



# GUARDIAN™ 5000

Hotplate Stirrers



## *Reliable Hotplate Stirrers with Exceptional Safety Features for Everyday Use*

OHAUS Guardian 5000™ Hotplates Stirrers are designed for safety and simplicity in all research, academia and industrial applications. The design ensures proper mixing and temperature control of the top plate or your sample when using the optional temperature probe. Heating models include a Single Point Calibration feature for multiple setpoints. Select from five models with three plate sizes for your everyday heating and stirring applications.

### *Unique Features:*

- **SafetyHeat™ System Protects the Lab**

An 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.

- **Powerful, Consistent Stirring Performance**

Precise stirring from 60 to 1600 rpm is made possible by the design of a powerful motor, strong magnet and software controlled ramp rate, ensuring secure magnetic coupling for viscous applications.

- **Easy to Read LCD Display With Everything You Need to Know**

The bright LCD display includes large temperature and speed settings, intuitive icons and a prominent hot top indicator - all designed to quickly and easily monitor performance from across the lab.

- **Designed for Durability and Reliability with the Exclusive SmartHousing™**

The SmartHousing™ is chemical resistant with an innovative, easy-to-clean design that channels spills away from internal components and the angled control panel.

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## SafetyHeat™

Industry-leading internal protection system to assure safety in heating applications with dual monitoring of system health.

## Additional Features

Built-in Rod Support Holder and IP21 Ingress Protection.

## Top Plates

Sizes available in 7" x 7" ceramic or resin, 10" x 10" ceramic and 5.3" diameter round aluminum.

## Display

Large backlit LCD clearly displays temperature and speed.



## SmartHousing™

Stays cool to the touch and is chemical resistant.

| Model                   | e-G51ST07R  | e-G51HP07C   | e-G51HS07C                                | e-G51HS10C                                    | e-G51HSRDM                                   |
|-------------------------|---|--|---|---|--|
| Function                | Stirring  | Heating  | Heating and Stirring                      |   |  |
| Top Plate Size          | 7 x 7 in<br>17.8 x 17.8 cm  |  |   | 10 x 10 in<br>25.4 x 25.4 cm                  | 5.3 in diameter<br>13.5 cm diameter          |
| Speed Range             | 60 rpm to 1600 rpm  | --   | 60 rpm to 1600 rpm                        |   |  |
| Speed Stability         | +/-2 %  | --   | +/-2 %                                    |   |  |
| Temperature Range       | --  | Ambient + 5 °C – 500 °C  |   |   | Ambient + 5 °C – 380 °C                      |
| Temperature Stability*  | --  | +/-3 % Plate, below 100 °C +/-2 °C<br>and +/-1 % Probe, below 100 °C +/-1 °C |   |   |  |
| Temperature Calibration | --  | 3 Plate and 3 Probe  |   |   |  |
| Control                 | Digital   |  |   |   |  |
| Display                 | Backlit LCD for Speed   | Backlit LCD for Temperature  | Backlit LCD for Temperature and Speed     |   |  |
| Capacity                | 15 L  |  |   | 18 L  | 20 L   |
| Top Plate Material      | Resin   | Ceramic  |   |   | Aluminum                                     |
| Dimensions (H x L x W)  | 4.8 x 12.2 x 8.8 in<br>12.2 x 30.9 x 22.3 cm                                    |  |   | 4.8 x 16.3 x 11.3 in<br>12.2 x 41.5 x 28.6 cm | 5.0 x 10.5 x 6.8 in<br>12.6 x 26.7 x 17.3 cm |
| Net Weight              | 5.7 lb. / 2.6 kg  |  |   | 11.5 lb. / 5.2 kg                             | 5.7 lb. / 2.6 kg                             |
| Power                   | 120V, 1.0A, 50/60Hz<br>230V, 0.5A, 50/60Hz                                      | 120V, 10A, 50/60Hz<br>230V, 6.0A, 50/60Hz                                    | 120V, 11.2A, 50/60Hz<br>230V, 7A, 50/60Hz |   | 120V, 8.3A, 50/60Hz<br>230V, 4.6A, 50/60Hz   |
| Power Consumption       | 108W (120V)<br>104W (230V)  | 1080W (120V)<br>1242 (230V)  | 1210W (120V)<br>1449W (230V)              |   | 896W (120V)<br>952W (230V)                   |
| Working Environment     | 41 °F – 104 °F, 80 % RH, non-condensing / 5 °C – 40 °C, 80 % RH, non-condensing |  |   |   |  |

\* Conditions permitting. Variations in temperature measurement process, vessel, ambient and sample will impact actual performance.

# GUARDIAN™ 5000 Hotplate Stirrers Accessories

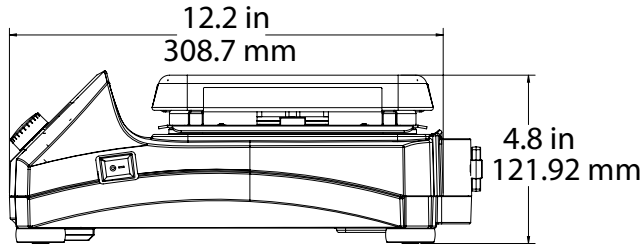
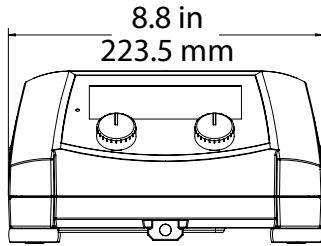
| Item No.  | Description                           | e-G51ST07R | e-G51HP07C | e-G51HS07C | e-G51HS10C | e-G51HSRDM |
|-----------|---------------------------------------|------------|------------|------------|------------|------------|
| 30500570  | Base Plate, 135 mm                    |            |            |            |            | ●          |
| 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                |            |            |            |            | ●          |
| 30500585  | Uni Block, 28 mm Vials                |            |            |            |            | ●          |
| 30500586  | Uni Block, 12 mm Test Tubes           |            |            |            |            | ●          |
| 30500587  | Uni Block, 16 mm Test Tubes           |            |            |            |            | ●          |
| 30500588  | Uni Block, 20 mm Test Tubes           |            |            |            |            | ●          |
| 30500589  | Uni Block, 25 mm Test Tubes           |            |            |            |            | ●          |
| 30392233* | Clamp, Specialty, Rod, CLS-RODS       |            |            |            |            | ●          |
| 30500590  | Temperature Probe, 20 cm S/S          |            | ●          | ●          | ●          | ●          |
| 30500591  | Temperature Probe, 20 cm PTFE         |            | ●          | ●          | ●          | ●          |
| 30500592  | Temperature Probe, 25 cm S/S          |            | ●          | ●          | ●          | ●          |
| 30500593  | Temperature Probe, 25 cm PTFE         |            | ●          | ●          | ●          | ●          |
| 30500594  | In Use Cover Guardian, 7" x 7"        | ●          | ●          | ●          |            |            |
| 30500595  | In Use Cover Guardian, 10" x 10"      |            |            |            | ●          |            |
| 30500596  | In Use Cover Guardian, Round          |            |            |            |            | ●          |
| 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  | ●          | ●          | ●          | ●          | ●          |
| 30400145  | Ultra Flex Support Kit                | ●          | ●          | ●          | ●          | ●          |
| 30400146  | Support Rod And Clamp Kit             | ●          | ●          | ●          | ●          | ●          |
| 30400147  | Spinbar, 2.5 cm PTFE                  | ●          |            | ●          | ●          | ●          |
| 30400148  | Spinbar, 3.8 cm PTFE                  | ●          |            | ●          | ●          | ●          |
| 30400149  | Spinbar, 7 cm PTFE                    | ●          |            | ●          | ●          | ●          |
| 30400150  | Spinbar, 10 cm with Pivot Ring PTFE   | ●          |            | ●          | ●          | ●          |

\*30392233 is for use with the 30500570 Base Plate only

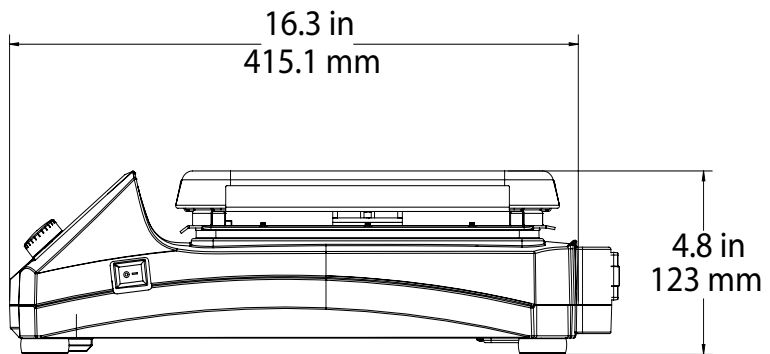
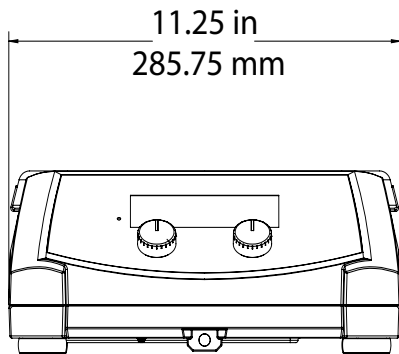
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## Outline Dimensions

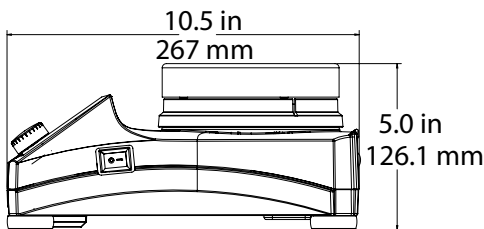
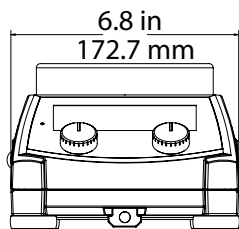
e-G51ST07R, e-G51HP07C and e-G51HS07C



e-G51HS10C



e-G51HSRDM



## Other Features and Equipment

Green indicator lights when unit is heating and stirring, probe in use icon, Single Point Calibration icon, probe connection, IP21 Ingress Protection, polycarbonate front panel, control knobs, On/Off switch for heater disconnect, built-in support rod holder, audible alarm

## Compliance

- **Product Safety:** 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
- **Compliance Mark:** TÜV SÜD