## **Automatic Melting Point Apparatus**Touch Screen Display



## **MPS40 Series**



- ✓ Maximum Temperature 400°C (752°F)
- Utilizes Latest Technology in Digital Imaging
- ✓ 145 mm (5.7") Color VGA Touch Screen Display
- Unique Split Design Concept
- ✓ Integrated Cooling 350 to 50°C (662 to 122°F) in 10 Minutes

The MPS40 automatic melting point uses the latest technology in digital image processing, to accurately identify the melt of up to 3 samples simultaneously. The unit comes with a 145 mm (5.7") color VGA display, on which the melt can be watched real time, or the melt video will automatically be saved as an AVI file that can be reviewed later, either on the unit or via PC, providing traceability long after the sample has gone. The result can also be overridden if for any reason you don't agree with the result calculated by the image processing algorithm.

The MPS40 is fully programmable via the touch screen display, once the user has set the plateau temperature they can select the ramp rate, between 0.1 and 10°C (0.2 to 18°F) in 0.1°C (0.2°F) increments. During use a library

of preset methods can be built up to streamline the method input for repeat measurements. For materials where the user is unaware of an approximate melting point, and therefore unable to set the plateau temperature, the MPS40 can be used in rapid melt mode. During rapid melt mode a fast scan of the full temperature range is undertaken to provide an approximate melt temperature, then a method will be automatically programmed with the appropriate plateau temperature to allow a more accurate measurement to be carried out.

The MPS40 has an innovative split design concept, the unit can be used as normal or the control side and the melt side can be separated, allowing for the maximum in footprint flexibility. After the samples have been loaded the melt side of the unit can be placed at the back



MPS40, melting point apparatus shown smaller than actual size.



of the bench or even in a fume cupboard to catch any potentially dangerous fumes. Once the unit has been split the control panel side can be used in two orientations, either landscape or portrait to allow the perfect viewing angle whether you are sat or stood at the bench, the screen automatically changes orientation with the unit.

The unit can store up to 200 result files with videos, if required data can be easily transferred from the unit to a flash memory drive or PC via one of the USB connectors.

The unit has been designed to include a number of other useful features such as slots to accommodate pre-prepared samples and a draw to house your unused melting point tubes. Also included in the draw is a handy glass cutter, which can be used to accurately cut tubes in half quickly and cleanly for users who prefer to use half tubes.

All units are supplied with a NIST calibration certificate showing individual serial numbers.

## **Specifications**

Number of Samples: 3 simultaneously

Temperature Range: Ambient to

400°C (752°F)

Temperature Resolution: 0.1°C

Display: 145 mm (5.7") color VGA

touch screen

Ramp Rates: 0.1 to 10°C (0.2 to 18°F)

in 0.1°C (0.2°F) increments

Temperature Sensor: Pt1000

platinum resistance

Memory: 200 results with video Cool Down Time: 350 to 50°C

(662 to 122°F), 10 minutes

**Heat Up Time:** 50 to 350°C (122 to 662°F), 6 minutes **Oven Control:** Closed loop PID

Flash Memory/PC Interface: USB Sample Level: 2 to 3 mm in 50 mm,

or 100 mm length capillaries **Electrical Supply:** 120V/230V,

50 to 60 Hz

Temperature Units: °C, °F, K

**Dimensions:** 

175 H x 210 D x 328 mm W

(6.9 x 8.3 x 13")

Net Weight: 3.2 kg (113 oz)

IP Rating: 30

To Order	mps40 for Pricing and Details
Model No.	Description
MPS40	Melting point apparatus with pack of 100 melting point tubes, closed at both ends
MPS40-TUBESSEALED	Spare glass melting point tubes, closed at both ends, pack of 100

Comes complete with 100 melting point tubes, RS232 cable, USB cable, UK, European and USA power cords, NIST calibration certificate and operator's manual.