

Innova[®] 40 Incubator Shakers

Compact and convenient benchtop model for flasks up to 3 liters

The Innova 40 and 40R incubated benchtop shakers with the Eppendorf triple-eccentric counterbalanced drive provide years of dependable operation. The cast iron support and counter balanced drive is specifically designed to support high-speed applications and heavy workloads.

Innova 40 incubated shakers provide broad temperature capabilities for culturing a wide variety of organisms in flasks up to 3 L. Refrigeration module is built into the Innova 40R, or can be easily added to the Innova 40, at any time. Precise control, automated operation and high temperature capabilities makes the Innova 40 the clear choice.

- > Exceptionally quiet operation provides for a favorable work environment
- > Triple-eccentric counterbalanced drive in cast iron housing provides vibration and trouble free operation for years
- > Programmable Innova controls—automatically changes temperature and speed at programmed and timed intervals
- > Clear cover allows easy viewing of the cultures and lifts easily to access all samples
- > Versatile accessory platform accommodates flasks, test tube racks, and Microplate holders²

Hydraulic arms make it easy to raise and keep the lid open, leaving hands free for sample handling




Clear lid provides excellent visibility. Lifts out of the way for easy access to samples



Specifications, Innova 40, 42, 43 & 44 Series Shakers*

Temperature System	
Control	Microprocessor-controlled in increments of 0.1 °C
Heaters	Low watt-density, resistance heaters with high-temperature safety thermostat cut-out
Refrigeration	Refrigerated "R" models only: Hermetically-sealed compressor uses CFC-free refrigerant
Calibration Offset	User-adjustable temperature display can be offset to match a "reference" temperature, either as measured in a flask or the average of a series of points measured in the chamber
Shaking	
Drive Mechanism	Triple-eccentric counterbalanced drive in cast-iron housing with 9 permanently lubricated ball bearings. Driven by solid-state brushless DC motor
Control	Microprocessor-controlled in increments ± 1 rpm
Alarms, audible & visible	Indicate when speed deviates more than 5 rpm or temperature more than 1 °C from setpoint, and when program or time has finished. Alarm may be muted
Safety, mechanical & electronic	Acceleration circuit prevents sudden starts and stops. Sensor shuts off temperature when high temperature limit is exceeded

Specifications, Innova® 40 / 40R*

	40	40R
Temperature		
Range	5 °C above ambient to 80 °C	15 °C below ambient to 80 °C; min 4 °C
Control	± 0.1 °C	
Stability	± 0.1 °C at 37 °C	
Uniformity	± 0.25 °C	
Orbit	1.9 or 2.5 cm (0.75 or 1 in)	
Shaking speed ¹	25 - 500 rpm \pm , 1 rpm	
Dimensions		
Platform	46 x 46 cm (18 x 18 in)	
Chamber	51.4 x 54.6 x 35.6 cm (20.3 x 21.5 x 14 in) – Height measured from top of platform	
Overall	55.9 x 76.2 x 61 cm (22 x 30 x 24 in)	
Net weight	60 kg (133 lb)	79 kg (175 lb)
Certifications		

* Specifications subject to change without notice.

¹ Speed range based on shaking a typical workload. Baffled flasks can significantly reduce maximum speed.

² Platforms sold separately - see page 22.

Timer & Parameter Control

4 Modes	<ul style="list-style-type: none"> • Speed and temperature continuous • Shaker can be set to run from 00:01 (which means 1 minute) to 99:59, in increments of 00:01 • On-board firmware can program multiple parameter changes to temperature and speed. On "R" models, can program optional photosynthetic lighting and UV decontamination
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Computer Interface	For data logging and control using laboratory management software or HyperTerminal. BioCommand® SFI data-logging software offered. See options below
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Setpoint Retention	<ul style="list-style-type: none"> • Setpoints and operating status retained by non-volatile memory • Automatic restart after power is restored (indicated by flashing display)
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Ambient Conditions	10 °C to 35 °C. 20 to 80 % RH (non-condensing)
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Ordering information²

Order no.	Description
Innova® 40 Incubated	
M1299-0082	1.9 cm (3/4 in) Orbit, 230 V 50 Hz
M1299-0080	1.9 cm (3/4 in) Orbit, 120 V 60 Hz
M1299-0092	2.5 cm (1 in) Orbit, 230 V 50 Hz
M1299-0090	2.5 cm (1 in) Orbit, 120 V 60 Hz
Innova® 40 R Incubated/Refrigerated	
M1299-0086	1.9 cm (3/4 in) Orbit, 230 V 50 Hz
M1299-0084	1.9 cm (3/4 in) Orbit, 120 V 60 Hz
M1299-0096	2.5 cm (1 in) Orbit, 230 V 50 Hz
M1299-0094	2.5 cm (1 in) Orbit, 120 V 60 Hz
Options for Innova® 40 / 40R	
M1299-0061	Refrigeration Module to upgrade Innova 40 to Innova 40R
M1320-8029	Remote Alarm Contact, factory installed, for communication with user-supplied building monitoring system
M1291-1000	BioCommand® SFI Data-Logging Software, includes software and cable to connect one shaker