

Vacuum Oven

Excellent temperature uniformity, allowing testing at any position

Precise temperature control

- Wide temperature range of up to 250 °C
- Temperature variation up to $\pm 1.5^{\circ}\text{C}$ at 100°C according to DIN 12880:2013
- Actual experiment area is expanded by excellent temperature uniformity
- 3-point calibration improves temperature accuracy in the entire area



OV4-30

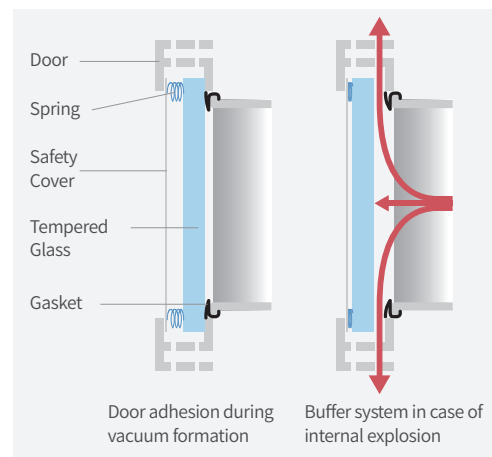
2 shelves included (standard)

Structural Functions

- Excellent corrosion resistance by stainless steel and aluminum shelves
- Safety circuits protect from overcurrent and over temperature
- Vacuum line and release line are separated and convenient to use
- Viton gasket when drying highly reactive chemicals (option)
- In vacuum, tempered glass adheres tightly to the gasket, maintaining an airtight seal

Outstanding User Safety

- Door buffer system that maintains stable vacuum condition. In case of explosion, internal pressure is discharged via the upper/lower exhaust ports
- BMS port is provided as standard to monitor within a building management system (option)
- Polycarbonate cover is provided as standard in case of tempered glass breakage
- Top-rated overheating protection system (Patented in Korea)
- The surface remains safe (< 60°C) at high temperature



Buffer system door structure



Variation less than $\pm 1.5^{\circ}\text{C}$ at 100°C

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 accuracy



Safe from burns with surface below 60°C even at max temperature



User Convenience

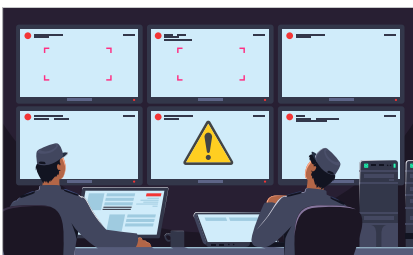
- Wide LCD Color touch display controller
- Monitor via mobile app anytime, anywhere with LC Connected. (Requires LC GreenBox, option)
- Test data are automatically stored and easily exported with USB in CSV format (except for OV-S)
- Events/alerts in a single view with real-time graph (except for OV-S)
- Able to limit speed of temperature rise with [Ramp Control™] (except for OV-S)
- Wait On/Off timer (up to 99hrs 59mins)
- Auto recommendation of 3 temperatures based on user history
- Integrated with 21 CFR Part 11 compliant LC DataKeeper, suitable for GMP audits (option)



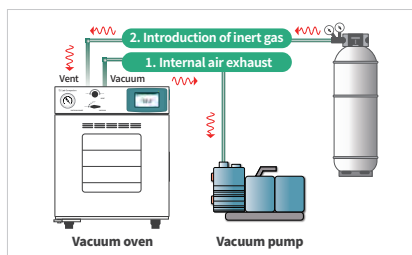
Intuitive touch controller
(OV4 : 5 inch / OV4-S : 3.5 inch)



Real-time monitoring via mobile devices (LC GreenBox: option)



Timely responses via BMS-connected Monitoring (BMS port: option)



Application of replacing internal air of chamber with inert gas

General Settings > Event			
Event	2020-03-15 07:00:00	Basic control started	1
Error	2020-03-15 07:01:00	Warning: Over Temp.	
Event	2020-03-15 07:02:00	Basic control started	
Error	2020-03-15 07:03:00	Warning: Over Temp.	

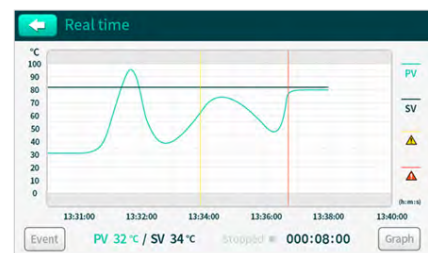
Store recent 36 events (OV-S: 12 events)

General Settings > Data			
No.	Date_Name	Check	
1	20200423_123400.csv	✓	1
2	20200423_123410.csv	✓	
3	20200423_123420.csv	✓	
4	20200423_123430.csv	✓	
5	20200423_123440.csv	✓	
6	20200423_123450.csv	✓	

Automatic storage of experimental data in the internal memory



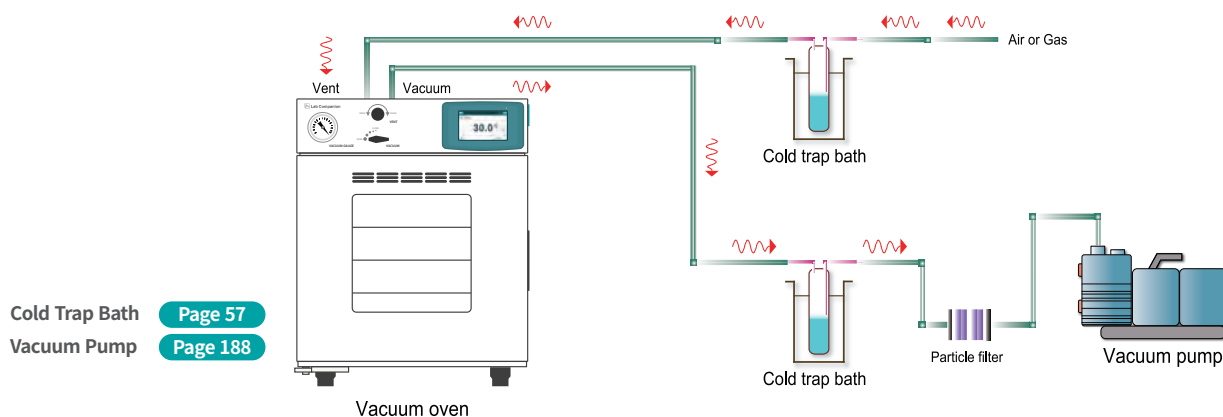
Data storage using USB ports



Graphs for real-time process monitoring

Vacuum Oven Use Configuration

- It is recommended to use the cold trap bath on the vacuum line to protect the weak vacuum pump against water/solvent or to supply dry air to the sample.



Specification

Model		OV4-30	OV4-30S*	OV4-65	OV4-65S*
Control panel		5 inch	3.5 inch	5 inch	3.5 inch
Chamber volume (L / cu ft)		28 / 1		65 / 2.3	
Temperature	Range (°C / °F)	Amb. +15 to 250 / Amb. +27 to 482		Amb. +15 to 250 / Amb. +27 to 482	
	Fluctuation at 100°C (±°C / °F)	0.2 / 0.36		0.2 / 0.36	
	Variation at 100°C (±°C / °F)	1.5 / 2.7		1.5 / 2.7	
	Heating time to 100°C (min.)	70		90	
Vacuum gauge range, analog (Mpa)		0 to 0.1		0 to 0.1	
Dimension	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	
	Exterior (W x D x H, mm / inch)	537 x 522 x 655 / 21.1 x 20.6 x 25.8		636 x 622 x 755 / 25.0 x 24.5 x 29.7	
	Net weight (Kg / lbs)	68 / 150		107 / 235.9	
Shelves	Quantity of shelves (standard / max.)	2 / 3		3 / 4	
	Max. Load per shelf (Kg / lbs)	20 / 44.1		20 / 44.1	
Material		Body: Stainless Steel, Shelf: Aluminum		Body: Stainless Steel, Shelf: Aluminum	
Electrical requirements (230V, 50/60Hz, A)		5.7		6.7	
Cat. No.		AAH13315K	AAH13335K	AAH13325K	AAH13345K
Electrical requirements (120V, 60Hz, A)		10.2		11.7	
Cat. No.		AAH13316U	AAH13336U	AAH13326U	AAH13346U

※ The lowest controllable temperature depends on variations in room and sample temperatures. Please contact technical support for consultation before purchasing.

※ Technical data (according to DIN 12880, after 2013)

* The OV4-30S and OV4-65S exclude some convenient features. (real-time graphs, data storage, etc.)

Jeio Tech

Jeio Tech Releases
New Vacuum Oven OV4 series

Key Measurement of the
Chamber-type Performance

How to choose the right shelf
for the OV4 series

Accessories [Page 84](#) BMS Port, Silicone Gasket, Viton Gasket, Shelf, Shelf Spacer, LC GreenBox, LC DataKeeper

Vacuum Oven System Station

Dedicated Table for Neat Organization of Vacuum Drying

Compact System Structure

- Compact system placing vacuum oven on top, cold trap bath and vacuum pump below.
- Neat arrangement of power cords and vacuum hoses using ring bolts and cable clamps.

Convenient Use and Maintenance

- Two outlets for cold trap bath and vacuum pump and convenient on/off control of using front-panel switches.
- Easy removal for cleaning and replacing glass traps of cold trap bath.
- Easy installation and movement with casters.



Vacuum Oven System Station (OVT)



Neat hose arrangement



Convenient caster for moving/fixing



Easy replacement and cleaning

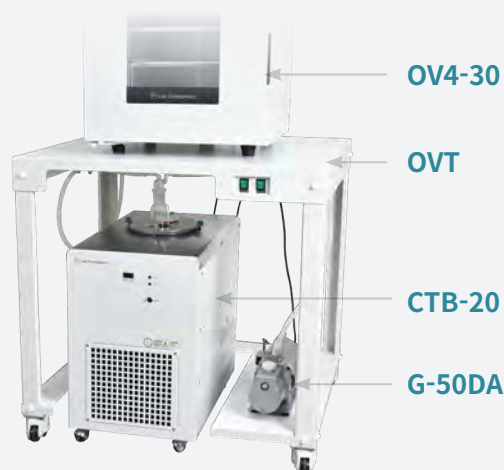


Convenient power On/Off

Composition Example

Table	OVT
Vacuum Oven	OV4-30
Cold Trap Bath	CTB-20 with glass trap
Vacuum Pump	G-50DA, 1.3 ⁻¹ Pa

※ The above configuration is an example using Jeio Tech products. Please purchase the model that suits your needs.



Specification

Cat. No.	Description
AAA13551	Vacuum Oven Table (OVT), 910 x 710 x 890 mm

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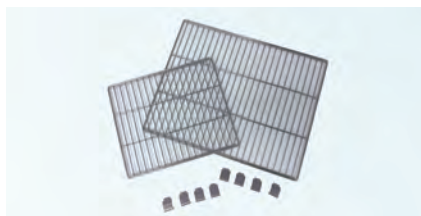
Jeio Tech



Read more about OVT

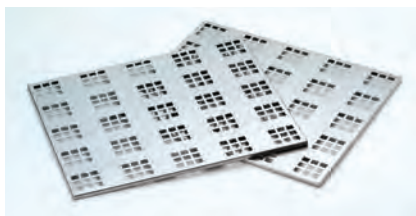
Accessories for Oven & Furnace

Shelves



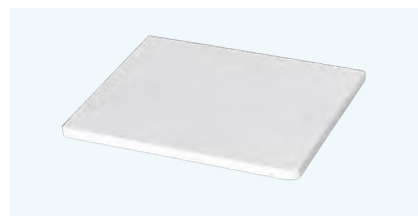
Wire Shelf (Oven)

- Excellent corrosion resistance as made of stainless steel.
- Excellent air permeability and uniform temperature uniformity.



Perforated Shelf (Oven)

- Porous structure made of stainless steel.
- Solid structure makes it suitable for high load samples.



Ceramic Shelf (Furnace)

- Plate for placing a crucible.
- Made of Mullite for thermal resistance.

Shelves for Forced/Natural Convection Oven

Model	Wire shelves		Perforated shelves	
	Cat. No.	Quantity (standard/max.)	Cat. No.	Quantity (max.)
OF4-03P/V/S, OF4-03PW/VW/SW	00FDA0009739	2 / 4	AAA125341	4
OF4-05P/V/S, OF4-05PW/VW/SW	00FDA0009738	2 / 5	AAA125342	5
OF4-10P/V/S, OF4-10PW/VW/SW	00FDA0009737	2 / 8	AAA125343	8
OF4-15P/V/S, OF4-15PW/VW/SW	00FDA0009736	2 / 9	AAA125344	9
OF3-30/30W/30P/30PW	00RTD0001196	2 / 5	AAA18501	5
OF3-30H/30HW/30HP/30HPW	00RTD0001196	2 / 5	AAA18501	5
OF3-45/45W/45P/45PW	00RTD0001196	3 / 11	AAA18501	8
OF3-45H/45HW/45HP/45HPW	00RTD0001196	3 / 11	AAA18501	8
OF3-75/75W/75P/75PW	00RTD0001197	3 / 11	AAA18502	11
OF3-75H/75HW/75HP/75HPW	00RTD0001197	3 / 11	AAA18502	11
OF-02G-4C	00EDA0008136	8 / 16	AAA12531	16
ON4-03V/S, ON4-03VW/SW	00FDA0009739	2 / 4	AAA125341	4
ON4-05V/S, ON4-05VW/SW	00FDA0009949	2 / 5	AAA125362	5
ON4-10V/S, ON4-10VW/SW	00FDA0009950	2 / 8	AAA125363	8
ON4-15V/S, ON4-15VW/SW	00FDA0009951	2 / 9	AAA125364	9

※ Brackets for each shelf are included.

Shelves for Vacuum Oven

Description	Position	Material	Cat. No.	
			OV4-30/30S	OV4-65/65S
Bottom shelf, Basic ²⁾		Aluminum	AAA13519	AAA13520
		Stainless Steel	AAA13529	AAA13530
Extra shelf, Optional ^{1), 4)}		Aluminum	AAA13511	AAA13513
		Stainless Steel	AAA13521	AAA13523
Lower shelf, Basic ²⁾		Aluminum	AAA13517	AAA13518
		Stainless Steel	AAA13527	AAA13528
Upper shelf, Basic ^{2), 3)}		Aluminum	AAA13512	AAA13514
		Stainless Steel	AAA13522	AAA13524
Multiple shelf, Optional ^{1), 4)}		Aluminum	AAA13531	AAA13533
		Stainless Steel	AAA13532	AAA13534
Shelf spacer, Basic ²⁾	Insert where the gap occurs	Aluminum	AAA13515	AAA13516
		Stainless Steel	AAA13525	AAA13526

1) You can add an extra shelf or multiple shelf that can be placed at the bottom to experiment with more samples same time, and the value of Variation and Fluctuation may increase slightly.

2) The shelf and shelf spacer are included as bundled accessories, and you can purchase when need to replace them.

3) For OV4-65 models, 2 upper shelves are basic provided.

4) Maximum number of shelf for OV4-30 model : 4 extra shelves / 5 multiple shelves and for OV4-65 model : 4 extra shelves / 8 multiple shelves.

Shelves for Furnace

Model	Dimension (W x D x H, mm)	Ceramic Shelf
MF2-12 series	120 x 230 x 12t	00FDA0009706
MF2-22 series	140 x 280 x 12t	00FDA0009707
MF2-32 series	260 x 260 x 12t	00FDA0009708

Recorders & Brackets



Recorder (Dot)

- 6-channel graph-type temperature recorder.
- Adjustable recording range, speed, etc.



Recorder (Thermal Line)

- Graph/Digital mode.
- Thermal-type temperature recorder.



Stacking Set (-05 / -15 models only)

- Double stackable
- Firm stacking allows efficient utilization of space (※ When double stacking, the minimum control temperature of the upper chamber may be limited.)

Model	Description	Cat. No.
OF3-30/45/75/30H/45H/75H Series	Recorder (Dot)	AAA8T500
	Recorder (Thermal line)	AAAE1503
MF2 series	Recorder (Thermal line)	AAAE1503
OF4/ON4-05	Stacking set	AAA125547
OF4/ON4-15	Stacking set	AAA125549

Door Gaskets for Vacuum Oven

Description		Cat. No.	
		OV4-30/30S	OV4-65/65S
Silicone Gasket	Included as standard. Silicon gasket for sealing the door.	00FDA0009912	00FDA0009913
Viton Gasket	High chemical resistance	00FDA0009914	00FDA0009915

Communication



BMS Port

- Real-time monitoring at a central monitoring facility.
- Easier to ensure safety, especially in labs where multiple units are operated.



LC GreenBox

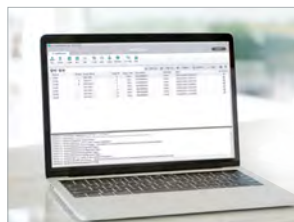
(Mobile Monitoring System)

- Remote monitoring and control via mobile application.
- One LC GreenBox can connect up to 4 devices.
- Connect using RS-232 port on the communication port.



Communication Port

- Control PC connection and data by dedicated software.
- Included as default in OF4-P/V and optional for OF4-S.



LC DataKeeper

- High-integrity software compliant with FDA 21 CFR Part 11
- Integrated with Jeio Tech equipment to undergo GMP audits

Ports	OF4-P/V, ON4-P/V	OF4-S, ON4-S	OV4
BMS Port	AAA125534		AAA125558
Communication Port ¹⁾	Standard	AAA125533	-
LC GreenBox	AAHQ1011K		
LC DataKeeper Basic ²⁾	SSA11001		
LC DataKeeper Pro ²⁾	SSA11002		

1) Communication port is provided as a standard in advanced (-V) model and is an optional add-on for the basic (-S) model for connecting LC DataKeeper, LC GreenBox, BMS, and PC.

2) Trial version is available for 30 days, offering the same features as the Basic version, and can be requested through the website.