

# Melting Point Apparatus

*EZ-Melt — Automated melting point system*



## EZ-Melt

- **Fully automated operation**
- **Simultaneous analysis of 3 samples**
- **PID-controlled temperature ramping**
- **Digital image processing technology**
- **Pharmacopeia and GLP compliant**

• **EZ-Melt (MPA120) ... \$2495 (U.S. list)**

EZ-Melt is a fully automated melting point apparatus that determines the melting points of chemical substances. It's fast, accurate, and very easy to use. You simply enter the start temperature, stop temperature, ramp rate and press *Start*. It's that simple!

### Absolute Value

EZ-Melt is priced far below any other automated system, as well as most manual systems. It provides the absolute best value of any commercially available melting point apparatus.

### Automated Operation

Unlike time-consuming manual melting point systems, EZ-Melt is specifically designed for unattended (automated) operation. During a melt, a closed-loop PID algorithm controls temperature ramping, and a built-in digital camera continuously monitors your samples as they melt. Using digital image processing technology, images are analyzed and the melting points (clear point and onset of melt) are determined. Results are read on the large 4-digit LED display.

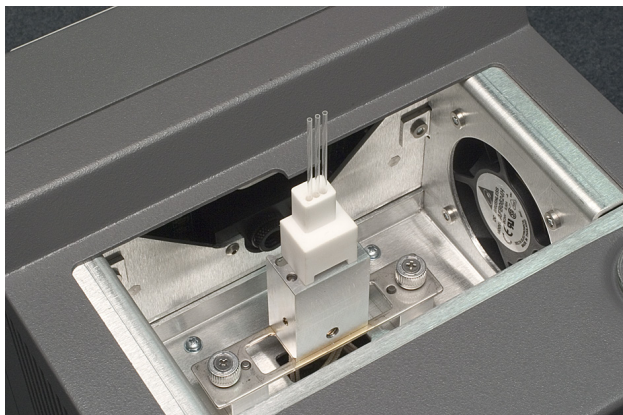
### Temperature Tagging

Samples can be viewed at any time using the built-in magnification lens. During a measurement, you can flag relevant events by pressing the *Left*, *Center* or *Right* front-panel buttons. Up to four individual temperatures can be tagged for each sample.

# MPA120 Automated Melting Point System

## Precise Temperature Control

The small, aluminum oven design, along with microprocessor-controlled temperature ramping, allows fast and repeatable



warm-up and cool-down cycling. Ramp rates from 0.1 °C/min. to 20 °C/min. (1-2-5 sequence) provide the flexibility needed for virtually any melt.

## Accurate Results

EZ-Melt uses a platinum RTD sensor to make temperature measurements to 400 °C with 0.1 °C resolution. It is easily calibrated in the lab using certified reference standards, and complies with modern Pharmacopeia protocols.



## EZ-Melt Specifications

### Operation

|                      |  |
|----------------------|--|
| Start temp. range    | (Ambient + 10 °C) to 396 °C,<br>0 °C minimum set point                     |
| Stop temp. range     | (Start temperature + 4 °C) to 400 °C                                       |
| Temp. resolution     | 0.1 °C   |
| Ramp rate            | 0.1, 0.2, 0.5, 1, 2, 5, 10 or 20 °C per min.                               |
| Heat-up time         | <10 minutes (50 °C to 350 °C)  |
| Cool-down time       | <10 minutes (350 °C to 50 °C)  |
| Temperature accuracy | ±0.3 °C (up to 100 °C)<br>±0.5 °C (up to 250 °C)<br>±0.8 °C (up to 400 °C) |
| Reproducibility      | 0.2 °C   |
| Temperature sensor   | Pt RTD   |
| Oven control         | Microprocessor-controlled<br>closed-loop PID                               |
| Automated operation  | Onset point and clear point  |
| Manual operation     | Store up to four manual temperature<br>recordings per capillary            |
| User calibration     | Single temperature offset,<br>0.1 °C resolution                            |

### General

|                       |   |
|-----------------------|---|
| Display               | 4-digit LED display   |
| Capillaries           |   |
| Dimensions            | 1.4 mm to 2.0 mm outside diameter,<br>100 mm length                 |
| Capacity              | Up to 3 tubes simultaneously  |
| Fill height           | 2 mm to 3 mm  |
| 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" × 10" × 8.5" (WHD)   |
| Warranty              | One year parts and labor on defects<br>in materials and workmanship |

### Ordering Information

|         |                         |        |
|---------|-------------------------|--------|
| EZ-Melt | Melting point apparatus | \$2495 |
| O100MPC | Capillaries (300 pcs.)  | \$150  |
| O100MPS | Melting point standards | \$395  |