° (z axes), zero-point detent x and y axis
Cutting speed	5 – 300 mm/s, freely selectable

* Dial gauge: ± 10 % tolerance delivery (standard deviation)

Cryostat

Dimensions (L x W x H)	760 mm x 760 mm x 1.110 mm
Weight (without accessories)	135 kg (without object cooling) 154 kg (with object cooling)

Standard components

Fully automatic rotary microtome
Integrated section counter
Cutting motor, freely selectable speed
2 anti-roll plates (40 mm wide; 70 mm wide)
Intuitive control
Automatic defrost
24 freezing positions (24 standard resp. 21 + 2 [version incl. quick freezing positions])
Heat extractor
Foot switch for cutting motor
Specimen holders (5 x Ø 22 mm; 5 x Ø 35 mm, each size comes in 5 different colors)
Rack for specimen holders (stainless steel)
Disposable blade holder (alternatively: standard knife holder)



Disposable blades (box with 50 pcs.)

Cover for cooling bar

CryoGlue embedding medium (4 x 125 ml)

Cryostat low temperature oil (50 ml)

Brush

Set of Allen keys

Mains cable

Manual

Options

Item No.

2 quick freezing positions (quick freeze)

10159000

UV-C disinfection 230 V, 50/60 Hz

10169000

UV-C disinfection 115 V, 60 Hz

10169001

Object cooling 230 V, 50/60 Hz

10164000

Object cooling 115 V, 60 Hz

10164200

Debris extraction system 230 V, 50/60 Hz

- adjusted waste tray
 - filter for extraction system (5 pcs.)
-

10167000

Debris extraction system 115 V, 60 Hz

- adjusted waste tray
 - filter for extraction system (5 pcs.)
-

10167200



Optional accessories

	Item No.
Blade remover, magnetic	34004113
Standard knife holder	10156010
Microtome knife (16 cm C-cut, 1 pcs.)	28000026
Disposable blade holder (low and high profile)	10157004
Object holder rack (stainless steel)	31000769
Heat extractor block	31000253
Object holder (Ø 22 mm; 5 pcs., 5 different colors)	30000002
Object holder (Ø 28 mm; 5 pcs., 5 different colors)	30000017
Object holder (Ø 35 mm; 5 pcs., 5 different colors)	30000000
Object holder (Ø 50 mm; 5 pcs., black)	30000003
Section removal brush	30001030
Pressure plate (glass, 40 x 26 x 3 mm)	32203206
Pressure plate (glass, 70 x 26 x 3 mm)	32203307
Footrest, height adjustable	10157009
Ergosit laboratory chair, low, with castors	10157011
Ergosit laboratory chair, high, with foot ring and sit-stop castors	10157010
Anti-roll plate (standard knife holder, plastic)	32001049
Disposable blades (cf. consumables)	
Filter for extraction system, 5 pcs.	33000417
Foot switch	34001500
Cooling bar cover	32000497
Waste tray (devices without extraction system)	32000604
Waste tray (devices with extraction system)	32000606
Brush tray (only for devices without extraction system)	32000605



Consumables

	Item No.
Disposable blades (plasma coated) Low profile plasma LPS for soft specimens, 50 pcs. / box	28407005
Disposable blades (plasma coated) Low profile plasma LPH for hard specimens, 50 pcs. / box	28407004
Disposable blades (plasma coated) High profile plasma HPS for soft specimens, 50 pcs. / box	28407007

Accessory for cryostats

	Item No.
CryoGlue embedding medium (4 x 125 ml)	30001100
Cryostat low temperature oil, 50 ml	30001011
Cork plates (Ø 20 mm; 100 pcs.)	30001001

Comments / additional information:

In case of further questions, please feel free to contact us at every time.

SLEE medical GmbH · Am Neuberg 14
55268 Nieder-Olm · Germany
www.slee.de

T: +49 (0) 6136 76997-0
E: mail@slee.de



www.slee.de



YouTube



LinkedIn



Instagram