ENDEAVOR™ 5000

Light Duty Orbital Shakers

Digital light duty orbital shakers you can trust for everyday shaking.

Endeavor™ Light Duty Shakers are available in 3 models: 3 mm orbit, 20 mm orbit, or dedicated microplate model. All models can be used in incubators and cold rooms. Stable, accurate, long-term shaking is ensured with the triple eccentric drive and maintenance-free brushless DC motor. Integrated overload and unbalanced detection to protect samples.

Unique Features:

- Budget-friendly – no need to buy a separate tray. Ready to attach a wide variety of accessories to customize for low to mid volume applications.
- Programmable – save time and guarantee reproducible results. Simple on-board menu to set, store and recall multi-step programs.
- Data logging and control – remote function permits PC control and data transfer.

ENDEAVOR™ 5000 *Light Duty Orbital Shakers*

Specifications

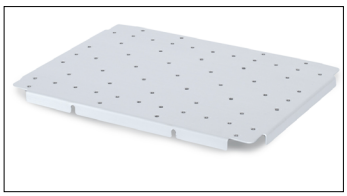
Model	e-E51LD0403		e-E51LDMP03	e-E51LD0420	
Control	Digital				
Motion	Orbital 3 mm			Orbital 20 mm	
Speed Range	100 to 800 rpm		100 to 1200 rpm*	50 to 300 rpm	
Speed Steps	1 rpm increments				
Speed Accuracy**	Above 100 rpm ± 2% of set speed, Below 100 rpm ± 2 rpm				
Timer	Up to 99 hours 59 minutes				
Weight Capacity	4 kg at 400 rpm linearly down to 1 kg at 800 rpm		4 kg at 400 rpm linearly down to 1 kg at 800 rpm 0.5 kg at ≥900 rpm	4 kg at 300 rpm	
Volume Capacity	**Standard Tray**	**Universal Platform*****	4 Microplates or 2 × Microtube Racks or 2 × Microplates & 1 × Rack	**Standard Tray**	**Universal Platform*****
	7 × 10 ml	39 × 10 ml		7 × 10 ml	39 × 10 ml
	6 × 125 ml	12 × 125 ml		6 × 125 ml	12 × 125 ml
	6 × 250 ml	8 × 250 ml		6 × 250 ml	8 × 250 ml
	4 × 250 ml	6 × 500 ml		4 × 250 ml	6 × 500 ml
	-	3 × 1 l		-	3 × 1 l
Standard Tray Size (L × W)	300 × 222 mm		280 × 197 mm	300 × 222 mm	
Tray Construction	Aluminum tray with 11 mounting points for accessories. Non-slip rubber mat included		Aluminum tray with hardware to secure Microplates and Deepwell plates	Aluminum tray with 11 mounting points for accessories. Non-slip rubber mat included	
Drive System	Brushless DC Motor, Triple Eccentric				
Communication	RS232				
Programming	On-board programming for 8 separate, 5-step programs				
Recall Feature	Retrieve last 5 recently used settings				
Protection	IP21				
Dimensions (L × W × H)	420 × 262 × 119 mm				
Net Weight	7.5 kg				
Working Environment****	-10 °C to 40 °C, 80% RH, non-condensing				
Power Input	24V DC, 1.25A				

*Microplates and deepwell plates are available with a variety of skirt styles. Depending on the skirt style the maximum speed may need to be reduced.
**Conditions permitting. Variations in measurement process, vessel(s), and sample(s) will impact actual performance.
***Universal Platform 30770938 required for expanded capacity from 39 × 10 ml up to 3 × 1L flasks
****Avoid cold starts. Unit is not designed to start after being in a cold room environment. Bring unit into cold room from a room temperature environment, operate and remove unit from cold room as soon as operation is complete.

ENDEAVOR™ 5000 *Light Duty Orbital Shakers*

Accessories

Item Number	Desccription	e-E51LD0403 & e-E51LD0420		e-E51LDMP03
		On Standard Tray	On Universal Platform 30770938	Only Microplate Tray
30400084	Flask Clamp, 10 ml	7	39	--
30400085	Flask Clamp, 25 ml	7	24	--
30400086	Flask Clamp, 50 ml	7	24	--
30400087	Flask Clamp, 125 ml	6	12	--
30400088	Flask Clamp, 250 ml	6	8	--
30400089	Flask Clamp, 500 ml	4	6	--
30400090	Flask Clamp, 1ll	--	3	--
30400097	500 ml Media Bottle Clamp	4	6	--
30400099	Flask Clamp PVC 125ml	6	12	--
30400100	Flask Clamp PVC 250ml	6	8	--
30400101	Flask Clamp PVC 500ml	--	4	--
30400115	Test Tube Rack 10-13 mm Diameter	2	2	--
30400116	Test Tube Rack 14-16 mm Diameter	2	2	--
30400117	Test Tube Rack 18-20 mm Diameter	2	2	--
30400118	Test Tube Rack 22-25 mm Diameter	2	2	--
30400119	Test Tube Rack For 15 ml Tubes	2	2	--
30400120	Test Tube Rack For 50 ml Tubes	2	2	--
30770938	Universal Platform 22 × 30 cm e-E51LD	1	--	--
30400121	Adjustable Platform 22 × 30 cm, 2 bars	1	--	--
30400122	Roller Bar, 22 cm (for Adjustable Platform only)	Variable	--	--
30400124	Dimpled Mat, 22 × 30 cm	1	--	--
30770935	Rubber Mat 29 × 22 cm	1	--	--
30770939	Sticky Mat 22 × 18 cm	1	1	--
30770940	Universal Harness e-E51LD	1	--	--
30400114	Micro Tube Rack	2	2	2
30772773	Deep Plate Kit, set of 4	--	--	1 (set of 4)
30304101	Interface Kit, RS232-USB	Yes, for shaker's data logging and remote control		
30304102	Interface Kit, RS232-Ethernet	Yes, for shaker's data logging and remote control		



Universal Platform 30 × 22 cm e-E51LD
Part Number: 30770938

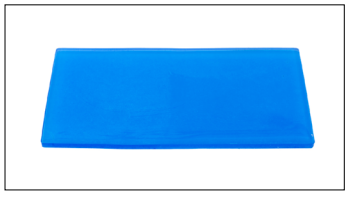
Flask Clamp 250 ml
Part Number: 30400088

Flask Clamp PVC 125 ml
Part Number: 30400099

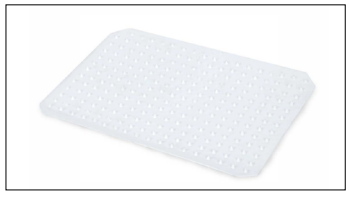
Interface Kit, RS232-USB
Part Number: 30304101

Adjustable Platform 22 × 30 cm, 2 bars
Part Number: 30400121

Micro Tube Rack
Part Number: 30400114



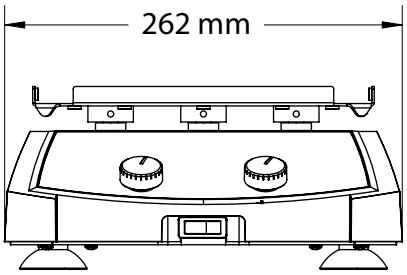
Sticky Mat 22 × 18 cm
Part Number: 30770939

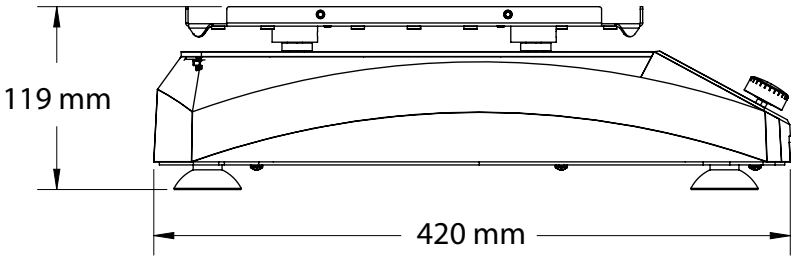


Dimpled Mat 22 × 30 cm
Part Number: 30400124

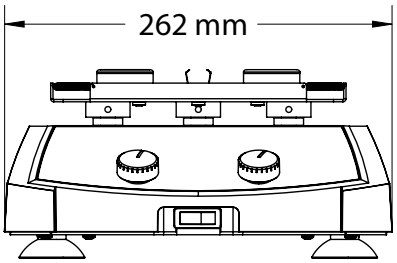
ENDEAVOR™ 5000 *Light Duty Orbital Shakers*

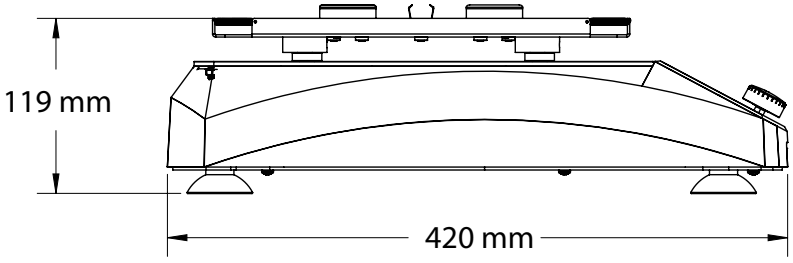
Outline Dimensions





e-E51LD0420 & e-E51LD0403





e-E51LDMP03

Other Features and Equipment

Visual and audio alarm when timer counts down to zero or an error occurs, small footprint to save bench space, advanced microprocessor control slowly ramps the shaker tray up to the desired speed and avoids splashing, durable chemical-resistant polymer housing, sturdy easy-to-clean aluminum standard tray with attachment points for accessories, optional accessory platform to expand capacity, control knobs, ON/OFF switch

Compliance

- **Product Safety:** IEC/EN 61010-1; IEC/EN 61010-2-051
- **Electromagnetic Compatibility:** IEC/EN 61326-1 Class B, Basic electromagnetic environment
- **Compliance Marks:** CE; TÜV SÜD
- **Other:** IP21

Download our other Lab Shaker Guides:

Click the image or use the QR code

Shaker Selection Guide

Shaker Selection Basics

Shaker Accessories Catalog

80776878_D 20250710 © Copyright OHAUS Corporation

OHAUS Europe GmbH

e-mail: ssc@ohaus.com
Tel: 0041 22 567 53 19
e-mail: tsc@ohaus.com
Tel: 0041 22 567 53 20

www.ohaus.com

The management system governing the manufacture of this product is ISO 9001:2015 certified.

OHAUS®