Digital Melting Point Apparatus - Touchscreen Melting Point Meter - RT-400°C - 0.1°C Resolution

Model **MSMTP-2CSWISS, MSMTP-1CSWISS, MSMTP-1BSWISS** | Brand **Master Science**





The Master Science Digital Melting Point Apparatus measures the melting point and melting range of organic crystalline materials automatically. It is used in the production and quality control of medicines, dyes, perfumes and other fine chemicals.

KEY HIGHLIGHTS

- Automatic, objective results
- Faster batches
- Instant averages
- Simple operation
- Easy records

AT A GLANCE

Ambient to 360 °C (2C); to 400 °C (1C); to 320 °C (1B) TEMPERATURE RANGE	**±0.4 °C up to 200 °C; ±0.7 °C above 200 °C** ACCURACY

Request a Quotation
Contact us for pricing, configuration options and delivery details.

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Overview

PID and PWM control produce a linear heating ramp, the melting curve is recorded automatically, and the instrument calculates the average initial and final melting points for each test.

Key Benefits

Automatic, objective results
the Master Science Digital Melting Point Apparatus detects onset and clear points without visual judgement.

Faster batches
the three-capillary model tests three samples together.

Instant averages
initial and final melting points are averaged automatically.

Simple operation
a 7-inch touchscreen sets methods and shows curves.

Easy records
1000 result memory, printer and PC connection.

For video recording of each melt, see the Master Science video melting point apparatus.

Technical Specifications

GENERAL

General	The Master Science Digital Melting Point Apparatus is available in three versions:
Brand	Master Science
Model Number	MSMTP-2CSWISS, MSMTP-1CSWISS, MSMTP-1BSWISS
SKU	MSMTP-2CSWISS, MSMTP-1CSWISS, MSMTP-1BSWISS
Models	MSMTP-2CSWISS, MSMTP-1CSWISS, MSMTP-1BSWISS
Temperature Range	**Ambient to 360 °C (2C); to 400 °C (1C); to 320 °C (1B)**
Measuring Mode	Automatic
Stored Methods	8
Resolution	0.1 °C
Heating Rate	0.1 to 20 °C/min
Accuracy	**±0.4 °C up to 200 °C; ±0.7 °C above 200 °C**
Repeatability	0.3 °C (at 1.0 °C/min)
Heating Rate Error	±10 %
Capillaries	3 (2C); 1 (1C, 1B)
Power Supply	100 to 240 V AC, 50/60 Hz, 100 W

DIMENSIONS & WEIGHT

Capillary Size	OD 1.4 mm, ID 1.0 mm, length 90 mm
Sample Height	3 mm
Package Size	580 × 445 × 320 mm (2C); 500 × 445 × 330 mm
Gross Weight	13 kg (2C); 11 kg

DISPLAY & DATA

Data Storage	1000 sets (2C, 1C)
Display	7-inch touch LCD
Thermal Printer	Standard (2C); optional (1C, 1B)
Interfaces	RS232, USB
Lost data	1000 results stay in memory.

COMMON LABORATORY PROBLEMS AND HOW THIS INSTRUMENT HELPS

Common Laboratory Problems and How This Instrument Helps	How the Master Science Digital Melting Point Apparatus supports melting point testing:
Operator-dependent endpoints	automatic detection gives consistent values.
Non-linear heating	PID control keeps the ramp steady.
Manual averaging	results are calculated automatically.
Slow single tests	the 3-capillary model triples throughput.

Applications

The Master Science Digital Melting Point Apparatus is used for: Pharmaceutical raw material identification Dyes and pigments Perfumes and flavour chemicals Organic synthesis and fine chemicals Teaching laboratories

Heating

- PID and PWM temperature control
- Linear ramp 0.1 to 20 °C/min

Detection and Data

- Automatic melting curve recording
- Average initial and final melting point
- Clock function and 1000-set memory

Interface

- 7-inch touch LCD
- RS232 and USB
- Thermal printer

Optional Accessories

- Thermal printer (MSMTP-1CSWISS, MSMTP-1BSWISS)