

1.2 Specifications

These specifications assume a maximum load of 34 pounds (15.5 kg), including platforms, clamps, glassware and contents.

Innova 4430 Incubator Shaker			
SHAKING Speed	25-400 rpm with 1-inch (2.5 cm) stroke or 25-300 rpm with 2-inch (5.1 cm) stroke or 25-250 rpm with 2-inch (5.1 cm) stroke for 3 units stacked		
Control Accuracy	± 1 rpm		
Indication	3 Digit LED, in 1 rpm increments		
Stroke/Orbit	1-inch (2.5 cm) or 2-inch (5.1 cm)		
TEMPERATURE Range	15°C (minimum setpoint 4° C) below ambient temperature to 80°C		
Control Accuracy	± 0.1°C from 30-40 °C, ± 0.5°C over the remaining range.		
Indication	3 Digit LED, in 0.1°C increments		
Heaters	Long-life, low-watt density resistance-type heaters with high temperature thermostats		
Refrigeration	CFC-free		
ALARMS	Visible and audible warning indication when speed deviates more than 5 rpm or temperature more than 1°C from setpoints, and when timer has expired. Audible alarm can be muted.		
LED DISPLAY	Indicates speed, temperature, running time alarm conditions, and displays readout of internal clock (actual accumulated operating time). Character height: 3/8 inch (9.5 mm)		
RECORDER OUTPUT	0-5 VDC output for tracking temperature (and speed) with an external recorder or computer.		
SETPOINT RETENTION	All setpoints and operating status are retained in non-volatile memory		
Automatic Restart	Automatic restart after power is restored, indicated by flashing display		
Stacking	Up to three units may be stacked; the 2nd & 3rd units require a stacking kit.		
Drive	Triple-eccentric counterbalanced drive with nine permanently lubricated ball bearings		
Drive Motor	Solid-state brushless DC motor. Maximum torque 40 oz-in (2880 cm-g)		
Safety	Unique sensor automatically limits speed of Shaker when overloaded or unbalanced condition is detected. Drive Interrupt shuts off power to Shaker when door opens. Acceleration/deceleration circuit prevents sudden starts and stops, minimizing both splashing and mechanical damage.		
Electrical Requirements	100/120/230/240 VAC 50/60 Hz. 1,000 VA per Shaker.		
Overall Dimensions	Single Unit	Two Units	Three Units
Width	51.5" (131 cm)	51.5" (131 cm)	51.5" (131 cm)
Depth (Front to Back)	33" (84 cm)	33" (84 cm)	33" (84 cm)
Height	27" (69 cm)	52.25" (133 cm)	77.5" (197 cm)
Chamber Dimensions	34" (86.4 cm) W X 23" (58.4 cm) D X 15.5" (39.4 cm) H clearance above platform		
Chamber Door	32" X 14.5" (81.3 X 36.8 cm) see through door allows for viewing of cultures. Door swings out and up. Open door position adds 6" (15.2 cm) to depth (D) dimension and adds 18" to height (H) when open.		
Platform	Aluminum. Choice of 16.5" X 33.5" (42 X 85 cm) lift-out style, or 18" X 30" (46 X 76 cm) bolt-on style. Both platform styles are 5/16" (0.79 cm) thick.		
Weight	Net: 490 lbs (222 kg)		Gross: 575 lbs (261 kg)

 **NOTE:** Add 18 in. (45.6 cm) to height and 6 in. (15.2 cm) to depth for door clearance.