

Цифровые приборы для определения точки плавления МРА 160, ІА 9200, МРА100, МРМ-Н/НУ

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +(727)345-47-04

Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: kdu@nt-rt.ru || сайт: <https://kleinfeld.nt-rt.ru/>

Kleinfeld

Digital Melting Point Apparatus for Students



The MPA 160 allows for a simultaneous measurement from up to 3 samples. With integrated RTD thermometer, microprocessor-guided temperature control and sample shaker. Due to the LED and enlargement technology, a high-contrast observation of the melting process is secured. The effective oven provides an heating rate up to 260 °C in under 10 min. The rate of heating during measurements can be defined 0.5, 1.0, 2.0 or 5.0 °C / min. Easy cleaning after break of capillary due to detachable lens-ring. Automatic switch-off of the oven after 30 min in resting state.

Technical Data:

Measurement range:	50 to 260 °C
Resolution:	0.1 °C
Accuracy:	± 0.5 °C (< 200 °C) ± 0.8 °C (> 200 °C)
Reproducibility:	0.2 °C
Heating rate during fast heating-up:	10 min up to 260 °C
Heating rate during measurements:	0.5, 1.0, 2.0, 5.0 °C / min
Light:	4 x LED
Dimensions:	15 x 25 x 13 cm
Weight:	1 kg
Voltage:	230 V, 150 W

Type	PU	Order No.	Manuf. Prod. No.
Digital melting point apparatus MPA 160	1	5424688	9402859 / MPA160
Capillaries	1	5420631	9402701
Melting point standards	1	5424690	O100MPS

Kleinfeld

Melting Point Apparatus MPA100



Accurate measurements of melting point and range.

Automatic and visual determination.

Simultaneous analysis of 3 samples.

Microprocessor-controlled temperature ramping.

Built-in camera and image processor.

Stand-alone operation or computer control (USB).

Conforms to Pharmacopeia and GLP.

Printer output.

With software.

Incl. 100 capillaries.

Technical Data:

Temperature range: room temperature to 400 °C

Temperature resolution: 0.1 °C

Heat-up time: ~ 10 min (50 to 350 °C)

Cool-down time: ~ 10 min (350 to 50 °C)

Temperature accuracy: ± 0.3 °C (to 100 °C)

± 0.5 °C (to 250 °C)

± 0.8 °C (to 400 °C)

Reproducibility: 0.2 °C

Capillaries dimensions: 1.4 to 2.0 mm outside-Ø

Weight: 4.1 kg

Dimensions (W x H x D): 19.5 x 25.5 x 21.5 cm

Description	PU	Order No.	Manuf. Prod. No.
Melting point apparatus MPA100	1	5420630	9402700
Capillaries for melting point apparatus MPA100	1	5420631	9402701

Kleinfeld

Melting Point Apparatus IA 9200



-
Semi-automatic. Up to 3 melting points can be quickly and accurately determined simultaneously. With microprocessor heating over control. The ramp starting temperature of the approximate melting range can be input via the keyboard. The units quickly heat up to this temperature and give an optical and acoustic signal once it has been reached. By the operators pressing another key, the devices begin to heat up at a constant rate (fixed at 1 °C / min). Up to 4 melting points can be recorded and transferred to the memory as discreet temperatures for later recall on the display. The different phases of a melt or the critical melting temperatures of various samples can be investigated under the same conditions in this way. The initial temperature and heating rate can be set via the keyboard in order that various test protocols are available. An accessory printer enables documentation of the results, date, time (real time) and sample number. The 8 x magnifier has a Ø of 40 mm and an adjustable focal point. Units comply with VDE requirements.

Half automatic.

Digital temperature control LCD-display in increments of 0.1 °C.

3 sample can be quickly and accurately determined simultaneously.

Optical and acoustic signal once it has been reached.

Technical Data:

Measuring range: 45 to 400 °C

Accuracy: ± 0.5 °C (at 50 °C), ± 1 °C (at 350 °C)

Resolution: ± 0.1 °C

Display: LCD, 4 digit, height 12 mm
 Dimensions (W x D x H): 200 x 350 x 85 mm
 Weight: 2.5 kg
 Capillary: Ø 2.0 mm, one end closed
 Ø 1.5 mm, both ends closed
 Power: 45 W
 Oven output: 18 W
 Input: 220 / 240 V
 Output: 12 V

Description	PU	Order No.	Manuf. Prod. No.
Melting point apparatus IA 9200	1	5830442	9.830 442
Cooling finger	1	5830445	9.830 445
Capillary tubes, 2 mm, one end closed	1	5830447	9.830 477
Capillary tubes, 1.5 mm, both ends closed	1	5830463	9.830 463
Calibration standard, P-nitrotoluene	1	5436968	9830470
Calibration standard, carbazole, 245.61 °C, 0.5 g	1	5830469	9.830 469
Calibration set	1	5830451	9.830 451
Printer, complete with connection cable	1	5830448	9830448
Paper roll (2) and ribbon for paper	1	5830449	9.830 449
Interface cable for printer PR2000	1	5830452	9.830 452
Dust cover	1	5830446	9.830 446
Calibration standard, 4-nitrotoluene, 51.3 °C, 0.5 g	1	5830467	9.830 467

Models IA 9100, IA 9300 on request!

Kleinfeld

Melting Point Measuring Units



-
For measuring the melting point of powdery substances in glass capillaries.
Digital temperature control.
Membrane keyboard allows for easy cleaning.
Plain text display for error message.
Sample monitoring via illuminated lens.
Automatic rapid cooling via integrated ventilator.
With quick user's guide on unit (German / English).

Multi-function unit semi- / fully automatic MPM-HV 2:

With printer. 2 selectable measuring methods (visual or automatic) for independent testing of problem substances without transparent melting point or with discolouration. Fully automatic measurement: set desired temperature (approx. 3 °C below expected melting point). A filled capillary is inserted once the preset temperature has been reached. The unit then continues to heat to the melting point and automatically starts printing the transparency progression of the substance.

Semi-automatic MPM-H 2:

Semi-automatic melting point measuring unit without printer. A filled capillary is inserted once the preset temperature has been reached, visual inspection of capillary via magnifier. After pressing the 'start' key again, the unit will continue to heat at 1 °C / min. As soon as sample has melted, the value can be read on the display.

Semi-automatic MPM-H 2 / D:

Like semi-automatic MPM-H 2, however with printer. Printout without transparency progression.

Items supplied:

The desired melting point measuring unit and 100 melting point capillaries.

Technical Data:

Measuring range:	25.0 to 360.0 °C
Resolution:	0.1 °C

Accuracy: $\pm 0.5\text{ }^{\circ}\text{C}$ (+ 25 to + 200 $^{\circ}\text{C}$)
 $\pm 0.5\text{ }\%$ of mean value (rest measuring range)

Heating rate during rapid heating: approx. 4 min to 200 $^{\circ}\text{C}$
approx. 8 min to 350 $^{\circ}\text{C}$

Heating rate during measurement: 1 $^{\circ}\text{C}$ / min

Magnifier: 10-times

Light: 2 x LED

Dimensions (W x D x H): 230 x 220 x 280 mm

Weight: 4 kg

Mains supply: 115 to 230 V, 50 Hz

	Description	PU	Order No.	Manuf. Prod. No.
	Capillary tubes, 1.4 mm, one end closed	1	5830111	9.830 204
	CFS 1. capillary filler, for capillaries L x Ø 80 x 1.4 mm	1	5436983	001282
	Mini-printer	1	5830112	9.830 205

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +(727)345-47-04

Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: kdu@nt-rt.ru || сайт: <https://kleinfeld.nt-rt.ru/>