VOS200 Vacuum Drying Oven with Vacuum Pump

Digital Vacuum Display & Programmable Control

LAB1ST VOS200 series is an integrated vacuum drying oven engineered for precise and reliable control of both temperature and vacuum. It comes with a built-in vacuum pump and desiccant tank for simplified operation, and supports programmable vacuum and temperature cycles, making it an ideal solution for drying heat-sensitive and easily oxidized materials.

With a digital pressure sensor and microcomputer-controlled vacuum system, the VOS200 ensures efficient and repeatable drying processes.

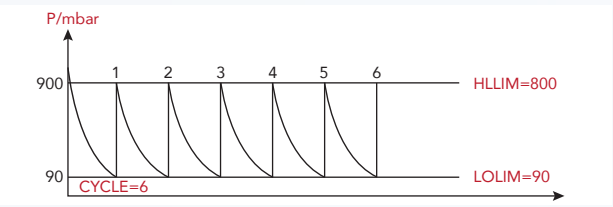
Features

> Key Features

- **Fully Integrated Plug-and-Play Design**: Includes a built-in vacuum pump and desiccant tank for immediate operation.
- **Standard Programmable Control:** Offers comprehensive control over heating, vacuum, nitrogen purge, and time, including temperature ramp rate (slope) control for precise process management.
- **Rectangular Chamber Design:** Maximizes usable workspace volume.
- **Tempered & Bullet-Proof Double-Layer Glass Door:** Provides clear visibility into the chamber; compatible with inert gas injection.
- **Adjustable Door Seal & Integrated Silicone Gasket:** Maintains high vacuum integrity.
- **Stainless Steel Interior:** Durable, long-lasting, and easy to clean.
- **Oxygen-Free Operation:** Suitable for storage, heating, testing, and drying under inert or vacuum conditions to prevent oxidation.
- **Reduced Drying Time:** Cuts drying time by over **50%** compared to conventional vacuum drying ovens.

> Drying Process Control

- The vacuum drying process can be programmed with customizable vacuum cycles. Users can set upper and lower vacuum limits to further shorten drying times. For example:
  - · Minimum Vacuum: 50Pa
  - · Maximum Vacuum: 900Pa
  - · Cycle Count: Up to 99 cycles
  - · As cycles progress, humidity decreases rapidly, significantly accelerating drying.



> Programmable Cycle Control

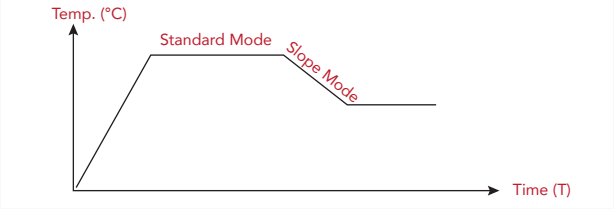
- User-friendly interface with direct programming capability.
- Supports up to **15** program segments, each configurable from **1 to 9999 minutes**.
- Pre-set startup and shutdown timers for automated operation.

> Vacuum Control

- Digital vacuum control with auto-regulation via digital vacuum gauge.
- Adjustable vacuum range: **10–10^5Pa** (minimum achievable vacuum: 133Pa).
- Control accuracy: **±1%**.
- Resistant silicon piezoresistive sensor ensures stable pressure readings, unaffected by airflow.

> Temperature Control Advantages

- **15-Segment Programmable Profiles:**
  - · Standard temperature and hold-time settings ("Temperature – Dwell Time").
  - · Ramp rate control using "Temperature–Time–Temperature" format for precise heating/cooling rate management.
- Full control over every stage: heating, holding, and cooling.
- **Heating Methods:** Chamber heating or shelf heating



Model	VOS200-33L	VOS200-63L	VOS200-93L	VOS200-123L	VOS200-213L	VOS200-503L	VOS200-933L
Temp. Range	RT+10°C ~ 200°C						
Display Resolution	0.1°C						
Temp. Fluctuation	±1°C						
Vacuum Range	10–10^5 Pa (min. 133 Pa)						
Vacuum Sensor	Resistive Silicon Tube Pressure Sensor						
Vacuum Gauge	Digital Play						
Chamber Material	SUS304 Stainless Steel (1Cr-18Ni9Ti)						
Chamber Volume	33 L | 1.17 cu ft	64 L | 2.26 cu ft	91 L | 3.21 cu ft	125 L | 4.41 cu ft	215 L | 7.59 cu ft	430 L | 15.19 cu ft	910 L | 32.14 cu ft
Shelves	2 pcs	3 pcs	2 pcs	3 pcs	3 pcs	4 pcs	5 pcs
Heating Method	Chamber Heating	Chamber Heating	Chamber Heating	Shelf Heating	Shelf Heating	Shelf Heating	Shelf Heating
Inner Dimensions (W×D×H, mm)	320×320×320	400×400×400	450×450×450	500×500×500	560×600×640	630×810×845	750×1160×1050
Outer Dimensions (W×D×H, mm)	550×490×1240	600×570×1390	610×590×1350	660×640×1400	720×820×1750	1000×1040×1855	1400×1395×2010
Power Input	1200 W	1800 W	1350 W	2050 W	2100 W	3800 W	5600 W
Power Supply	AC220V 50Hz	AC220V 50Hz	AC220V 50Hz	AC220V 50Hz	AC220V 50Hz	AC380V 50Hz	AC380V 50Hz

*Note: Performance data measured under no-load conditions at 20°C ambient temperature and 50% RH.

Options

Exhaust Oil Mist Filter
(recommended replacement every 6 months)

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