

# Melting Point Apparatus

## Automatic melting point apparatus, SMP40

- Maximum temperature 400°C
- Utilises latest technology in digital imaging
- 5.7" colour VGA touch screen display
- Unique split design concept
- Integrated cooling, 350°C to 50°C in 10 minutes

The SMP40 automatic melting point uses the latest technology in digital image processing, to accurately identify the melt of up to three samples simultaneously. The unit comes with a 5.7" colour 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 SMP40 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 in 0.1°C 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 SMP40 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 SMP40 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 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.

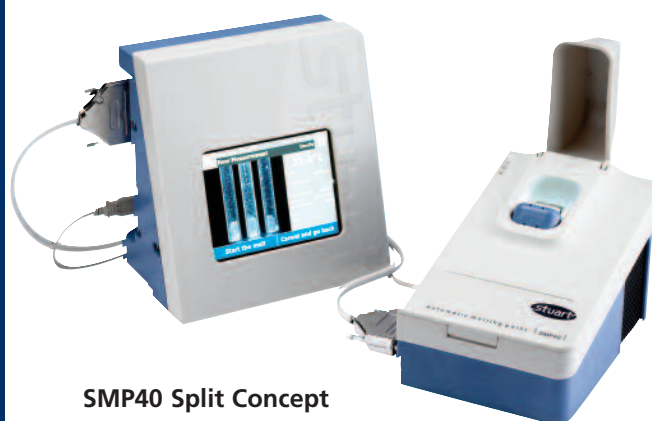
The unit can store up to 200 result files with videos, if required data can be easily transferred from the unit to a flash memory drive or PC via one of the USB connectors.

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 calibration certificate showing individual serial numbers for traceability. The SMP40 conforms to Pharmacopeia and GLP.



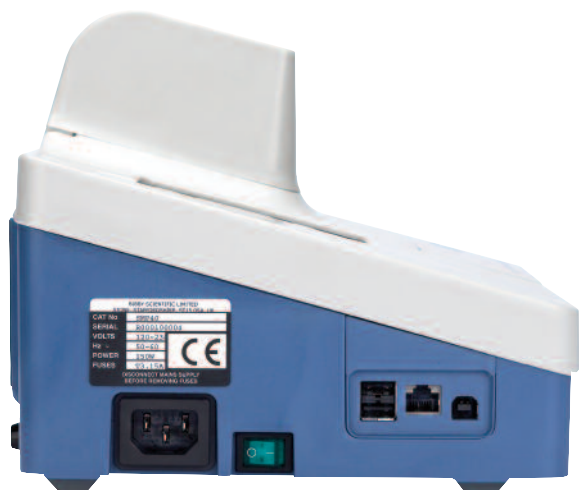
SMP40



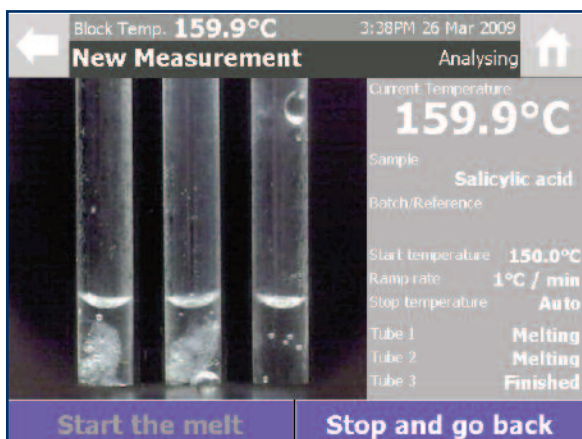
SMP40 Split Concept

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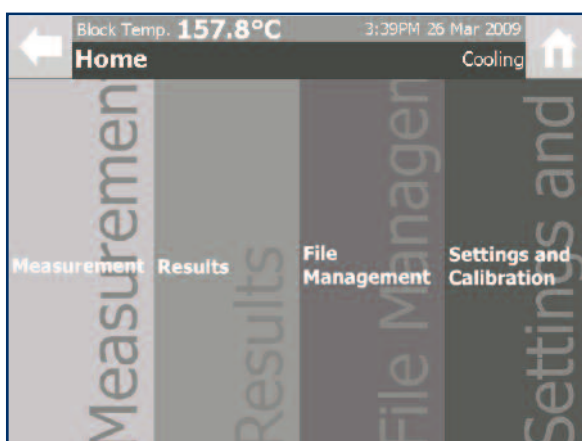
## Technical specification



SMP40 Side Profile



SMP40 Interface - Measurement Screen



SMP40 Interface - Homepage

### SMP40

Number of samples	3 simultaneously
Temperature range	Ambient to 400°C
Temperature resolution	0.1°C
Display	5.7" Colour VGA touch screen
Ramp rates	0.1-10°C in 0.1°C increments
Temperature sensor	PT1000 Platinum resistance
Memory	200 results with video
Cool down time 350-50°C	~10 mins
Heat up time 50-350°C	~ 6 mins
Oven control	Closed loop PID
Flash memory/PC interface	USB
Sample level	2-3mm in 50mm or 100mm length capillaries
Electrical supply	120V / 230V, 50-60Hz
Temperature units	°C, °F, K
Dimensions, mm (h x d x w)	175 x 210 x 328
Net weight, kg	3.2
IP Rating	30

## Ordering Information

Model	Description
SMP40	Melting point apparatus, complete with pack of 100 melting point tubes, closed at both ends.
SMP2/1	Glass melting point tubes, closed at both ends, pack of 100