

# Melting Point Apparatus

## MTP-3A



### Features

- To be used in production of medicines, dye-stuffs, perfumes and other organic crystal substances.
- Observing the process through visual window or choose auto mode to measure.
- Use PID to control the temperature.
- It can measure 3 samples at the same time and calculate the average automatically.
- Color Touch Screen



### Specification

Model	MTP-3A
Measuring range	Room temperature -360 °C
Measuring mode	Auto/Visual
Resolution	0.1 °C
Linear heating-up rate	0.1 °C/min-10 °C/min
Accuracy	≤200 °C:±0.5 °C; >200 °C:±0.8 °C
Repeatability	0.3 °C (heating rate:1.0 °C/min)
Linear heating rate error	±10%
Number of capillary	3
Capillary dimensions	Outer diameter:φ1.4mm Inner diameter:φ1.0mm Length:90mm
Height of sample	3mm
Display	5.6 inch color touch screen
Calibration method	Multi-point calibration
Data storage	100 sets
Interface	U disk, USB, RS232
Power supply	220V±22V, 50Hz±1 Hz, 180w
Package Dimension (W*D*H)(mm)	510*450*390mm
Weight G.W.(kg)	8.8kg

# Dropping-point and softening-point apparatus

## MTP-DPI



### Features

- Designed according to ASTM D3461-97.
- Measure concentration polymerization degree, refractoriness of amorphousbody highly polymerized compound.
- Photoelectric test, temperature program control, LCD display, high precisionand stable performance.

Widely used to component control and quality test of tar, asphalt, paraffin, resin, fats, rosin, lubricant, Vaseline, medical ointment, ointment, suppository, edible and grease.

### Specification

Model	MTP-DPI
Measuring range	Room temperature~300 °C
Minimum digital display	0.1 °C
Linear heating rates	0.2, 0.5, 1.0, 1.5, 2.0, 3.0, 4.0, 5.0 °C/min
Furnace temperature	≤200 °C ±0.5 °C; >200 °C ±1 °C
The dimension of cup	Φ9.9mm (inside diameter), R4.6 ±0.1mm (bottom radius)
Hole size	Φ2.80mm (dropping-point), Φ6.35mm (softening-point), Φ5.00mm (user choose)
Ball	Lead ball (Φ3mm, 3.2±0.1g, according to ASTM) Steel ball (3.8", according to GB2728-1988; 5/6" user choose)
Weight (G.W.)	12.6kg
Package Dimension (W*D*H)(mm)	740*390*300

# Melting Point Apparatus

MTP-2C MTP-2A MTP-1C MTP-1B MTP-2



## Features



To be used in production of medicines, dye-stuffs, perfumes and other organic crystal substances.



Automatically records the melting curve.



Use PID & PWM to control the temperature.



Can connect to a computer for data transferring.



Calculate average value of initial and final melting points automatically.



Touch Screen.



Equipped with clock function.

## Specifications

Model	MTP-2C	MTP-2A	MTP-1C	MTP-1B	MTP-2
Measuring range	RT~360 C	RT~300 C	RT~400 C	RT~320 C	RT~300 C
Measuring mode	Auto		Auto		
Measuring methods	8		8		
Resolution	0.1C		0.1C		
Linear heating-up rate	0.1C/min~20 C/min		0.1C/min~20 C/min		
Accuracy	≤200 C:±0.4 C; >200 C:±0.7 C		≤200 C:±0.4 C; >200 C:±0.7 C		
Repeatability	0.3 C (heating rate:1.0 C/min)		0.3 C (heating rate:1.0 C/min)		
Linear heating rate error	±10%		±10%		
Number of capillary	3		1		
Capillary dimensions	Outer diameter: φ1.4mm Inner diameter: φ1.0mm Length: 90mm		Outer diameter:φ1.4mm Inner diameter: φ1.0mm Length: 90mm		
Height of sample	3mm		3mm		
Data storage	1000 set	/	1000 set	/	/
Display	7 inch touch LCD		7 inch touch LCD		
Printer(Thermal)	Standard accessory	/	Optional accessory	Optional accessory	/
Interface	RS232, USB		RS232, USB		
Power supply	100~240VAC, 50/60Hz, 100W		100~240VAC, 50/60Hz, 100W		
Package Dimension	580mm×445mm×320mm	500mm×445mm×330mm	500mm×445mm×330mm		
Weight(Gross)	13kg	11kg	11kg		

## Visual Melting-point Apparatus

MTP-VL



### Features

- To be used to measure the melting point of medicines, dye-stuffs and perfumes and other organic crystal substances to determine their purity.
- Visually detect the initial and final melting points of the sample.
- Measuring three samples at the same time and calculate the average value automatically.
- Use silicone oil or water as heating-conducting medium.



### Specification

Model	MTP-VL
Measuring range	Silicon oil:40°C-280°C
Heating-conducting medium	Silicon oil
Measuring Mode	Visual (8x magnification window)
Resolution	0.1°C
Linear heating-up rate	0.5°C/min, 1.0°C/min, 1.5°C/min, 3.0°C/min
Accuracy	≤200°C:±0.4°C; >200°C:±0.7°C
Repeatability	0.3°C (heating rate:1.0°C/min)
Linear heating rate error	±10%
Capillary dimensions	Outer diameter:φ1.4mm Inner diameter:φ1.0mm Length:120mm
Number of capillary	3
Height of sample	3mm
Interface	RS232, USB
Display	LCD
Power supply	220V±22V, 50Hz±1Hz, 200w
Overall Dimensions	390mm ×390mm ×520mm
Weight(Gross)	13kg

## Melting point Apparatus with Microscope

MTP-4B MTP-4A MTP-4



### Features

- To be used in pharmaceutical industry, chemical industry, textile industry, dyestuff.
- Use capillary or hot table (slide and cover glass) for sample loading.
- Observe with microscope.



### Specifications

Model	MTP-4B	MTP-4A	MTP-4
Measuring range	Room temperature-320°C		
Measuring mode	Visual		
Sample loading	Capillary/Hot table		
Repeatability	≤200°C:±1°C; >200°C:±2°C		
Resolution	0.1°C	0.1°C	1°C
Observation mode	Binocular Stereoscopic microscope	Monocular microscope	
Optic magnification	40X-100X Continuous zoom	10X(Eye lens) 4X(Objective lens)	
Power supply	220V±22V, 50Hz±1Hz, 80w		
Overall Dimensions	300mm ×220mm×440mm		
Weight(Gross)	4 kg	3.5 kg	3.5 kg

# Video Melting Point Apparatus

MTP-685 MTP-682



## Features

- Features an Android system with a 10.1-inch touch screen for melting video playback.
- 720P HD camera for clear observation.
- Uses PID & PWM to control temperature.
- The light source brightness and detection sensitivity can be adjusted to better measure dark color samples.
- The instrument can measure 4 capillaries simultaneously.
- The audit tracking function is optional, which complies with the relevant requirements of the National Pharmacopoeia, GMP, GLP, and FDA/21CFR Part 11, and has user management permissions.

## Application

The melting point apparatus plays an important role in the chemical industry and pharmaceutical research. It is an essential instrument for the production of drugs, spices, dyes and other organic crystal substances.



## Specifications

Model	MTP-685	MTP-682
Measurement Range	RT.~400 °C	RT.~360 °C
Measurement Mode	Auto / Visual (HD camera, video capture, playback monitoring)	
Measurement Methods	200	150
Number of Users	200	150
Audit Trail	Optional	
Electronic Signature	Yes	
Minimum Indication	0.01 °C	
Linear Heating Rate	0.1 °C/min~20 °C/min	
Indication Error	≤ 200 °C: ±0.3 °C; >200 °C: ±0.5 °C	
Indication Value Repeatability	0.3 °C (heating rate: 1.0 °C/min)	
Linear Heating Rate Error	±10%	
Number of Capillary	4	
Capillary Dimensions	Outer diameter: φ1.4mm; Inner diameter: φ1.0mm; Length: 90mm	
Sample Height	3mm	
Operation System	Android	
Data Storage	128G	64G
Display	10.1-inch capacitive touch screen	
Graph Storage	40,000 groups	20,000 groups
Interface	RS 232*1, USB*3, RJ-45*1, WIFI	
Electricity	100~240V, 50/60Hz, 150W	
Package Dimension	495*493*350mm	
Gross Weight	5kg	

# Melting Point Apparatus

MTP-650 MTP-630



- Measurement Range: Room temperature - 400 °C
- Number of Capillary: 5, 3
- Measurement Mode: Automatic, Visual (Replay monitoring)
- Compliant with the relevant requirements of the National Pharmacopoeia, GMP, GLP, and FDA/21CFR Part 11



MTP-650

## Features



Image processing and analysis, with video recording and playback.



Android operating system with a large touchscreen.



Equipped with multi-point calibration function, observing with automatic mode or visual mode.



Improved accuracy and reliability of melting point measurements.



It can measure special samples that appear dark or opaque after melting, as well as samples that decompose during heating.



Compliant with the relevant requirements of the National Pharmacopoeia, GMP, GLP, and FDA/21CFR Part 11.



## Specifications

Model	MTP-650	MTP-630
Measurement Range	Room temperature - 400 °C	
Measurement Mode	Auto/Visual	
Pre-stored Measurement Methods	600	400
Number of Users	300	200
Audit Trail	Optional	Optional
Electronic Signature	Yes	Yes
Resolution	0.01 °C	
Linear Heating Rate	0.1 °C/min~20 °C/min	
Accuracy	≤ 200 °C ± 0.3 °C; > 200 °C ± 0.5 °C	
Repeatability	0.3 °C (heating rate: 1.0 °C/min)	
Linear Heating Rate Error	± 5%	
Number of Capillary	5	3
Capillary Dimensions	Outer diameter: φ1.4mm; Inner diameter: φ1.0mm; Length: 90mm;	
Height of Sample	3mm	
Operating System	Android	
Data Storage	128 G	
Display	10.1-inch touchscreen	
Interface	1×RS 232, 3×USB, 1×RJ-45, Wi-Fi	
Power Supply	100V~240VAC, 50Hz/60Hz, 150W	
Package Dimension	495*493*350 mm	
Gross Weight	5kg	