

## Hei-PLATE Mix 'n' Heat Ultimate

P/N: 506-41100-00



Precision and networking opportunities when heating or stirring

The Hei-PLATE Mix 'n' Heat Ultimate magnetic stirrer paves the way for future-oriented working practices: thanks to its equipment with numerous interfaces, it meets all requirements for digitalization and network. The RS232 and USB B interfaces allow a control via our Hei-Control software, free of charge, as well as our Hei-PROCESS solution. With the LAN interface, you can directly integrate the device into a network, whereas the USB A interface located at the front allows data logging via a USB stick. Use the USB C interface and combine the magnetic stirrer with the electric Heidolph lab jack to work even more comfortable and secure.

For controlling the temperature, you can choose between three heating modes: FAST for a particularly quick heating, as well as PRECISE and PRECISE+ for a particularly exact control of your target temperature without overshoot - this is how sensitive samples are optimally protected. Therefore, the device is compatible with the temperature sensor Pt1000 as well as the double sensor Pt1000 that allows the measurement in your sample and in the bath liquid simultaneously. The possibility to program ramps and to create profiles, gives you the full control and increases the precision and reproducibility of your experiments.

For the stirring speed, there is a three-stage setting (start-up behavior). Furthermore, you can set the rotational direction of the magnetic stirring bar and benefit from the automatic stir bar detector. As a result, your sample is optimally stirred at any time, even when there are irregularities while stirring.

This magnetic stirrer is equipped with the most important safety features. The large safety distance between the heating plate and the control panel, as well as the visual residual heat indicator at temperatures  $> 50\text{ }^{\circ}\text{C}$ , protect against burns.

The patented Kera-Disk<sup>®</sup> plate made of anodized aluminum is chemical-resistant, scratch-resistant and has a diameter of 145 mm. This unique size makes it suitable for the use with many accessories and samples on a small footprint. Moreover, the material used allows the fastest heating times.

## Hei-PLATE Mix 'n' Heat Ultimate - Technical Data

Overheat protection	Yes
Analog / digital interface	RS232, RJ45 (LAN), USB A, USB B, USB C
Permissible ambient conditions	5 – 31 °C at up to 80 % rel. humidity, 32 – 40 °C at up to 50 % rel. humidity (linearly reducing)
Weight	3 kg
Protection class (EN 60529)	IP 42
Drive	EC motor, counterclockwise/clockwise rotating
Timer	Yes
Display	2 x TFT display
Rotation speed range	100 – 1,400 rpm
Max. stirring capacity (H <sub>2</sub> O)	20 l
Power input	Normal operation 230 V: 825 W (EU) / 115 V: 625 W (US) Standby mode: 1.7 W
Temperature range	20 – 350 °C, setting accuracy 1 K
Temperature measurement accuracy	Operation with external temperature measuring sensor Pt1000: ± 0.2 K, plus tolerance Pt1000
Dimensions (w/d/h)	168 x 299 x 106 mm
Speed accuracy	± 2 %
Heating power	800 W at 230 V (EU) 600 W at 115 V (US)
Accuracy temperature setting	± 1 K
External temperature sensor	Pt100 / Pt1000
Temperature accuracy hotplate	-
Residual heat indicator	Yes
Max. Load	25 kg
Plate diameter ø	135 / 145 mm
Plate material	Kera-Disk®

Operating Mode	-
Speed range	-
Overvoltage Category	II
Connection	L+N+PE
Acoustic pressure	< 50 db(A)
Heating control	PID
Installation altitude	up to 2,000 m asl
EMC class	B, Group 1
Protection class IEC 61140	-
Protection class IEC 60529	I
Usable Surface heating plate	145 mm
Degree of pollution	2
Temperature measurement resolution	0,1 K
Rated Voltage	230 V, 50/60 Hz (EU) 115 V, 50/60 Hz (US)