

# AELAB Melting Point Device

**Model : AE-DM Series**



## Automatic Melting Point Instrument (AE-DM Series)

Melting point meter is an instrument for measuring the melting point of a substance. The melting point of a substance refers to the temperature at which the substance changes from solid to liquid. In the field of organic chemistry, the determination of the melting point is the basic means to identify the nature of a substance, and also one of the important methods for the determination of purity.

AELAB automatic melting point instrument series perfectly combine high-precision temperature control technology and high-definition video camera technology, not only to provide users with accurate, stable and reliable test results, but also to bring users efficient and convenient test experience. High-definition video can easily and clearly see the whole process of sample melting, automatic detection real-time Tupu display, convenient for users to accurately measure the sample melting point and melt distance.

### Application fields:

- ◆ Melting point meter plays an important role in chemical industry and medical research. It is a necessary instrument for the production of drugs, spices, dyes and other organic crystal substances. Corresponding enterprises (pharmaceutical related enterprises, chemical enterprises)
- ◆ Universities and Research Institutes (chemical and pharmaceutical related schools and research institutes)
- ◆ Government supervision departments (Entry-Exit Inspection and Quarantine Food and Drug Administration, Grain Administration, etc.)



Pharmaceutical



Medical Industries



Drug Testing

### Features:

- ◆ HD recording function, easy to observe and look back.
- ◆ Large temperature range from room temperature to 420°C.
- ◆ The heating rate is adjustable from 0.1°C/Min to 20°C/Min without pole.
- ◆ Enlarge HD color screen window.
- ◆ Four samples can be determined simultaneously.
- ◆ Printer can be connected to realize real-time data printing and historical data printing.
- ◆ Comply with Pharmacopoeia test methods, including European Pharmacopoeia, United States Pharmacopoeia and Chinese Pharmacopoeia.
- ◆ Compliance with 21CFR Part 1, audit trail, pharmacopoeia and electronic signature.

## Technical Specifications:

Model	AE-DM30	AE-DM50	AE-DM70	AE-DM80	AE-DM90	AE-DM130
Temperature range	Room temperature -360°C	Room temperature -420°C	Room temperature -360°C	Room temperature -400°C	Room temperature -420°C	Room temperature -420°C
Detection method	Semi-automatic	Semi-automatic	Fully automatic (compatible with manual)	Fully automatic (compatible with manual)	Fully automatic (compatible with manual)	Fully automatic (compatible with manual)
Processing capacity	4 pcs per batch	4 pcs per batch	4 pcs per batch	4 pcs per batch	4 pcs per batch	4 pcs per batch
Test mode	Melting point	Melting point	Melting point	Melting point	Melting point	Melting point, boiling point, cloud point, slip point
Temperature resolution	0.01°C	0.01°C	0.01°C	0.01°C	0.01°C	0.01°C
Heating rate	0.1°C--20°C (200 gears, steplessly adjustable)	0.1°C--20°C (200 gears, steplessly adjustable)	0.1°C--20°C (200 gears, steplessly adjustable)	0.1°C--20°C (200 gears, steplessly adjustable)	0.1°C--20°C (200 gears, steplessly adjustable)	0.1°C--20°C (200 gears, steplessly adjustable)
Temperature control mode	PID precise temperature control, fully enclosed design of the furnace body	PID precise temperature control, fully enclosed design of the furnace body	PID precise temperature control, fully enclosed design of the furnace body	PID precise temperature control, fully enclosed design of the furnace body	PID precise temperature control, fully enclosed design of the furnace body	PID precise temperature control, fully enclosed design of the furnace body
Accuracy	±0.3°C (<250°C) ±0.5°C (>250°C)	±0.2°C (<250°C) ±0.4°C (>250°C)	±0.3°C (<250°C) ±0.5°C (>250°C)	±0.2°C (<250°C) ±0.4°C (>250°C)	±0.2°C (<250°C) ±0.4°C (>250°C)	±0.2°C (<250°C) ±0.4°C (>250°C)
Repeatability	Melting point repeatability was ±0.1°C at 0.1°C/Min	Melting point repeatability was ±0.1°C at 0.1°C/Min	Melting point repeatability was ±0.1°C at 0.1°C/Min	Melting point repeatability was ±0.1°C at 0.1°C/Min	Melting point repeatability was ±0.1°C at 0.1°C/Min	Melting point repeatability was ±0.1°C at 0.1°C/Min
magnification	9 times	9 times	9 times	9 times	9 times	9 times
Display method	10.4 inch FTF color touch color screen	10.4 inch FTF color touch color screen	10.4 inch FTF color touch color screen	10.4 inch FTF color touch color screen	10.4 inch FTF color touch color screen	10.4 inch FTF color touch color screen
Data storage	32G	64G	32G	64G	128G	128G
Map save	200 groups	400 groups	200 groups	400 groups	600 groups	600 groups
Map	-	-	Any zoom	Any zoom	Any zoom	Any zoom
User management	YES /Level 4 authority	YES /Level 4 authority	YES /Level 4 authority	YES /Level 4 authority	YES /Level 4 authority	YES /Level 4 authority
Audit trails	YES	YES	YES	YES	YES	YES
Electronic signature	YES	YES	YES	YES	YES	YES
Custom method libraries	YES	YES	YES	YES	YES	YES
Export file verification advanced protection MDS	YES	YES	YES	YES	YES	YES
Printing method	WIFI serial port	WIFI serial port	WIFI serial port	WIFI serial port	WIFI serial port	WIFI serial port
Export in multiple file formats	PDF & EXCEL	PDF & EXCEL	PDF & EXCEL	PDF & EXCEL	PDF & EXCEL	PDF & EXCEL
Data interface	USB RS232 SD Wi-Fi, RJ45, U disk	USB RS232 SD Wi-Fi, RJ45, U disk	USB RS232 SD Wi-Fi, RJ45, U disk	USB RS232 SD Wi-Fi, RJ45, U disk	USB RS232 SD Wi-Fi, RJ45, U disk	USB RS232 SD Wi-Fi, RJ45, U disk
Small capillary size	OD: Φ1.3mm ID:Φ1.1mm	OD: Φ1.3mm ID:Φ1.1mm	OD: Φ1.3mm ID:Φ1.1mm	OD: Φ1.3mm ID:Φ1.1mm	OD: Φ1.3mm ID:Φ1.1mm	OD: Φ1.3mm ID:Φ1.1mm
Large capillary size	-	-	-	-	-	OD: Φ4.2mm ID:Φ3.8mm
Instrument size	400*280*330mm	400*280*330mm	400*280*330mm	400*280*330mm	400*280*330mm	400*280*330mm
power supply	110-230V 50/60Hz 120W	110-230V 50/60Hz 120W	110-230V 50/60Hz 120W	110-230V 50/60Hz 120W	110-230V 50/60Hz 120W	110-230V 50/60Hz 120W
Weight	4.1kg	4.1kg	4.1kg	4.1kg	4.1kg	4.1kg