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Data Sheet

August 13, 2026

STANFORD RESEARCH SYSTEMS

Stanford Research MPA120 Optimelt Automated Melting Point System

Stanford Research Systems MPA120 EZ-Melt Automated Melting Point Apparatus The SRS EZ-Melt MPA120 is a fully automated melting-point apparatus that analyzes up to three samples at once using digital image processing for onset and clear points. A platinum RTD and closed-loop PID oven cover (ambient + 10 C) to 396 C start and up to 400 C stop, with 0.1 C resolution and the same accuracy class as OptiMelt MPA100. Ramp rates follow a 1-2-5 sequence (0.1, 0.2, 0.5, 1, 2, 5, 10, or 20 C/min). A 4-digit LED displays temperature; a magnification lens supports visual tagging of up to four manual temperatures per capillary. The SRS EZ-Melt MPA120 is a fully automated melting-point apparatus that analyzes up to three samples at once using digital image processing for onset and clear points. A platinum RTD and closed-loop PID oven cover (ambient + 10 C) to 396 C start and up to 400 C stop, with 0.1 C resolution and the same accuracy class as OptiMelt MPA100. Ramp rates follow a 1-2-5 sequence (0.1, 0.2, 0.5, 1, 2, 5, 10, or 20 C/min). A 4-digit LED displays temperature; a magnification lens supports visual tagging of up to four manual temperatures per capillary. Routine melting-point determinations; Pharmacopeia and GLP melts; teaching laboratories; simultaneous three-capillary screening without a PC.



MODEL

**Stanford Research
Systems MPA120**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MPA120

LISTING

<https://aumictechlabs.com/products/mpa120-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Stanford Research Systems MPA120 Optimelt is a fully automated melting point determination system that analyzes up to three samples simultaneously using digital image processing and PID-controlled temperature ramping. The instrument identifies clear points and onset of melt with 0.1 °C resolution across a range up to 400 °C, delivering repeatable results compliant with Pharmacopeia and GLP standards. Its compact aluminum oven design, built-in magnification lens, and wide observation window with internal illumination enable precise sample viewing without manual intervention.

Technical Specifications

Temperature measurement: Platinum RTD sensor, 0.1 °C resolution, up to 400 °C

Temperature control: PID-controlled microprocessor ramping with selectable rates from 0.1 °C/min to 20 °C/min (1-2-5 sequence)

Sample capacity: Three simultaneous samples

Detection method: Digital image processing technology

Temperature tagging: Up to four individual temperatures per sample via front-panel buttons

Capillary tubes: 100-count pack included; 1.4–2.0 mm OD, 100 mm length recommended; 2–3 mm fill height

Display: 4-digit LED for results and status

Oven: Compact aluminum construction

Power: 90–264 VAC, 47–63 Hz, 125 W consumption

Dimensions: 7.5" W × 10" D × 8.5" H; 9 lbs

Operating environment: 0 °C to 40 °C, non-condensing

Key Features

Fully automated operation - no operator attendance required

PID temperature control for fast, repeatable warm-up and cool-down cycles

Field calibration using certified reference standards

Integrated magnification lens with wide observation window and internal illumination

GLP-compliant data handling and documentation

Typical Applications

Quality control, pharmaceutical compliance testing, research and development.

Compatibility & Integration

USB interface for instrument control and data querying

RS-232 serial port for Epson-compatible dot-matrix printer output

Features & description

From manufacturer datasheet

Features

- Automated onset and clear point via digital image processing
- Simultaneous analysis of three capillaries
- Stepped ramp rates 0.1 to 20 C/min (1-2-5 sequence)
- Heat-up and cool-down less than 10 minutes (50 C to 350 C and reverse)
- Single-point user calibration offset at 0.1 C resolution
- 4-digit LED (no MPA100 touchscreen/USB movie workflow)

MPA120 Characteristics / Specifications

PARAMETER	VALUE
Model	MPA120
Manufacturer	Stanford Research Systems
Instrument Type	Automated Melting Point Apparatus
Product Name	EZ-Melt
Alias	MPA120; EZ-Melt MPA120
Start Temperature Range	(ambient + 10 C) to 396 C
Stop Temperature Range	(start temperature + 4 C) to 400 C
Temperature Resolution	0.1 C
Ramp Rates	0.1, 0.2, 0.5, 1, 2, 5, 10, or 20 C per minute
Heat Up Time	less than 10 minutes (50 C to 350 C)
Cool Down Time	less than 10 minutes (350 C to 50 C)
Temperature Accuracy to 100 C	+/-0.3 C
Temperature Accuracy to 250 C	+/-0.5 C
Temperature Accuracy to 400 C	+/-0.8 C
Reproducibility	0.2 C
Temperature Sensor	platinum RTD
Oven Control	microprocessor-controlled closed-loop PID
Automated Determinations	onset point and clear point using digital image processing
Manual Determinations	store up to 4 manual temperature recordings per capillary
User Calibration	single temperature offset, 0.1 C resolution
Temperature Display	4-digit LED
Capillary Outside Diameter	1.4 mm to 2.0 mm
Capillary Length	100 mm
Capillary Capacity	up to 3 tubes simultaneously
Fill Height	2 mm to 3 mm

PARAMETER	VALUE
Line Power	90 to 264 VAC, 47 to 63 Hz, 125 W
Operating Temperature	0 C to 40 C, non-condensing
Weight	9 lbs
Dimensions	7.5 in x 10 in x 8.5 in (WxHxL)
Standard Capillary Pack	100 count included
Vanillin Standard Point	83.0 C (operating range 40 C to 110 C)
Phenacetin Standard Point	135.9 C (operating range 100 C to 200 C)
Caffeine Standard Point	237.0 C (operating range 190 C to 300 C) Notes Specs from SRS MPA120 EZ-Melt manual and EZ-Melt catalog. Capillary OD is 1.4 to 2.0 mm on MPA120 versus 1.4 to 1.8 mm on MPA100 catalog. Confirm firmware and included accessories on the unit.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 40 C, non-condensing
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Weight	9 lbs
Dimensions	7.5 in x 10 in x 8.5 in (WxHxL)
Standard Capillary Pack	100 count included
Vanillin Standard Point	83.0 C (operating range 40 C to 110 C)
Phenacetin Standard Point	135.9 C (operating range 100 C to 200 C)
Caffeine Standard Point	237.0 C (operating range 190 C to 300 C) Notes Specs from SRS MPA120 EZ-Melt manual and EZ-Melt catalog. Capillary OD is 1.4 to 2.0 mm on MPA120 versus 1.4 to 1.8 mm on MPA100 catalog. Confirm firmware and included accessories on the unit.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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PARAMETER	VALUE
Model	MPA120
Manufacturer	Stanford Research Systems
Instrument Type	Automated Melting Point Apparatus
Product Name	EZ-Melt
Alias	MPA120; EZ-Melt MPA120
Start Temperature Range	(ambient + 10 C) to 396 C
Stop Temperature Range	(start temperature + 4 C) to 400 C
Temperature Resolution	0.1 C
Ramp Rates	0.1, 0.2, 0.5, 1, 2, 5, 10, or 20 C per minute
Heat Up Time	less than 10 minutes (50 C to 350 C)
Cool Down Time	less than 10 minutes (350 C to 50 C)
Temperature Accuracy to 100 C	+/-0.3 C
Temperature Accuracy to 250 C	+/-0.5 C
Temperature Accuracy to 400 C	+/-0.8 C
Reproducibility	0.2 C
Temperature Sensor	platinum RTD
Oven Control	microprocessor-controlled closed-loop PID
Automated Determinations	onset point and clear point using digital image processing
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Line Power	90 to 264 VAC, 47 to 63 Hz, 125 W

PARAMETER	VALUE
Operating Temperature	0 C to 40 C, non-condensing
Weight	9 lbs
Dimensions	7.5 in x 10 in x 8.5 in (WxHxL)
Standard Capillary Pack	100 count included

Optional Capillaries: 0100MPC 300 count
Optional Standards Kit: 0100MPS
Optional Glass Window: 0100GW
Optional Capillary Holder: 0100CH

Specifications

PARAMETER	VALUE
Vanillin Standard Point	83.0 C (operating range 40 C to 110 C)
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Notes
Specs from SRS MPA120 EZ-Melt manual and EZ-Melt catalog. Capillary OD is 1.4 to 2.0 mm on MPA120 versus 1.4 to 1.8 mm on MPA100 catalog. Confirm firmware and included accessories on the unit.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.