



GUARDIAN™ SERIES

# Think Safer. Think SMART.

Modernize your lab with the  
**Guardian Series Hotplate Stirrers**  
designed with outstanding safety and  
superior performance in mind.



*Ingeniously Practical*



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# Think Safer. Think SMART.

## Modernize Your Lab with the Guardian Series Hotplate Stirrers

Featuring OHAUS SMART technology, the Guardian Series protects the lab with advanced safety features designed to reduce the chance of accidents. Designed with superior heating and stirring performance, the Guardian 7000 and 5000 Series Hotplate Stirrers combine durability and affordability to reduce the high costs of doing business in science labs.

Modernize your lab with OHAUS SMART technology including **\*SmartPresence™**, **\*SmartLink™**, **\*SmartRate™**, **\*SmartHeat™**, **SafetyHeat™**, and **SmartHousing™**. The bright LCD screen displays temperature, speed and \*time, and a green indicator lights when the unit is heating and stirring.



(\* in the Guardian 7000 Series only)

# GUARDIAN 7000

Durable Hotplate Stirrers with Superior Safety Features and Intelligent Performance

OHAUS Guardian 7000 Hotplate Stirrers are designed with outstanding safety features and superior heating and mixing performance. The SmartHousing is chemical resistant with an innovative, easy-to-clean design that channels spills away from internal components and the angled glass control panel. The bright LCD display includes intuitive icons, temperature, speed and time settings - all designed to monitor performance from across the lab.



SmartPresence



SmartLink



SmartHeat



SmartHousing



SafetyHeat



SmartRate

Model e-G71HS07C

# Unique Features



## SmartPresence and SmartLink Technologies Ensure Supervised Operation

Protect your lab with SmartPresence and SmartLink technologies. These exclusive features automatically shut off the heater if no one is detected after a user set "time out" period has passed or the \*Bluetooth® link between a paired mobile device is broken.

## 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.

## Customized Performance for Precise Applications

SmartHeat allows you to set the maximum temperature of the unit and SmartRate enables fast or slow temperature and speed ramp rates. The programming feature allows storage of 5 multi-step programs.

Model No.	e-G71HS07C	e-G71HS10C	e-G71HSRDM
Top Plate Size	17.8 x 17.8 cm (Square)	25.4 x 25.4 cm (Square)	13.5 cm diameter (Round)
Capacity	15 L	18 L	20 L
Function	Heating and Stirring		
Top Plate Material	Ceramic		Aluminum
Speed Range	60 rpm to 1600 rpm		
Temperature Range	Ambient + 5 °C – 500 °C		Ambient + 5 °C – 380 °C

\*The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by OHAUS is under license.

# GUARDIAN 5000

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.



SafetyHeat



SmarrHousing



Model e-G51HSRDM

# 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.

Model No.	e-G51ST07C	e-G51HP07C	e-G51HS07C	e-G51HS10C	e-G51HSRDM
<b>Top Plate Size</b>	17.8 x 17.8 cm (Square)			25.4 x 25.4 cm (Square)	13.5 cm diameter (Round)
<b>Capacity</b>	15 L			18 L	20 L
<b>Function</b>	Stirring	Heating	Heating and Stirring		
<b>Top Plate Material</b>	Ceramic				Aluminum
<b>Speed Range</b>	60 rpm to 1600 rpm	--	+/-2 %	60 rpm to 1600 rpm	
<b>Temperature Range</b>	--	Ambient + 5 °C – 500 °C			Ambient + 5 °C – 380 °C

# GUARDIAN SERIES

## *Frequently Asked Questions*

### **What differentiates the Guardian 7000 Hotplate Stirrers?**

**SmartLink** – provides long-range user detection for improving safety when using the heating function.

**SmartPresence** – detects when a user is nearby and safely turns off the heating function when no one is detected.

**SmartHeat** – allows users to control the maximum temperature, preventing overheating of sensitive samples.

**SafetyHeat** – our industry leading internal protection system assures safety in heating applications with dual-monitoring of system health.

**SmartRate** – allows users to safeguard sensitive applications with precise control of temperature and speed ramp rates.

**SmartHousing** – ensures that every Guardian hotplate stirrer is consistently safe to use at high temperature settings by remaining cool to the touch. The innovative design is easy to clean and channels spills away from the internal components, as well as being constructed from a chemical resistant material for long-term use in the lab.

### **How can the Guardian 7000 safeguard sensitive applications?**

For precise sample control with the Guardian 7000, use the included temperature probe and enable **SmartRate** to select fast or slow temperature and speed ramp rates.

**SmartHeat** allows lab users to limit the maximum temperature of the hotplate stirrer preventing overheating of sensitive samples -- keeping the user and samples safe.

### **What are the benefits of using the Guardian Series Hotplate Stirrers with round top plates?**

The Guardian round top models are ideal for biochemistry and chemistry labs that carry out complex heating and stirring applications and increase productivity by utilizing multiple positions to perform experiments in parallel. Round top models save valuable bench space and accept a wide range of aluminum block accessories that can accommodate standard vials and test tubes.







## What type of Guardian top plate material best suits the lab, ceramic or aluminum?

Ceramic and aluminum top plates are both suitable for lab use and each material has its benefits.

Ceramic top plates are chemical resistant and safer if working with corrosive chemicals that may splash onto the plate surface. They can withstand higher temperatures up to 500 °C and can be wiped clean.

The white surface of a ceramic top plate is preferable for quantitative chemical analysis or other work where clear visibility of the sample color is required.

The edges of a ceramic top plate may not be as hot as the center. This may not be suitable if uniform heating over the entire plate surface is needed for the application. Aluminum top plates offer more uniform temperature over the entire heating surface and will not crack or chip, and will withstand accidental handling.

To avoid thermal shock, glassware should be used on ceramic top plates and heating of metallic vessels should be avoided. Ceramic top plate units are also not suitable for sandbaths or any vessel that may reflect heat back onto the surface which may cause thermal shock.

## What types of applications are the Guardian 5000 Series Hotplate Stirrers designed for?

Guardian 5000 Series are designed for safety and simplicity in all academia, research, and industrial applications. The design ensures proper mixing and temperature control of the top plate or your sample when used with the optional temperature probe.

## Which features are built into the Guardian 5000 Series to make it safe for use in academic settings?

The Guardian 5000 Series are designed for durability, reliability, and safety with its exclusive **SmartHousing** and **SafetyHeat**.

**SmartHousing** remains cool to the touch at all temperature settings, is chemical resistant, and is an easy-to-clean design that channels away spills from internal components and the front panel.

**SafetyHeat** system protects the lab with an industry-leading early detection system that uses two independent safety controls to continuously monitor the electronics and shuts off heating before an overtemperature condition occurs.

# GUARDIAN SERIES

## Comparison Chart

FEATURES	GUARDIAN 7000	GUARDIAN 5000	OHAUS MINI HOTPLATE STIRRER
SmartLink	X	-	-
SmartPresence	X	-	-
SmartHeat	X	-	-
SafetyHeat	X	X	-
SmartRate	X	-	-
SmartHousing	X	X	X
Hardened glass front panel	X	-	-
Polycarbonate front panel	-	X	X
Probe connection	X	X	-
Easy-to-clean ceramic/aluminum tops	X	X	X
Built-in support rod holder	X	X	X
USB port	X	-	-
Green indicator lights for heating/stirring	X	X	-
IP21 ingress protection	X	X	-
Control knobs	X	X	X
On/Off switch for heater disconnect	X	X	X
Probe in use icon	X	X	-
Audible alarm	X	X	-
Temperature calibration feature: 3 probe/3 plate	-	X	-
Temperature calibration feature: 5 probe/5 plate	X	-	-
Icons for SmartRate™, SmartHeat™, SmartPresence™, SmartLink™	X	-	-
LCD display	X	X	-
Timer	X	-	-

# GUARDIAN SERIES

## Accessories\*



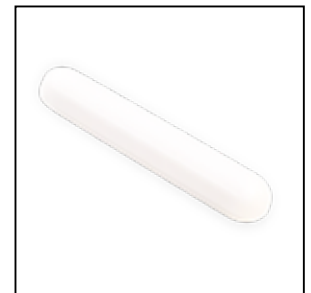
**Vial and Test Tube Blocks**



**Base Plate and Handles**



**Temperature Probe**



**Spin Bars**



**Ultra Flex Support Kit**



**In Use Cover**



**Support Rod and Clamp Kit**



**Vessel Clamps and Clamp Kit**

\*40 accessories available for Guardian Series



## OHAUS Corporation

*Headquartered in Parsippany, NJ, OHAUS Corporation manufactures an extensive line of balances and scales, lab equipment and lab instruments that meet the weighing, sample processing and measurement needs of multiple industries. We are a global leader in the laboratory, industrial and education markets, as well as a host of specialty markets, including the food preparation, pharmacy and jewelry industries. An ISO 9001:2015 manufacturer, OHAUS lab balances, industrial scales, lab equipment and lab instruments are precise, reliable and affordable, and backed by industry-leading customer support.*

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