



Improved usability and reliability

Lab Companion Vacuum Ovens

Lab Companion Vacuum Oven (Model: OV4)



OV4-30

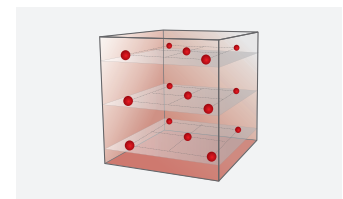


OV4-65

Why choose Lab Companion vacuum oven?

Excellent temperature uniformity

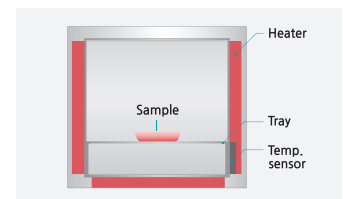
- Max. temperature variation of $\pm 1.5^{\circ}\text{C}$ at 100°C in 27 detect points according to the DIN 12880:2007.
- Conforms to the conditions for vacuum drying test method (below $\pm 2.0^{\circ}\text{C}$) defined in the Korean Pharmacopoeia



Variation below $\pm 1.5^{\circ}\text{C}$

Efficient heat transfer

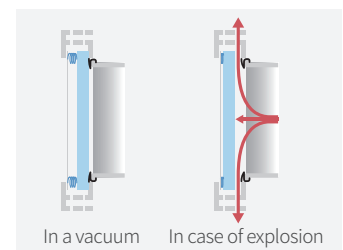
- 3-side heater structure optimized for heat transfer.
- Stainless steel interior and aluminum shelves with excellent heat transfer.



3-side Heater

Safety for users

- Buffer system applied to door front
 - In a vacuum: stable vacuum environment by close contact.
 - In case of internal explosion: internal pressure release through upper and lower ventilation holes.



Door Buffer System

Patented safety technology (KR 10-0328729)

- CLS-CS (Custom Logical Safe-Control System):
Lab Companion's unique, top-grade overheating prevention system that completely prevents overheating in the event of electrical problems.



Patented Technology (CLS-CS)



Main features

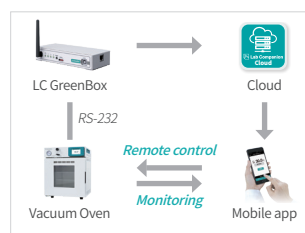
- Wide temperature control range up to 250°C.
- Convenient controller for intuitive operation.
- 3-point temperature calibration to provide reproducible data with accurate temperature control.
- Polycarbonate safety cover is provided in case of tempered glass breakage.
- Monitoring and controlling via mobile app. anytime, anywhere through LC Connected. (Mobile Monitoring System) (Option)
- Useful for feedback of experiment result by recording the recent 12 events such as door open and error.



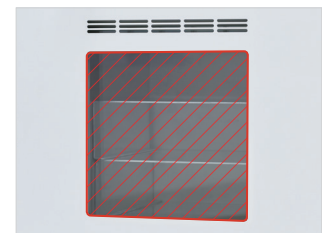
5 inch color touch controller

System Settings > Calibration		
Actual Temperature	17.0 °C	
	Uncalibrated	Calibrated
Temp 1	60.2 °C	60.0 °C
Temp 2	100.7 °C	100.0 °C
Temp 3	151.0 °C	150.0 °C

3-point calibration for accurate data



Mobile monitoring system



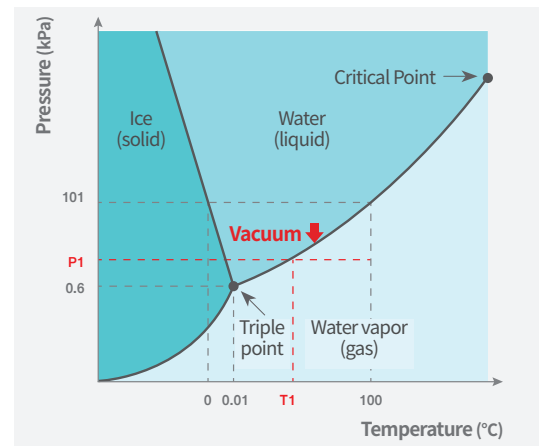
Polycarbonate safety cover

Why dry in a vacuum?

Vacuum drying is used to dry samples which can be deformed when drying at high temperatures, maintaining original shape, or to dry faster than standard ovens.

When the pressure is reduced with a vacuum pump, the vaporization proceeds at a temperature lower than the boiling point of water, allowing drying at a lower temperature than normal drying conditions.

For example, if the pressure is reduced to the pressure of 'P1' in the graph on the right, the phase changes to water vapor at the temperature of 'T1', which is lower than the boiling point.

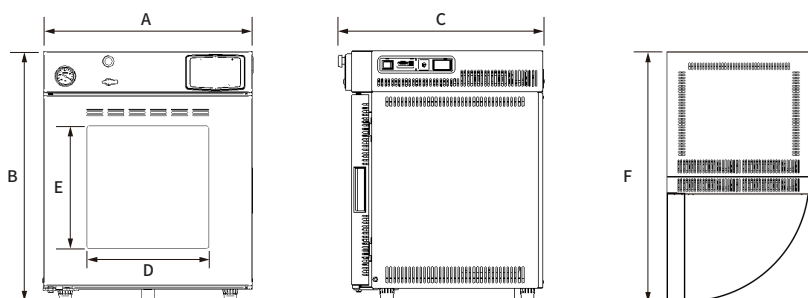


Vapor pressure curve

Applications

- Moisture removal from food such as dairy products.
- Moisture removal from sensitive products such as electronics.
- Drying process with prevention of oxidation.
- Removing residual moisture to relieve capillary action.
- Defined heating protocols with temperature ramping under vacuum.




Dimensions (Unit: mm / inch)

Model	OV4-30	OV4-65
A	537 / 21.1	636 / 25.0
B	655 / 25.8	755 / 29.7
C	522 / 20.6	622 / 24.5
D	270 / 10.6	359 / 14.1
E	270 / 10.6	370 / 14.6
F	1009 / 39.7	1208 / 47.6

Specifications

Model		OV4-30	OV4-65
Temperature	Range (°C / °F)	Amb. +15 to 250 / Amb. +27 to 482	Amb. +15 to 250 / Amb. +27 to 482
	Variation at 100°C (±°C / °F)	1.5 / 2.7	1.5 / 2.7
	Fluctuation at 100°C (±°C / °F)	0.1 / 0.18	0.3 / 0.54
	Heating up time to 100°C (min.)	60	90
Dimensions	Interior(W x D x H, mm / inch)	302 x 305 x 302 / 11.9 x 12 x 11.9	402 x 405 x 402 / 15.8 x 15.9 x 15.8
	Volume (L / cu ft)	28 / 1	65 / 2.3
Shelves	Quantity of shelves (standard/max.)	2 / 2	3 / 3
	Max. Load per shelf (kg / lbs)	20 / 44.1	20 / 44.1
Electrical requirements (230V, 50 / 60Hz, A)		5	5.8
Cat. No.		AAH13315K	AAH13325K
Electrical requirements (120V, 60Hz, A)		10.2	11.7
Cat. No.		AAH13316U	AAH13326U

Accessories

Name	Cat. No. (For 30 model)	Cat. No. (For 65 model)	Description
Silicone Gasket	00FAA0005146	00FAA0005147	Basics are included, silicon gasket for sealing doors
Viton Gasket	00FAA0005187	00FAA0005188	Viton gasket for sealing doors, high chemical resistance
Safety Cover	AAA13603	AAA13604	User and laboratory protection in case of tempered glass breakage
LC GreenBox	AAAQ1011	AAAQ1011	A simple internet connection allows real-time monitoring and control of the device's operation through a mobile app.

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