

# **GYROMAX™ 747 ORBITAL INCUBATOR SHAKER**

***Incubate And Shake It To The Max...With GYROMAX!***



The GYROMAX™ 747 orbital incubator shaker is designed to accommodate as many clamps of a given size as that in a chest-type shaker, but has the advantage of accommodating shelves for incubation and the stacking of two units to save space. The double-walled construction, with 1.25" of insulation and a triple-paned, evacuated viewing glass window, minimizes heat loss. This construction, together with an efficient circulation system, ensures unrivaled optimum temperature uniformity throughout the chamber. The temperature is microprocessor-controlled and is monitored accurately by a platinum RTD. It is set digitally and reproducibly from a membrane keypad and displayed by an LED to 0.1°C. The working temperature is from about 7°C above ambient to 80°C. Over-temperature cutoff devices protect the chamber from accidental overheating. A timer is programmable up to 99 hours and 59 minutes or for continuous operation.

A large, quiet fan ensures air and temperature uniformity throughout the stainless steel chamber. A brushless, maintenance-free drive motor generates speeds from 25 to 420 RPM that is displayed digitally. At the same RPM, the standard shaking orbit of 25 mm provides a higher oxygen transfer rate (OTR) compared with shakers with a 19 mm orbit because OTR is directly proportional to orbit size. It also incorporates a built-in fan for operating at a low temperature, thereby prolonging the life of the motor. A triple-eccentric drive with counter-balancing weights provides smooth and quiet shaking. The shaking stops when the door is opened. The chamber is constructed of stainless steel. The chamber lamp is turned on and off with a switch on the control panel. The 26" x 21" platform can accommodate Erlenmeyer flasks up to 6 liters.

Optional accessories include platforms, clamps, and spring racks. Platform holes are drilled to accommodate the different clamps purchased. The spring rack is designed for holding tubes in a horizontal, angled, or upright position. It can also be used to hold flasks up to 1-liter without clamps. The rack consists of a 2-tiered grid of springs. The distance between the racks is adjustable so as to accommodate tubes and flasks of different heights. It is mounted on to the platform by four screws.

***Amerex Instruments, Inc.***

# GYROMAX™ 747 INCUBATOR SHAKER

SPECIFICATIONS	747
Temperature Range	7°C above ambient to 80°C
Temperature Control	PID microprocessor temperature controller, platinum RTD sensor
Temperature Display	Digital to 0.1°C
Accuracy/Uniformity	±0.1°C/±0.5°C at 37°C
Speed Range	25 to 400 RPM measured directly by a speed sensor for accuracy. Maximum RPM slightly less at 50Hz.
Display	Digital
Orbit	25mm (1") orbit provides higher oxygen transfer rate than 19mm
Timer	Programmable up to 99 hours and 59 minutes or for continuous operation
Window/Insulation	1.25" triple-pane viewing window and polyurethane insulation to minimize heat loss
Control Panel	Located near the top of the unit for easy access without a stand
Safety Features	Shaking stops when door is opened. Auto-restart after power failure.
Stacking	Two can be stacked and coupled to save space
Shelf	One supplied, additional shelves optional
Spring Rack	Accommodates an accessory spring rack that can shake flasks up to 1-L without the use of clips or clamps as well as 15-mL or 50-mL Falcon tubes placed horizontally, vertically, or at 45° to the platform
Drive	Triple-eccentric drive with counter-balancing weights provides stable shaking without the need for adjustments as the load increases
Motor	Maintenance-free, brushless motor with a built-in cooling fan
Chamber Dimensions	28"W x 23"D x 23.6"H (713mm x 585mm x 600mm)
Platform Dimensions	26"W x 21"D (660mm x 530mm)
Overall Dimensions	39.5"W x 28"D x 33.5"H (1094mm x 713mm x 850mm)
Power Source	120V (or 220), 50/60Hz, single phase, 12A

## FLASK CAPACITY

Flask Size (mL)	25	50	125	250	500	1000	2000	2800	4000	6000
No. of Flasks	120	112	63	42	30	15	12	6	6	4

## ACCESSORIES

**HOLDERS for Tube Racks & Plates**



**Full Size Spring Rack**



**Platform with Custom Spring Rack and Other Accessories**



**Flask Clamps**



**Amerex Instruments, Inc.**

3951C Industrial Way  
 Concord, California 94520  
 925.299.0743 / Fax: 925.299.0745  
 www.amerexinst.com  
 marketing@amerexinst.com