

# Heavy Duty Orbital Shakers



With load capacities from 35 to 150 lb and over 70 accessory options, OHAUS Heavy Duty Shakers are designed to handle a range of applications. Available as analog or digital models with microprocessor control to provide variable speed and consistent shaking, while ramping to the set speed. Microprocessor displays the last set-point and will restart if power is interrupted. Built-in tray and non-slip rubber mat included with all models.

- Patented Accu-Drive Shaking System Ensures Accuracy and Speed Control
- Touchpad Control With Independent LED Displays for Speed/Time on Digital Models
- Safety Features Include Speed Ramping and Load Sensor

## Heavy Duty Orbital Shaker

- Microprocessor controls
- Continuous or timed operation
- 35 lb weight capacity

The OHAUS 16 kg Capacity Analog Heavy Duty Orbital Shaker is designed for a wide range of applications that require basic shaking control. Shaker provides reproducible motion that is evenly distributed throughout the entire surface of the tray.

### Operating Features:

**Microprocessor Control:** The variable speed microprocessor control provides consistent uniform shaking action. The shaker will automatically restart after a power interruption.

**Triple Eccentric Drive:** Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

**Adjustment Knobs:** Basic speed and time knobs with dial settings from 1 to 10.

### Safety Features:

**Speed Ramping Feature:** Slowly increases speed to desired set-point to avoid splashing.

**Spill-Resistant Design:** Channels fluids away from internal components.

### Operating Conditions:

Unit can be run in cold rooms, incubators, and CO<sub>2</sub> environments from 0 to 40°C (32 to 104°F), maximum 80% relative humidity, non-condensing.

### Applications:

Bacterial suspensions, staining/destaining, and general mixing.

### Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with an 11 × 13" (27.9 × 33 cm) non-skid rubber mat.



Specifications	
Speed Range	25 to 500 rpm
Timer	1 minute to 120 minutes
Orbit	19 mm (0.75")
Maximum Weight Capacity	35 lbs (16 kg)
Tray Material	Aluminum
Tray Dimensions (L × W)	11 × 13" (27.9 × 33 cm)
Overall Dimensions (L × W × H)	16.3 × 14.0 × 5.9" (41.3 × 35.5 × 14.9 cm)
Ship Weight	49 lbs (22.2 kg)

Description	Model	Item Number	Country Code
16 kg Capacity Analog Heavy Duty Orbital Shaker	SHHD1619AL	30391803	AU, NZ

# Open Air Shakers

## Heavy Duty Orbital Shaker

- Exceptional speed control, accuracy and durability
- LED displays for speed and time
- Calibration mode for speed

The OHAUS 16 kg Capacity Digital Heavy Duty Orbital Shaker is designed for a wide range of applications, including cell cultures, that require accurate and repeatable results. The microprocessor control provides consistent uniform shaking while safely ramping to the set speed.

### Operating Features:

**Accu-Drive Shaking System:** The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is  $\pm 1\%$  of set speed. When set under 100 rpm, speed accuracy is  $\pm 1$  rpm.

**Microprocessor Control:** The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

**Triple Eccentric Drive:** Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

**LED Display:** Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

**RS232 Interface:** Provides two-way communication for data logging and unit control.

**Speed Calibration Mode:** Allows user to automatically recalibrate speed display.

### Safety Features:

**Load Sensor:** A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.

**Overload Protection:** Audible and visual signals will activate when system detects an obstruction or overload of the tray.

**Speed Ramping Feature:** Slowly increases speed to desired set-point to avoid splashing.

**Audible Alarm:** In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.

**Spill-Resistant Design:** Channels fluids away from internal components.

### Operating Conditions:

Unit can be run in cold rooms, incubators, and CO<sub>2</sub> environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

### Applications:

Cell cultures, solubility studies, and extraction procedures.

### Ordering Information:

Unit includes a detachable, 3-wire cord and plug. Unit is also supplied with an 11 x 13" (27.9 x 33 cm) non-skid rubber mat.



Specifications	
Speed Range	15 to 500 rpm
Speed Accuracy	above 100 rpm $\pm 1\%$ of set speed below 100 rpm $\pm 1$ rpm
Timer	1 second to 160 hours
Orbit	19 mm (0.75") orbit
Maximum Weight Capacity	35 lbs (16 kg)
Tray Material	Aluminum
Tray Dimensions (L x W)	11 x 13" (27.9 x 33 cm)
Overall Dimensions (L x W x H)	16.3 x 14.0 x 5.9" (41.3 x 35.5 x 14.9 cm)
Ship Weight	49 lbs (22.2 kg)

Description	Model	Item Number	Country Code
16 kg Capacity Digital Heavy Duty Orbital	SHHD1619DG	30391812	AU, NZ

## Heavy Duty Orbital Shaker

- Microprocessor controls
- Continuous or timed operation
- 50 lb weight capacity

The OHAUS Analog 23 kg Capacity Heavy Duty Orbital Shaker is designed for applications with heavy duty loads. Shaker provides reproducible motion that is evenly distributed throughout the entire surface of the tray.

### Operating Features:

**Microprocessor Control:** The variable speed microprocessor control provides consistent uniform shaking action. The shaker will automatically restart after a power interruption.

**Triple Eccentric Drive:** Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

**Adjustment Knobs:** Basic speed and time knobs with dial settings from 1 to 10.

### Safety Features:

**Speed Ramping Feature:** Slowly increases speed to desired set-point to avoid splashing.

**Spill-Resistant Design:** Channels fluids away from internal components.

### Operating Conditions:

Unit can be run in cold rooms, incubators, and CO<sub>2</sub> environments from 0 to 40°C (32 to 104°F), maximum 80% relative humidity, non-condensing.

### Applications:

Bacterial suspensions, staining/destaining, and general mixing.

### Ordering Information:

Units include a 3-wire cord and plug. Units are also supplied with an 18 × 24" (45.7 × 61 cm) non-skid rubber mat.



Specifications	
Speed Range	25 to 500 rpm
Timer	1 minute to 120 minutes
Orbit	25 mm (1")
Maximum Weight Capacity	50 lbs (22.7 kg)
Tray Material	Aluminum
Tray Dimensions	18 × 24" (45.7 × 61 cm)
Overall Dimensions (L × W × H)	24.0 × 26.7 × 5.9" (61.0 × 67.8 × 14.9 cm)
Ship Weight	109 lbs (49.5 kg)

Description	Model	Item Number	Country Code
Analog 23 kg Capacity Heavy Duty Orbital Shaker	SHHD2325AL	30391838	AU, NZ

# Open Air Shakers

## Heavy Duty Orbital Shaker

- Patented Accu-Drive Shaking System
- LED displays for speed and time
- 50 lb weight capacity



The OHAUS Digital 23 kg Capacity Heavy Duty Orbital Shaker is designed for a wide range of applications with larger or heavier loads that require accurate and repeatable results.

### Operating Features:

**Accu-Drive Shaking System:** The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is  $\pm 1\%$  of set speed. When set under 100 rpm, speed accuracy is  $\pm 1$  rpm.

**Microprocessor Control:** The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

**Triple Eccentric Drive:** Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

**LED Display:** Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

**RS232 Interface:** Provides two-way communication for data logging and unit control.

**Speed Calibration Mode:** Allows user to automatically recalibrate speed display.

### Safety Features:

**Load Sensor:** A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.

**Overload Protection:** Audible and visual signals will activate when system detects an obstruction or overload of the tray.

**Speed Ramping Feature:** Slowly increases speed to desired set-point to avoid splashing.

**Audible Alarm:** In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.

**Spill-Resistant Design:** Channels fluids away from internal components.

### Operating Conditions:

Unit can be run in cold rooms, incubators, and CO<sub>2</sub> environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

### Applications:

Cell cultures, solubility studies, and extraction procedures.

### Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with an 18 x 24" (45.7 x 61 cm) non-skid rubber mat.



Specifications	
Speed Range	20 to 500 rpm
Speed Accuracy	above 100 rpm $\pm 1\%$ of set speed below 100 rpm $\pm 1$ rpm
Timer	1 second to 160 hours
Orbit	25 mm (1")
Maximum Weight Capacity	50 lbs (22.7 kg)
Tray Material	Aluminum
Tray Dimensions	18 x 24" (45.7 x 61 cm)
Overall Dimensions (L x W x H)	24.0 x 26.7 x 5.9" (61.0 x 67.8 x 14.9 cm)
Ship Weight	109 lbs (49.5 kg)

Description	Model	Item Number	Country Code
Digital 23 kg Capacity Heavy Duty Orbital Shaker	SHHD2325DG	30391845	AU, NZ





## Heavy Duty Orbital Shaker

- Patented Accu-Drive Shaking System
- 100 lb weight capacity
- Available with either 1" or 2" orbit

The OHAUS Digital 45 kg Capacity Orbital Shaker is a large capacity shaker. They have a more powerful drive mechanism and larger orbits for optimal shaking of large vessels.

### Operating Features:

**Accu-Drive Shaking System:** The exclusive patented Shaking System delivers exceptional speed control, accuracy, and durability. The shaking system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is  $\pm 1\%$  of set speed. When set under 100 rpm, speed accuracy is  $\pm 1$  rpm.

**Microprocessor Control:** The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

**Triple Eccentric Drive:** Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

**LED Display:** Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

**RS232 Interface:** Provides two-way communication for data logging and unit control.

**Speed Calibration Mode:** Allows user to automatically recalibrate speed display.

### Safety Features:

**Load Sensor:** A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.

**Overload Protection:** Audible and visual signals will activate when system detects an obstruction or overload of the tray.

**Speed Ramping Feature:** Slowly increases speed to desired set-point to avoid splashing.

**Audible Alarm:** In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.

**Spill-Resistant Design:** Channels fluids away from internal components.

### Operating Conditions:

Units can be run in cold rooms, incubators, and CO<sub>2</sub> environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

### Applications:

Cell cultures, solubility studies, and extraction procedures.

### Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 24 x 24" (61 x 61 cm) non-skid rubber mat.



Specifications		
Speed Range	SHHD4525DG SHHD4550DG	15 to 500 rpm 15 to 300 rpm
Speed Accuracy		above 100 rpm $\pm 1\%$ of set speed below 100 rpm $\pm 1$ rpm
Timer		1 second to 160 hours
Orbit	SHHD4525DG SHHD4550DG	25 mm (1") 51 mm (2")
Maximum Weight Capacity		100 lbs (45.4 kg)
Tray Material		Aluminum
Tray Dimensions (L x W)		24 x 24" (61 x 61 cm)
Overall Dimensions (L x W x H)		28.7 x 26.7 x 6.7" (72.9 x 67.8 x 17.0 cm)
Ship Weight		200 lbs (90.8 kg)

Description	Model	Item Number	Country Code
Digital 45 kg Capacity Heavy Duty Orbital Shaker 1" Orbit	SHHD4525DG	30391866	AU, NZ
Digital 45 kg Capacity Heavy Duty Orbital Shaker 2" Orbit	SHHD4550DG	30391873	AU, NZ

# Open Air Shakers

## Heavy Duty Orbital Shaker



- Patented Accu-Drive Shaking System
- Available with either 1" or 2" orbit
- Calibration mode for speed

The OHAUS Digital 68 kg Capacity Orbital Shakers is the largest capacity shakers designed for the heaviest of loads. They have the most powerful drive mechanism of all the shakers and large orbits for optimal shaking of larger vessels.



### Operating Features:

**Accu-Drive Shaking System:** The exclusive patented Accu-Drive Shaking System delivers exceptional speed control, accuracy, and durability. The system continuously monitors shaking speed and maintains set-point, even under changing loads. When unit is set to a speed above 100 rpm, the speed accuracy is  $\pm 1\%$  of set speed. When set under 100 rpm, speed accuracy is  $\pm 1$  rpm.

**Microprocessor Control:** The variable speed microprocessor control provides consistent uniform shaking action. Microprocessor will display last set-point and will restart if power is interrupted.

**Triple Eccentric Drive:** Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty operation.

**LED Display:** Touch pad controls with easy-to-read, independent LED displays for speed and time allow operator to view both settings at once. Provides repeatable and accurate results every time and is easily visible across lab benches. Timer will display elapsed time or, when programmed to user defined limit, will shut off unit when time reaches zero. Display will show last used settings, even after power has been turned off.

**RS232 Interface:** Provides two-way communication for data logging and unit control.

**Speed Calibration Mode:** Allows user to automatically recalibrate speed display.

### Safety Features:

**Load Sensor:** A built-in load sensor detects unbalanced conditions and automatically reduces rpm to a safe speed to protect samples.

**Overload Protection:** Audible and visual signals will activate when system detects an obstruction or overload of the tray.

**Speed Ramping Feature:** Slowly increases speed to desired set-point to avoid splashing.

**Audible Alarm:** In timed mode, alarm will sound when the time reaches zero. Alarm has optional mute function which can be set from the touch pad control.

**Spill-Resistant Design:** Channels fluids away from internal components.

### Operating Conditions:

Units can be run in cold rooms, incubators, and CO<sub>2</sub> environments from -10 to 60°C (14 to 140°F), maximum 80% relative humidity, non-condensing.

### Applications:

Cell cultures, solubility studies, and extraction procedures.

### Ordering Information:

Units include a detachable, 3-wire cord and plug. Units are also supplied with a 24 x 36" (61 x 91 cm) non-skid rubber mat.

Specifications		
Speed Range	SHHD6825DG SHHD6850DG	15 to 500 rpm 15 to 300 rpm
Speed Accuracy		above 100 rpm $\pm 1\%$ of set speed below 100 rpm $\pm 1$ rpm
Timer		1 second to 160 hours
Orbit	SHHD6825DG SHHD6850DG	25 mm (1") 51 mm (2")
Maximum Weight Capacity		150 lbs (68 kg)
Tray Material		Aluminum
Tray Dimensions (L x W)		24 x 36" (61 x 91 cm)
Overall Dimensions (L x W x H)		29.3 x 36.0 x 6.7" (74.4 x 91.4 x 17.0 cm)
Ship Weight		230 lbs (104.4 kg)

Description	Model	Item Number	Country Code
Digital 68 kg Capacity Heavy Duty Orbital Shaker 1" Orbit	SHHD6825DG	30391880	AU, NZ
Digital 68 kg Capacity Heavy Duty Orbital Shaker 2" Orbit	SHHD6850DG	30391887	AU, NZ



## OHAUS Corporation

Headquartered in Parsippany, NJ, OHAUS Corporation manufactures an extensive line of high-precision electronic and mechanical balances and scales that meet the weighing needs of virtually every industry. We are a global leader in the laboratory, industrial, and education channels as well as a host of specialty markets, including the food preparation, pharmacy and jewelry industries. An ISO 9001:2008 manufacturer, OHAUS products are precise, reliable and affordable, and are backed by industry-leading customer support. For additional information, contact OHAUS Corporation at 1.973.377.9000, or visit [www.ohaus.com](http://www.ohaus.com).



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