

Leica CM1850



Leica CM1850-- Cryostat for Clinical Applications

047131150

Leica CM1850 Basic Instrument - 220 V/60 Hz
with Peltier cooling system,
with specimen retraction

Instrument features:

Freestanding cryostat on rollers with front-encapsulated microtome. Heated, removable sliding window. Spacious cryochamber with illumination. Removable storage shelves. Corrosion-proof cryochamber for easy decontamination. Handwheel lock. Control panel with foil-protected buttons and locking function. Self-explanatory symbols for all essential functions and displays.

Microtome:

Low-maintenance microtome with cross roller guides.
Single-screw locking system for direct fitting of specimen discs. Precision X/Y/Z 8° specimen orientation.
Section thickness continuously adjustable from 1 to 60 µm. Specimen retraction approx. 180 µm. Total vertical stroke: approx. 60 mm
Total horizontal specimen feed: approx. 25 mm
Motorized coarse feed at two speed settings (0.2 mm/s; 0.7 mm/s)
Visual indication of specimen stop positions (front/home).

Cryochamber:

Cryochamber temperature setting between 0 and -35 °C.
Power saving insulating system.
LED display indicates cryochamber temperature, real time and defrost time and Peltier cooling being activated.
Manual defrosting function for cryochamber and freezing shelf with sound signal to avoid unintentional defrosting; defrost cycle duration of 9 minutes. Overheating protection system.
Automatic hot-gas defrosting. Starting time programmable in 15-minute increments (cryochamber only). Duration of defrost cycle regulated by actual cryochamber temperature.
Actively cooled freezing shelf (-40 °C) for 10 specimen discs.
Manual hot-gas defrosting of freezing shelf, time-controlled.
Peltier cooling system for fast specimen

freezing - maximum Peltier cooling temperature of -55°C; Peltier system automatically switches off after 10 minutes.
Collecting tank for condensation water.

Section thickness selectable from 1 to 60 µm;
adjustable in:
0-10 µm in 1 µm increments
10-20 µm in 2 µm increments
20-60 µm in 5 µm increments

Maximum specimen size: 55 mm diameter/2.17 inches
Total horizontal specimen feed: approx. 25 mm/0.98 inches
Total vertical stroke: approx. 60 mm/2.36 inches

Technical Data:

-Mains power supply: 220 V/60 Hz
-Admissions: CE, UL, c-UL, VDE

-Dimensions and weight:
-Dimensions (W x D x H): 730 x 730 x 1140 mm
-Dimensions (W x D x H): 28.74 x 28.74 x 44.88 inches
-Weight: 135 kg - 297.36 lbs, including microtome

All specifications related to temperature are valid for a room temperature of up to 22°C and a relative air humidity of 60 %.

Note:

A non-orienting fixture for specimen clamps ('non-orienting specimen head') is also available for the Leica CM1850.
Please refer to 'Accessories' for ordering information!

Standard delivery with Peltier cooling system includes:

1 Basic instrument
1 Handwheel with marking, antibacterial (0471 42558)
1 Heat extractor, stationary (0471 30792)
1 Low temperature stabilizer for heat extractor, ("Parking station") (0471 30793)
1 Optional clamping lever for object head (0112 28806)
3 Specimen discs, 25mm diameter(0416 19275)
1 Section waste tray (0471 30787)
1 Storage shelf, right (0471 30789)
1 Storage shelf, left (0471 30790)
1 Brush shelf (0398 13088)
1 Tool set (0436 43463):
-1 Brush, fine (0183 28642)
-1 Leica-brush (0183 30751)
-1 Allen key, size 2.5 (0222 04137)
-1 Allen key, size 3.0 (0222 04138)
-1 Allen key with spherical head, size 4.0

(0222 32131)

-1 Allen key, size 5.0 (0222 04140)

-1 Allen key with handle, size 5.0 (0194 04760)

-1 Allen key, size 6.0 (0222 04141)

-1 Single-head wrench, size 16 (0330 18595)

1 Bottle of cryostat oil, type 407, 50 ml

(0336 06098)

1 Bottle of OCT-Compound, mounting medium
for cryosectioning, 125 ml (0201 08926)

1 Instruction manual Leica CM1850

- G/E/F/S (0708 37106)