

MP-250 Series Digital Melting Point Apparatus

- Advanced 32-bit microcontroller and step-through menu let you accurately control oven temperature and ramp rate
- View up to three samples simultaneously for greater efficiency
- Rotating viewing head ensures each user can analyze samples clearly
- Integral light and 8x magnifying lens enhance sample observation
- Tube guide removal for cleaning and use of cold finger
- 13-key membrane keypad
- 3-year warranty



MP-250 Series

Digital Melting Point Apparatus

The MP-250 series digital melting point apparatus offers an easy way to measure the melting points of samples without sacrificing accuracy. It is ideal for multiple users, being ergonomically designed to ensure comfortable viewing for everyone, with a height-adjustable extension arm and a viewing head that may be rotated to suit each user. As a visual aid, the viewing head holds a viewing magnifier that offers 8x magnification. As a further convenience, the extension arm is completely collapsible and can be neatly folded away into the unit, so that the unit can be stored flat to save space.

The MP-250D and MP-250D-F models feature two fixed ramp rates: a quick rate to define the approximate melt temperature of your sample and a slower rate to accurately attain the true melt temperature of your chemical sample. The MP-250D-P and MP-250D-PR models offer adjustable ramp rates, internal batch memory capacity, and RS-232 interface and USB ports for easy data transfer to a printer.

Performance

- Membrane keypad with simple menus for intuitive use
- Push button controls are conveniently located to ensure that temperatures can be recorded without looking away from the sample
- Digital microprocessor provides fast warm-up and accurate temperature control
- Samples in three capillary tubes may be viewed simultaneously.

Safety and convenience

- Three audible beeps indicate that the oven temperature is stable and ready for sample
- Adjustable arm with viewing magnifier can be folded away into the unit
- Adjustable object lens for sharp focus
- Rotating viewing head and safety eye piece to protect against glare and hot zone
- Integral light and wide angle 8x viewing magnifier enhance sample observation, so that all three samples can be viewed without eye strain
- For optimal performance, units can be calibrated using a calibration key (order separately) and certified calibration chemicals

Specifications

Model no.	MP-250D	MP-250D-F	MP-250D-P	MP250D-PR
Temperature range	1 to 405 °C			
Temperature resolution	1.0 °C	0.1 °C		
Temperature accuracy	±1 °C of set temperature	0.5°C @ 20 °C linearly to ±1.0 °C @ 350 °C		
Ramp rate	Select either 1.0 °C/min or 10.0 °C/min		Adjustable from 0.2 to 10.0 °C/min in increments of 0.1 °C/min	
Ceiling temperature setting	None	From 5 °C above set temperature to 405 °C in increments of 1 °C		
Display	12 x 2 backlit matrix LCD			
Date and time settings	None		Yes	
Melt memory capacity	4 x 1			3 x 2
Batch memory capacity	None		1000 melts	500 melts
Temperature control sensor	PT100 RTD			
Oven	Closed loop PID control; 3 white LEDs for illumination			
Dimensions (W x H x D)	20 x 8.5 closed / 45 open x 35 cm (7.9 x 3.3 closed / 17.7 open x 13.8 in)			
Power	100 to 240 VAC, 50/60 Hz, 45 W			

Features

Model no.	MP-250D	MP-250D-F	MP-250D-P	MP250D-PR
32-bit processor	●	●	●	●
Accepts 3 capillary tubes up to 2 mm OD	●	●	●	●
Storage area for pack of capillary tubes	●	●	●	●
Tube guide removal for cleaning and use of cold finger	●	●	●	●
Removable 40 mm dia lens (8x magnification) with adjustable focus	●	●	●	●
13-key membrane keypad	●	●	●	●
Sample preservation temperature ceiling	–	●	●	●
Date and time settings	–	–	●	●
PC output facility	–	–	●	●
USB output to flash drive	–	–	●	●
Serial port (RS-232) to printer	–	–	●	●
Pack of capillary tubes included	●	●	●	●
3-year warranty	●	●	●	●

Ordering Information

Description	Item no.	Series no.	Model no.	Legacy SKU
Digital melting point apparatus, two fixed ramp rates, 1.0 °C resolution	03010-15	MP-250	MP-250D	1101D
Digital melting point apparatus, two fixed ramp rates, 0.1 °C resolution	03010-51	MP-250	MP-250D-F	IA9100
Digital melting point apparatus, programmable ramp rate	03010-41	MP-250	MP-250D-P	IA9200
Digital melting point apparatus, programmable ramp rate, beginning/ending recordings for pharmacopeia requirements	03010-59	MP-250	MP-250D-PR	IA9300
Same as 03010-59 with IQ/OQ documentation	03010-64	MP-250	MP-250D-PR	IA9300/IQOQ

Accessories

Description	Item no.	Series no.	Model no.	Legacy SKU
Cold finger	03010-63	N/A	N/A	AZ9001
Calibration key	03010-65	N/A	N/A	AZ9253
Glass capillary tubes, 1.5 mm OD, 1000/pk	03010-67	N/A	N/A	AT4042
Glass capillary tubes, 2.0 mm OD, 1000/pk	03010-68	N/A	N/A	AT4043
Printer with internal battery pack/charger and serial connecting cable	03010-69	N/A	N/A	PR2000S
Paper roll (2) and ribbon for printer	03010-62	N/A	N/A	AT4044



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