Electrothermal

Melting Point Apparatus

Mel-Temp® and IA9000 Series

Electrothermal's range of melting point apparatus consists of the Mel-Temp® and IA9100, IA9200, IA9300. The Mel-Temp® gives a temperature resolution of ±1°C, whereas the IA900 series has a temperature resolution of ±0.1°C and other performance enhancements.

Find out more! Please scan the QR/Mobile Tag with your smartphone for more information

1101D and 1102D Mel-Temp®

Digital Melting Point Apparatus

The updated 1101D Mel-Temp® Digital Melting Point Apparatus offers a quick and easy way to measure the melting points of samples at a budget price. 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.

Each Digital Mel-Temp® comes supplied with a complimentary pack of 50 capillary tubes, its own power supply and power cable.

The 1101D Mel-Temp® has power requirements of 115-120V and 50-60Hz. The 1102D Mel-Temp® Digital Melting Point Apparatus has exactly the same functionality, but has power requirements of 230-240V; 50-60Hz.

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 with ±1°C resolution provides fast warm-up and accurate temperature control
- Samples in 3 capillary tubes may be viewed simultaneously

Safety and convenience

- 3 Audible beeps indicate that the oven temperature is stable and ready for sample
- Adjustable arm with 8x 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 magnifier enhance sample observation, so that all 3 samples can be viewed without eye strain
- Units can be calibrated by the user on their site or by manufacturer/service organisation. If calibrated by the user, a calibration kit is required.

Key Features

- Temperature resolution ±1°C
- Accommodates 3 Melting point capillaries of up to 2mm outside diameter
- Tube Guide removal forcleaning and use of cold finger
- 32-bit Processor
- 4 x 1 Melt memory capacity
- 13-key membrane keypad

1101D
1102D also available

1101D and 1102D Mel-Temp®

Digital Melting Point Apparatus

Technical Information

Colour	Black
Processor	32-bit Processor
Keypad	13-key membrane keypad
Capillary tubes	Accommodates 3 capillary tubes up to 2mm OD (Storage for pack 100)
Tube Guide	Tube Guide removal for cleaning and use of cold finger
Lens	40mm diameter lens (magnification 8x) removable and with adjustable focus
LED	White LED illuminated oven
Melt memory	4 x 1 Melt memory capacity
Temperature range	Ambient to 400°C
Fixed temperature ramp rate	1.0°C/minute
Fast temperature ramp rate	10°C/minute
Temperature resolution	±1°C
Accuracy	±1%
Temperature sensor	PT100 Platinum Resistance
Display	2 Rows of 12 characters with backlit LCD
Power requirements	115-120V, 50-60Hz for 1101D
	230-240V, 50-60 Hz for 1102D
Dimensions (d x w x h), mm	355 x 200 x 80
Shipping weight, kg	2.5

Ordering Information

1101D and 1102D Mel-Temp®

Model	Description	Electrical Requirements
1102D	Mel-Temp® Fixed Ramp Rate Model	230V, 50/60Hz, 45W
1101D	Mel-Temp® Fixed Ramp Rate Model	115V, 50/60Hz, 45W
1102DX6	Mel-Temp® Fixed Ramp Rate Model	230V, 50/60Hz, 45W with EU plug

*Please note that each instrument is supplied with a pack of 50 capillary tubes, power supply and power cable.

Accessories - Ordering Information

Part Code	Description
AZ9001	Cold Finger
AZ9002	Dust Cover
AZ9218	P-nitrotoluene
AZ9118	Carbazole (245.61deg) 0.5g
AZ9253	Calibration Key
AT4042	Capillary Tubes 1.5mm (10x100 pack)
AT4043	Capillary Tubes 2.0mm (10x100 pack)
PR2000S	Printer (with connecting ribbon cable)
AT4044	Paper Roll (2) and ribbon for printer
AZ9220	1A PSU Mains lead (UK)
AZ9220X1	1A PSU Mains Lead (115V – USA)
AZ9220X6	1A PSU mains Lead (European)

IA9100, IA9200, IA9300

Digital Melting Point Apparatus

Features of all 3 models of the IA9000 series:

The updated IA9000 series Digital Melting Point Apparatus offers a quick way to measure the melting points of samples, without sacrificing accuracy; the temperature resolution is within 0.1°C. 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.

Each IA9000 series model comes supplied with a complimentary pack of 50 capillary tubes, its own power supply and power cable. The IA9000 series operates at both 115V and 230V.

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 with ±0.1°C resolution provides fast warm-up and accurate temperature control
- Samples in 3 capillary tubes may be viewed simultaneously

Safety and convenience

- 3 Audible beeps indicate that the oven temperature is stable and ready for sample
- Adjustable arm with 8x viewing magnifier can be folded away into the unit
- Adjustable object lens for sharp focus
- Daylight-balanced LEDs for improved sample illumination
- Rotating viewing head and safety eye piece to protect against glare and hot zone
- Integral light and wide angle 8X magnifier enhance sample observation, so that all 3 samples can be viewed without eye strain
- Units can be calibrated in the field or at the factory; if in the field a calibration kit is required
- Improved calibration procedure using a calibration key

Additional features

Additional features of the IA9200 and IA9300 series Digital Melting Point apparatus

- Temperature resolution ±0.1°C
- Selectable ramp rates between 0.2°C/min and 10°C/min; the IA9200 has a default setting of 0.2°C/min and the IA9300 has a default setting of 1°C/min
- Date and time facility
- PC output facility
- Interface with optional PR2000S Printer
- Printer output facility via RS232-C serial port
- USB output to flash drive
- 3 x 2 Melt memory capacity (IA9300 only)
- Batch memory of 500 Melts (IA9300) and 1000 Melts (IA9200)

IA9100
IA9200, IA9300 also available

Digital Melting Point Apparatus

Technical Information

Model	IA9100	IA9200	IA9300
32-bit Processor	•	•	•
Accommodates 3 Capillary Tubes up to 2mm OD (Storage for pack 100)	•	•	•
Tube Guide removal for cleaning and use of cold finger.	•	•	•
40mm diameter Lens (magnification x 8) removable and with adjustable focus	•	•	•
Oven temperature range (ambient to 400°C)	•	•	•
Temperature resolution ±0.1°C	•	•	•
Accuracy ±1%	•	•	•
13-key membrane keypad	•	•	•
Cooling temp selection	•	•	•
Fast ramp rate of 10°C/minute.	•	•	•
Selectable ramp rate of 1.0°C/min & 10°C/min	•		•
Selectable ramp rates of 0.2 - 10°C/min		• (default 0.2°C/min)	• (default 1.0°C/min)
White LED illuminated oven	•	•	•
Nicad battery for memory, clock back-up		•	•
Date & Time facility		•	•
PC Output facility		•	•
Printer Output facility		•	•
USB Output to flash drive		•	•
Display (2 rows of characters with backlit LCD)	•	•	•
4 x 1 Melt memory capacity	•	•	
3 x 2 Melt memory capacity			•
Batch memory capacity of 500 melts			•
Batch memory capacity of 1000 melts		•	
Serial (RS232-C) Port for Printer		•	•
Dimensions (d x w x h), mm	355 x 200 x 80	355 x 200 x 80	355 x 200 x 80
Shipping Weight, kg	2.5	2.5	2.5

IA9100, IA9200, IA9300

Digital Melting Point Apparatus

Ordering Information

Model	Description	Electrical Requirements
IA9100	Fixed Ramp Rate Model	230V, 50/60Hz, 45W
IA9100X1	Fixed Ramp Rate Model	115V, 50/60Hz, 45W
IA9100X6	Fixed Ramp Rate Model	230V, 50/60Hz, 45W, EU Plug
IA9200	Programmable Ramp Rate Model	230V, 50/60Hz, 45W
IA9200X1	Programmable Ramp Rate Model	115V, 50/60Hz, 45W
IA9200X6	Programmable Ramp Rate Model	230V, 50/60Hz, 45W, EU Plug
IA9300	Beginning/Ending Recording Model for Pharmacopeia Requirements	230V, 50/60Hz, 45W
IA9300X1	Beginning/Ending Recording Model for Pharmacopeia Requirements	115V, 50/60Hz, 45W
IA9300X6	Beginning/Ending Recording Model for Pharmacopeia Requirements	230V, 50/60Hz, 45W, EU Plug

Please note that each instrument is supplied with a pack of 50 capillary tubes, power supply and power cable.

Accessories

Digital Melting Point Apparatus

Ordering Information

Part Code	Description
AZ9001	Cold Finger
AZ9002	Dust Cover
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