

# **GUARDIAN™3000**

**Hotplate Stirrers** 



## Affordable Digital Hotplate Stirrers Designed for Safety, Powerful Stirring and Fast Heating

OHAUS Guardian 3000™ Hotplate Stirrers are designed for economical heating and stirring in all laboratory settings. The bright LCD display includes easy-to-read temperature and speed settings, intuitive icons and a prominent hot top indicator that lights up when the heater is above 40°C. Select from three plate sizes to suit your application. All models can be used with the optional temperature probe for precise temperature control of the sample.

## **Unique Features:**

- Industry leading safety at affordable prices. Guardian 3000 units offer safety, controlled heating and powerful stirring for general laboratory use - all at a competitive price point.
- SafetyHeat™ protects the lab. An industry-leading early detection system uses two independent safety controls to monitor the electronics and stop heating before an overtemperature condition occurs.
- Designed to last the rugged metal housing has a spill-resistant design for long life in the lab under harsh conditions. The smooth, chemical-resistant ceramic top makes for easy clean ups.

## **GUARDIAN**<sup>™</sup>**3000** Hotplate Stirrers

Specifications

## **Design to Last**

The rugged metal housing has a spillresistant design for long life in the lab under harsh conditions. The smooth, chemical-resistant full ceramic top makes for easy clean ups.



## SafetyHeat™

Industry-leading early detection system that uses two independent safety controls to continuously monitor the electronics and shut off heating before an overtemperature condition occurs.

## **Hot Caution**

In case the top plate temperature is over 40°C, a bright, ISO standard hot caution symbol illuminates for caution. Turning off the power switch, the symbol remain illuminates and the LCD displays "HOT" texts for additional caution.

### **Power Switch**

An easy-to-reach rocker switch to power on/off the unit. Protected by enclosure overhang from accidential spills.

Model No.	e-G31HSRDA	e-G31HS04C	e-G31HS07C		
Kit Model**	e-G31HSRDA -K1	e-G31HS04C -K1	e-G31HS07C -K1		
Function	Heating and Stirring				
Top Plate Size	Ø 5.3 in / 13.5 cm	4 x 4 in / 10.8 x 10.8 cm	7 x 7 in / 18 x 18 cm		
Top Plate Material	Ceramic Coated Stainless Steel Ceramic				
Control	Digital				
Display	75 x 20 mm White Character LCD				
Temperature Range	Ambient $+ 5^{\circ}\text{C} - 380^{\circ}\text{C}$ Ambient $+ 5^{\circ}\text{C} - 500^{\circ}\text{C}$				
Set Temperature Increments	1℃				
Temperature Readability	1℃				
Temperature Stability*	+/-3% Plate, below 100°C +/-2°C and +/-2% Probe, below 100°C +/-2°C				
Temperature Calibration (SPC) Set Points	1 point for Plate and 1 point for Probe				
Probe Connection	PT1000 (Class A)				
Heating Power	500W 500W	1000W at 120V 1000W at 230V			
Speed Range	80 - 1600 rpm				
Speed Stability*	+/-2%				
Stirring Capacity	15 L H2O				
IP Rating	IP21				
Housing	Painted Aluminum				
Dimensions (L x W x H)	26.4 x 16.3 x 10.1 cm 10.4 x 6.4 x 4.0 in	26.4 x 16.3 x 11.0 cm 10.4 x 6.4 x 4.3 in	31.8 x 22.3 x 11.2 cm 12.5 x 8.8 x 4.4 in		
Working Environment	41°F – 104°F, 80%RH, non-condensing / 5°C – 40°C, 80%RH, non-condensing				
Net Weight	5.5 lb. / 2.5 kg	5.5 lb. / 2.5 kg	8.6 lb. / 3.9 kg		
Power Input	550W at 120V 550W at 230V		1050W at 120V 1050W at 230V		
Electrical (50/60Hz)	100-1. 220-2	100-120V, 10A 220-240V, 7A			

<sup>\*</sup> Conditions permitting. Variations in temperature and speed measurement processes, vessel, ambient and sample will impact actual performance. To improve temperature accuracy of the system use the Single Point Calibration feature.

<sup>\*\*</sup> Kit-1 ("K1") has the Temperature Probe 30500590 and the Probe Holder Kit 30973298 included in package.



# **GUARDIAN™3000** Hotplate Stirrers Accessories

Item No.	Description	e-G31HS04C	e-G31HS07C	e-G31HSRDS
30500590	Probe PT1000(A) -40~400C 20cm SS316/304			
80500591	Probe PT1000(A) -40~200C 20cm PTFE			
30500592	Probe PT1000(A) -40~400C 25cm SS316/304			
30500593	Probe PT1000(A) -40~200C 25cm PTFE			
30973655	Probe PT1000(A) -40~400C 25cm Hastelloy	•		
30973298	Probe Holder Kit-1			
30983667	Connecting Clamp S/S Grip 13mm & 13mm			
30983668	Support Rod S/S D13 x L450 mm THR.M10			
30500597	Vessel Clamp			
30500598	Stir Bar Retriever	•		
30392314	Clamp, Specialty, Column, CLS-COLMNSS			
30392315	Clamp, Specialty, Column, CLS-COLMNSM	•		
30392316	Clamp, Specialty, Column, CLS-COLMNSL			
30392317	Clamp, Specialty, Column, CLS-COLMNSX			
30392318	Clamp, Specialty, Nester, CLS-NESTXS			
30400147	Spinbar 2.5 cm PTFE			
30400148	Spinbar 3.8 cm PTFE	•		
30400149	Spinbar 7 cm Oval PTFE	•		
30400150	Spinbar 10 cm with Pivot Ring PTFE	•		
30692826	Thermometer Holder Economic Kit	•		
30726783*	Spinbar 3.8 cm with Pivot Ring PTFE			
30500570	Base Plate 135 mm			
30500571	Handles for Base Plate			
30500572	Sectional Block 12 mm Vials			
30500573	Sectional Block 15 mm vials			
30500574	Sectional Block 17 mm Vials			
30500575	Sectional Block 21 mm Vials			
30500576	Sectional Block 28 mm Vials			
30500577	Sectional Block 12 mm Test Tubes			
30500578	Sectional Block 16 mm Test Tubes			
30500579	Sectional Block 20 mm Test Tubes			
30500580	Sectional Block 25 mm Test Tubes			
30500581	Uni Block 12 mm Vials			
30500582	Uni Block 15 mm vials			
30500583	Uni Block 17 mm Vials			
30500584	Uni Block 21 mm Vials			
0500585	Uni Block 28 mm Vials			•
30500586	Uni Block 12 mm Test Tubes			
30500587	Uni Block 16 mm Test Tubes			
0500588	Uni Block 20 mm Test Tubes			
30500589	Uni Block 25 mm Test Tubes			•
0392233**	Clamp, Specialty, Rod, CLS-RODS			

<sup>\*</sup> pack of 5 spinbars

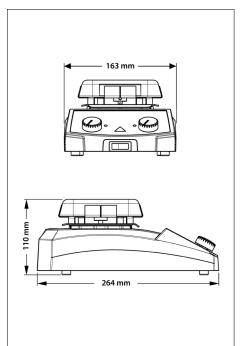


<sup>\*\* 30392233</sup> is for use with the 30500570 Base Plate only

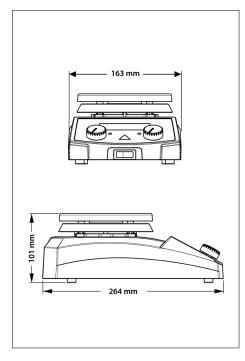
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## **Outline Dimensions**

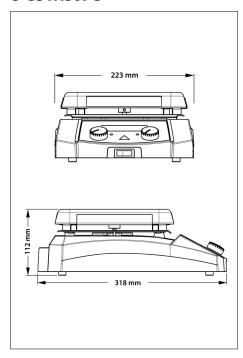
## e-G31HS04C



## e-G31HSRDS



## e-G31HS07C



## **Other Features and Equipment**

ON/OFF switch, Green indicator lights when unit is heating and stirring, probe in use icon, Single Point Calibration icon, rotary switch knob control, 1x built-in support rod holder, text and symbol HOT caution indicators, smooth enclosure surfaces for easy cleaning, audible alarm, IP21 Ingress Protection, robust full metal housing, ceramic square top plate or ceramic-coated stainless steel round top plate, high performance SmCo magnet.

## **Compliance**

- **Product Safety:** CE, TUV TÜV SÜD certified to CAN/CSA C22.2 61010-1; CAN/CSA C22.2 61010- 2-010; CAN/CSA C22.2 61010-2-051; UL 61010-1; UL 61010-2-010; UL 61010-2-051
- Electromagnetic Compatibility: Canada ICES-003 Class A; FCC Part 15 Class A













