## Hei-VAP Ultimate



Precise setting of rotation speed and heating bath temperature on the digital touch display or – for quick access during an active process – directly via the knobs on the operating panel.

- Central operating panel with 7" touch display
- Clear display of all values (Basic and Advanced modes)
- With timer, limitation of max. temperature, multilingual menu and text display for error messages
- Separate knobs for rotation and heating with locking function to prevent accidental readjusting
- LED ring lights and pictogram to display the activity even from a distance
- Integrated solvent library to facilitate adjustment of the required vacuum on an external vacuum controller
- USB and Micro SD plus LAN / RS 232 interfaces (Lab 4.0 ready)
- Optional display of vapor temperature
- Subsequent upgrade to Hei-VAP Ultimate Control possible, including vacuum and chiller control

## Hei-VAP Expert - Technical Data

Permissible ambient conditions  5 - 31 °C at 80 % rel. humidity 32 - 40 °C decreasing lineary up to max 50% rel. humidity 32 - 40 °C decreasing lineary up to max 50% rel. humidity  Protection class IEC 60529  Lift  Hand lift or Motor lift  Height adjustment speed  Hand lift models: manual Motor lift models: 25 mm/s  Height adjustment  155 mm  Drive  brushless DC motor with electronic speed control  Heating capacity  1,300 W  Temp. range heating bath  20 - 210 °C  Temperature accuracy bath  ±1°C  Overheat protection bath  cut-off at 5 °C over set temperature via separate PT 1000  Bath temperature setting  7" LCD color graphic display  Heating bath temperature control  electronic / digital  Secondary overtemp. cut off  250 °C  Material heating bath  stainless steel V4A  Diameter heating bath  4.5 I  Display vapor temperature  Yes  Required accessories for display vapor temperature sensor  temperature  Integrated vacuum controller  -  Timer  Yes  Programmable ramps  Yes  Supply Power  1,400 W	Rotation speed indicator	7" LCD color graphic display
Height adjustment speed Hand lift models: manual Motor lift models: 25 mm/s  Height adjustment 155 mm  Drive brushless DC motor with electronic speed control  Heating capacity 1,300 W  Temp. range heating bath 20 - 210 °C  Temperature accuracy bath ±1°C  Overheat protection bath cut-off at 5 °C over set temperature via separate PT 1000  Bath temperature setting 7° LCD color graphic display  Heating bath temperature control electronic / digital  Secondary overtemp. cut off 250 °C  Material heating bath biameter heating bath 255 mm  Volume heating bath 4.5 I  Display vapor temperature Yes  Required accessories for display vapor temperature  Integrated vacuum controller  Timer Yes  Programmable ramps Yes	Permissible ambient conditions	32 - 40 °C decreasing lineary up to max 50%
Height adjustment speed  Hand lift models: manual Motor lift models: 25 mm/s  Height adjustment  155 mm  Drive  brushless DC motor with electronic speed control  Heating capacity  1,300 W  Temp. range heating bath  20 - 210 °C  Temperature accuracy bath  ±1°C  Overheat protection bath  cut-off at 5 °C over set temperature via separate PT 1000  Bath temperature setting  7" LCD color graphic display  Heating bath temperature control  electronic / digital  Secondary overtemp. cut off  250 °C  Material heating bath  255 mm  Volume heating bath  4.51  Display vapor temperature  Yes  Required accessories for display vapor temperature  Integrated vacuum controller  Timer  Yes  Programmable ramps  Yes	Protection class IEC 60529	IP 20
Height adjustment  Drive  brushless DC motor with electronic speed control  Heating capacity  1,300 W  Temp. range heating bath  20 - 210 °C  Temperature accuracy bath  ±1°C  Overheat protection bath  cut-off at 5 °C over set temperature via separate PT 1000  Bath temperature setting  7" LCD color graphic display  Heating bath temperature control  electronic / digital  Secondary overtemp. cut off  250 °C  Material heating bath  tainless steel V4A  Diameter heating bath  Volume heating bath  4.5 I  Display vapor temperature  Yes  Required accessories for display vapor temperature  Integrated vacuum controller  Timer  Yes  Programmable ramps  Motor lift models: 25 mm/s  1,300 W  20 - 210 °C  C  41°C  C  20 - 210 °C  20 - 210 °C  20 - 210 °C  20 - 210 °C  21 - 20 - 210 °C  21 - 20 - 210 °C  22 - 210 °C  23 - 210 °C  24 - 210 °C  24 - 210 °C  25 °C  At temperature via separature V4A  255 mm  Volume heating bath  4.5 I  Display vapor temperature  Yes  Programmable ramps  Yes	Lift	Hand lift or Motor lift
Drive brushless DC motor with electronic speed control  Heating capacity 1,300 W  Temp. range heating bath 20 – 210 °C  Temperature accuracy bath ±1°C  Overheat protection bath cut-off at 5 °C over set temperature via separate PT 1000  Bath temperature setting 7" LCD color graphic display  Heating bath temperature control electronic / digital  Secondary overtemp. cut off 250 °C  Material heating bath stainless steel V4A  Diameter heating bath 255 mm  Volume heating bath 4.5 I  Display vapor temperature Yes  Required accessories for display vapor temperature sensor  temperature  Integrated vacuum controller -  Timer Yes  Programmable ramps Yes	Height adjustment speed	
control         Heating capacity       1,300 W         Temp. range heating bath       20 − 210 °C         Temperature accuracy bath       ±1°C         Overheat protection bath       cut-off at 5 °C over set temperature via separate PT 1000         Bath temperature setting       7° LCD color graphic display         Heating bath temperature control       electronic / digital         Secondary overtemp. cut off       250 °C         Material heating bath       stainless steel V4A         Diameter heating bath       255 mm         Volume heating bath       4.5 l         Display vapor temperature       Yes         Required accessories for display vapor temperature sensor       Vapor temperature sensor         Integrated vacuum controller       -         Timer       Yes         Programmable ramps       Yes	Height adjustment	155 mm
Temp. range heating bath 20 – 210 °C  Temperature accuracy bath ±1°C  Overheat protection bath cut-off at 5 °C over set temperature via separate PT 1000  Bath temperature setting 7" LCD color graphic display  Heating bath temperature control electronic / digital  Secondary overtemp. cut off 250 °C  Material heating bath stainless steel V4A  Diameter heating bath 255 mm  Volume heating bath 4.5 I  Display vapor temperature Yes  Required accessories for display vapor temperature sensor  Integrated vacuum controller -  Timer Yes  Programmable ramps Yes	Drive	·
Temperature accuracy bath ±1°C  Overheat protection bath cut-off at 5 °C over set temperature via separate PT 1000  Bath temperature setting 7" LCD color graphic display  Heating bath temperature control electronic / digital  Secondary overtemp. cut off 250 °C  Material heating bath stainless steel V4A  Diameter heating bath 255 mm  Volume heating bath 4.5 I  Display vapor temperature Yes  Required accessories for display vapor temperature sensor  Integrated vacuum controller -  Timer Yes  Programmable ramps Yes	Heating capacity	1,300 W
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Secondary overtemp. cut off 250 °C  Material heating bath stainless steel V4A  Diameter heating bath 255 mm  Volume heating bath 4.5 I  Display vapor temperature Yes  Required accessories for display vapor temperature sensor  Integrated vacuum controller -  Timer Yes  Programmable ramps Yes	Bath temperature setting	7" LCD color graphic display
Material heating bath  Diameter heating bath  Volume heating bath  Volume heating bath  Display vapor temperature  Required accessories for display vapor temperature  Untegrated vacuum controller  Timer  Yes  Programmable ramps  Stainless steel V4A  255 mm  Vasor  Vasor  Yes  Yes  Yes  Yes	Heating bath temperature control	electronic / digital
Diameter heating bath  Volume heating bath  4.5 I  Display vapor temperature  Required accessories for display vapor temperature  Integrated vacuum controller  Timer  Yes  Programmable ramps  Yes	Secondary overtemp. cut off	250 °C
Volume heating bath  A.5 I  Display vapor temperature  Required accessories for display vapor temperature sensor  Integrated vacuum controller  Timer  Programmable ramps  4.5 I  Yes  Yes  Yapor temperature sensor	Material heating bath	stainless steel V4A
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Required accessories for display vapor temperature sensor  Integrated vacuum controller  Timer  Yes  Programmable ramps  Yapor temperature sensor  -  Yes	Volume heating bath	4.5
Integrated vacuum controller - Timer Yes Programmable ramps Yes	Display vapor temperature	Yes
Timer Yes Programmable ramps Yes		Vapor temperature sensor
Programmable ramps Yes	Integrated vacuum controller	-
	Timer	Yes
Supply Power 1,400 W	Programmable ramps	Yes
	Supply Power	1,400 W

## Premium Laboratory Equipment

Weight without glassware assembly	15 kg
Dimensions with glassware set G3 (w/d/h)	HL: 739 x 532 x 887 mm ML: 739 x 477 x 887 mm
Dimensions with glassware set G3 XL (w/d/h)	HL: 739 x 532 x 920 mm ML: 739 x 477 x 920 mm
Condensing surface	1,400 cm <sup>2</sup>
Condensing surface XL condenser	2,200 cm <sup>2</sup>
Max. size evaporating flask	5
Rotation speed range	10 - 280 rpm
Integrated Hei-CHILL controller	-
Vacuum program Dynamic AUTOaccurate requires AUTOaccurate sensor	_
Solvent libary	Yes