

MELTING/BOILING POINT APPARATUS

Model : VMP-AD(CFT)

CFR 21 Part 11 Compliant instrument.



Melting point apparatus is a scientific instrument used to determine the melting point of a substance.

FEATURES

- Facility to select Melting point or Boiling point test type.
- Manual observation of melting point.
- 7 Inch TFT color monitor with capacitive touch screen for easy programming.
- User interface with multicolor graphic widgets & icons for interactive communication.
- Embedded with high performance single board computer for speedy data processing.
- Provision to back- up data directly on server or PC.
- Built-in Validation facility.
- Memory provision for data storage of 26GB.
- Installable CD of XAMPP software to be installed on server/PC for backup and printouts.
- PC Interface through Ethernet.
- Incorporated with user management module for account setting, editing etc.
- Uniqueness of user id.
- Back-Up & Restore facility.
- Provision for unknown/new product evaluation

CFR COMPLIANT FEATURES

- Four user level hierarchy System Admin, Admin, Manager and Operator.
- Role based access control.
- Password management as per guidelines
- System time-out after idleness.
- System tracks the prints & re-prints with audit trail.
- Results are authenticated by operator with date and time stamped.
- All user actions are recorded in audit trail with date & time.
- System does not allow the editing of audit trail.
- Temperature range: 15°C above room temperature -300 °C.
- Accuracy: 0.3 – 0.5 °C.
- Temperature resolution: 0.1 °C.
- Power supply: 230V, 50Hz, 500 W.

Model: VMP – AD(T)

This model is junior version of Model : VMP-AD(CFT) with most of the features are same. It doesn't have CFR compliant features.

MELTING/BOILING POINT APPARATUS

Model : VMP – CM



Instrument equipped with graphic display, color monitor and camera to observe melting point.

FEATURES

- Facility to select melting point or boiling point.
- Three number capillaries for melting point detection at a time.
- Built-in validation facility.
- Memory provision for storage of 99 product names with their expected melting point and 25 Product names with their expected boiling point.
- Memory to store 100 test records.
- On line and Off line printing facility with date and product selection.
- Tips of the capillaries containing the sample under thest on the colour monitor.
- Simple and user friendly operation.

SPECIFICATIONS

- Temperature range: 15°C above room temperature – 300 °C.
- Accuracy: 0.3 – 0.5 °C.
- Temperature resolution: 0.1 °C.
- Input: tactile keyboard + QWERTY keyboard.
- Compatible with Dot matrix printer.
- Time v/s temperature graphical representation.
- Display 24 x 128 graphic display
- Power Supply: 230V, 50Hz, 500 W

Melting point accessories:



MELTING/BOILING POINT APPARATUS

Model : **VMP – PM**



FEATURES

- Facility to select melting point or boiling point.
- Built-in validation facility.
- Memory provision for storage of 99 product names with their expected melting point and 25 Product names with their expected boiling point.
- Memory to store 100 test records.
- On line and Off line printing facility with date & product selection.
- Tips of the sample filled capillary can be observed through magnifying lens on illuminated background of silicon oil bath.

SPECIFICATIONS

- Temperature range : 15°C above room temperature - 300 °C.
- Accuracy: 0.3 – 0.5 °C.
- Temperature resolution : 0.1 °C.
- Input: tactile keyboard + QWERTY keyboard.
- Compatible with Dot matrix printer.
- Display 24 x 128 graphic display
- Power Supply: 230V, 50Hz, 500 W.




MELTING/BOILING POINT APPARATUS MODEL : **VMP-DS**

FEATURES

- This is Junior economical version for determination of melting point and melting range.
- Heating rate can be precisely adjusted by an electronic controller.
- Temperature range : 15 °C above room temperature - 300 °C.
- Temperature resolution : 0.1 °C.



Comparative chart of Melting Point Apparatus

Model Name	VMP-PM	VMP-CM	VMP-AD (T)	VMP-AD (CFT)
Facility to select Melting Point test type.	✓	✓	✓	✓
Number of melting point samples detected at a time.	1	3	3	3
Number of Boiling point samples detected at a time.	1	1	1	1
Silicon fluid as heating Media.	✓	✓	✓	✓
Manual observation for Melting Point.	✓	✓	✓	✓
Testing Temperature range 15° C above ambient temperature to 300° C.	✓	✓	✓	✓
Temperature Gradient.	1°C	0.5° & 1° C	0.5° & 1° C	0.5° & 1° C
Provision for Unknown/New product evaluation.	✓	✓	✓	✓
Validation Program for known Melting Point samples.	✓	✓	✓	✓
TFT color monitor (TFT) or Graphic Display (GRF).	GRF	GRF	TFT	TFT
Capacitive touch screen (CSR) or 4 x 4 Tactile keyboard & USB Port (USB) for easy programming.	USB	USB	CSR	CSR
80 column dot matrix External printer compatibility.	✓	✓	—	—
Server or PC Access for backup, restore & printing.	—	—	✓	✓
Number of user level based functionality.	0	2	3	4
Role Based Access Control.	—	—	✓	✓
Login Screen to login into software.	—	—	✓	✓
Incorporated with user management module for account setting, editing etc.	—	—	✓	✓
Uniqueness of User ID.	—	—	✓	✓
Password management as per guidelines.	—	—	—	✓
System time-outs after idleness.	—	—	✓	✓
The system tracks print & re-print with the audit trail.	—	—	—	✓
Back-up folder facility.	—	—	✓	✓
Results are authenticated by operator with date & time stamped.	—	—	—	✓
All users actions are recorded in audit trail with date & time stamped.	—	—	—	✓
System does not allow the editing of audit trail.	—	—	—	✓
High performance single board computer for speedy data processing.	—	—	✓	✓
				
✓ Sign Indicates "YES", — Sign indicates "NO".				