

## Model ADP-21/31 Vacuum Drying Oven Series

0.35 / 1.0 cu. ft.

The Yamato ADP Series Vacuum Ovens offer you simple and accurate control at negative pressure. Both temperature set and readout are controlled and monitored digitally with a fast and accurate display of operating parameters.

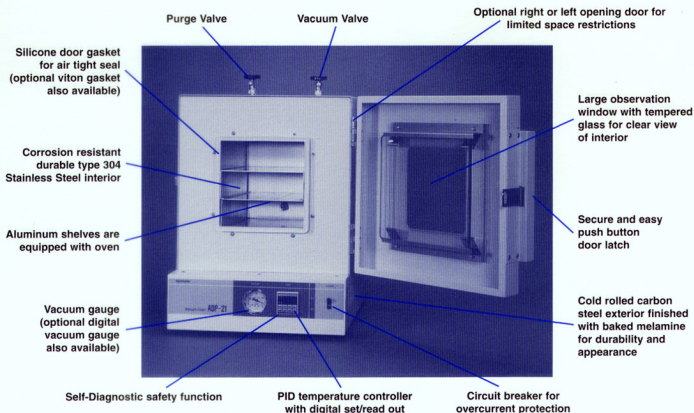
The large observation window provides visual access to the sample, and the option of a right or left opening door compensates for any space limitation in your lab. Both vacuum and purge valves are conveniently located on the top of the oven.

The self-diagnostic function visually alerts users if the temperature sensor, triac or heater malfunctions. At that time, the circuit heater will automatically turn off. Maximum performance is backed by our 24-month warranty policy.

### Retrofits

Yamato Scientific has the ability to customize ovens to meet your diverse requirements and applications. A few examples of retrofits performed at our facility are:

- Temperature output terminal
- Temperature recorder (24 hr / 7day)
- Vacuum port
- Digital vacuum gauge



**Yamato**

## Model ADP-21/31 Vacuum Drying Oven Series SPECIFICATIONS

MODEL	ADP-21	ADP-31
Operating Temperature Range	Ambient +5°C to 240°C	
Temperature Controller	Microprocessor PID	
Operating Vacuum Range	760 to 1 torr	
Safety	Built in Self-Diagnostic Function	
Temperature Accuracy	±1.5°C	
Time to reach maximum temperature	Approx. 70 minutes	Approx. 100 minutes
Sensor	K Thermocouple	
Chamber Size (cu ft)	0.35	1.0
Interior Dimension, (WxDxH, in)	7.9 x 9.8 x 7.9	11.8 x 11.8 x 11.8
Interior Dimension, (WxDxH, cm)	20.1 x 24.9 x 20.1	30.0 x 30.0 x 30.0
Exterior Dimensions, (WxDxH, in)	16.8 x 17.6 x 21.1	20.7 x 19.6 x 25.0
Exterior Dimensions, (WxDxH, cm)	42.7 x 44.7 x 53.6	52.6 x 49.8 x 63.5
Window Dimensions, (WxDxH, in)	6.3 x 7.1 x 0.5	9.8 x 11.0 x 0.5
Window Dimensions, (WxDxH, cm)	16.0 x 18.0 x 1.3	24.9 x 27.9 x 1.3
Interior Material	Type 304 (18-8) Stainless Steel	
Exterior Material	Cold rolled carbon steel finished w/ baked melamine resin	
Power Supply	115V AC, 6A, 60 Hz	115V AC, 10A, 60 Hz
Heater (kW)	0.68	1.05
Number of shelves included	2	3
Net Weight (lb. / kg)	Approx. 66 lb / 29.9 kg	Approx. 121 lb / 54.9 kg



### HITEC® Controller

The HITEC® PID temperature controller features compact and accurate control of temperature. Desired temperature can be easily set through the key pad. The secondary parameter program list allows the user to open various features such as auto tuning of temperature for easy calibration, altering the PID (Proportional Integral Derivative) parameters to alter the best temperature rising.



LRQA Certificate  
No. 954399

Copyright © January 1999 by Yamato Scientific America Inc.

All rights reserved. Information in this publication supersedes all earlier versions. Specifications and prices subject to change without notice. Subsidiary of Yamato Scientific Company Ltd.

# Yamato



**Yamato Scientific Co., Ltd.**

1-6 Nihonbashi Honcho 2-chome, Chuo-ku, Tokyo 103, Japan  
Tel: (03) 3231-1124 Fax: (03) 3231-1144

**Yamato Scientific America Inc**

33 Corporate Drive, Orangeburg, NY 10962-2620  
Tel: 1-800-2YAMATO (292-6286) Fax: (914) 359-0300