

# Melting Point Apparatus

*EZ-Melt — Automated melting point system*



## **EZ-Melt**

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

• **EZ-Melt (MPA120) ...**

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.

## 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 rear panel*

## EZ-Melt Specifications

### Operation

Start temp. range	(Ambient + 10 °C) to 396 °C, 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) ±0.5 °C (up to 250 °C) ±0.8 °C (up to 400 °C)
Reproducibility	0.2 °C
Temperature sensor	Pt RTD
Oven control	Microprocessor-controlled closed-loop PID
Automated operation	Onset point and clear point
Manual operation	Store up to four manual temperature recordings per capillary
User calibration	Single temperature offset, 0.1 °C resolution

### General

Display	4-digit LED display
Capillaries	
Dimensions	1.4 mm to 2.0 mm outside diameter, 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 in materials and workmanship

## Ordering Information

EZ-Melt	Melting point apparatus
O100MPC	Capillaries (300 pcs.)
O100MPS	Melting point standards