

Forced Convection Oven

Program type

Convenient program control function

Program Type

- User interface that provides a quick view of temperature changes (heating, stable, and cooling) and fan speed also.
- Set various test condition using 10 programs and 10 steps, which can be repeated up to 99 times.
- Setting time up to 99 hours 59 minutes per step.
- Start temperature, temperature and time for each step, and Opti-flow™ all adjustable as desired.
- Scheduler function to operate at scheduled times.



Use Convenience Features

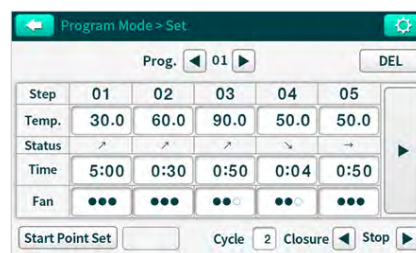
- Opti-flow™, a function to flexibly adjust the fan speed according to the specimen type and test conditions.
- Scheduler function to operate at scheduled times.
- Test data is automatically saved and easily downloaded via USB easy to edit and use. (in CSV format)
- Real-time graphs that allow users to view events and alarms at a glance so that the test progress can be easily and intuitively monitored.
- Ramping rates (°C/min) flexibly adjustable for each test performed
- RS-232/USB port and compatible software provided to enable easy device control and data management using PC.
- 36 latest events, such as errors and door opened or closed, automatically recorded, helping user obtain feedback on experimental results.
- Monitor and control via mobile app anytime, anywhere with LC Connected. (Requires LC GreenBox, option)
- Integrated with 21 CFR Part 11 compliant LC DataKeeper, suitable for GMP audits (option)

OF4-10PW

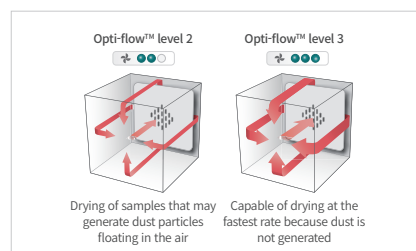
with Wire Shelves 2ea (standard)

Outstanding Safety

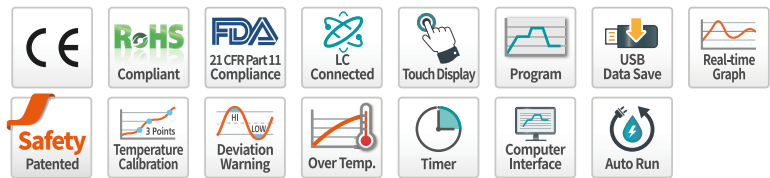
- Top-rated overheating protection system. (registration KR 10-0397583)
- BMS communication port that helps monitor the device temperature on the building management system, enabling quick response in case of abnormality. (option)
- Device surface not overheating even in operation at the highest temperature. (70°C or below, at 250°C)
- Over temperature limiter function
- Triple-toughened viewing window for safe and convenient observation even at high temperatures.
- Self-diagnostics function to check abnormal condition of temperature sens



Easy and intuitive program setting interface

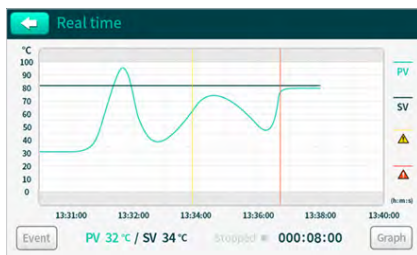


Fan speed can be adjusted manually according

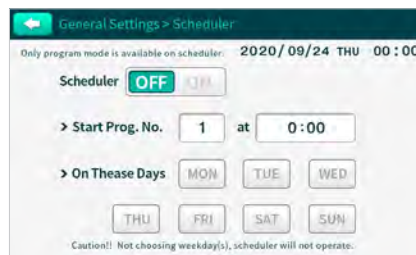


Structural Functional Features

- Wide temperature range of up to 250°C.
- Excellent visibility and easy control with a 5-inch touch screen.
- Airflow optimized for uniform heat transfer.
- Superior insulation and enclosed design minimize energy loss and reduce operating costs.
- Hands-free™ door system to allow users to easily open the door while carrying samples with both hands.
- Double stackable with stacking set (option) maximizes space utilization (-05 / -15 models only)
- Vent holes for gas discharge at the top.
- Compact models designed to be used in a fume hood available. (OF4-03)



Graph generation to visualize both stored and real-time data



Scheduler function to operate at scheduled times



Real-time monitoring and control via mobile (option)

Specification

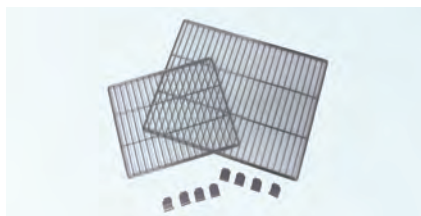
Model	Solid door (without window)	OF4-03P	OF4-05P	OF4-10P	OF4-15P
	Window door	OF4-03PW	OF4-05PW	OF4-10PW	OF4-15PW
Chamber volume (L / cu ft)		26 / 0.92	61 / 2.15	112 / 3.96	147 / 5.19
Temperature¹⁾	Range (°C / °F)	Amb. + 10 to 250 / Amb. + 18 to 482			
	Fluctuation at 100°C (±°C / ±°F)	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54	0.3 / 0.54
	Variation at 100°C (±°C / ±°F)	1.4 / 2.52	1.9 / 3.42	1.7 / 3.06	1.5 / 2.70
	Heating time to 100°C (min)	8	10	14	15
	Recovery time at 100°C (min)	4	4	4	4
Control panel		5 inch TFT Color LCD			
Communication interface		USB-B, RS-232			
Function	Program setting	10 program, 10 step, start temp.			
	Scheduler	Set day, time, and program No.			
	Recently event record	36 ea			
	Fan speed adjustable	Three-level wind speed settings			
	Recommended temperature	Three frequently used temperature settings suggested			
	Graph	Available checking the stored and real-time data as graphs			
	Data storage	Save the test data in CSV format			
	Temp. ramping rate (°C/min. / °F/min.)	0 to 13 / 0 to 23.4	0 to 9 / 0 to 16.2	0 to 6 / 0 to 10.8	0 to 5 / 0 to 9
Dimensions	Interior (W x D x H, mm / inch)	300 x 210 x 400 / 11.8 x 8.3 x 15.8	380 x 330 x 480 / 15.0 x 13.0 x 18.9	485 x 350 x 655 / 19.1 x 13.8 x 25.8	550 x 376 x 710 / 21.7 x 14.8 x 28.0
	Exterior (W x D x H, mm / inch)	478 x 527 x 604 / 18.8 x 20.8 x 23.8	558 x 648 x 684 / 22.0 x 25.5 x 26.9	663 x 677 x 859 / 26.1 x 26.7 x 33.8	728 x 704 x 914 / 28.7 x 27.7 x 36.0
	Net weight (kg / lbs)	33 / 72.8	53 / 116.8	63 / 138.9	73 / 160.9
	Quantity of shelves (Standard / max.)	2 / 4	2 / 5	2 / 8	2 / 9
Shelves		Max. Load per shelf (kg / lbs) 20 / 44.09			
Number of air change per hour at 100°C²⁾		123	22	18	11
Electrical requirements (230V, 50/60Hz, A)		6.4			
Cat. No.	Solid door (without window)	AAH12915K	AAH12925K	AAH12935K	AAH12945K
	Window door	AAH12955K	AAH12965K	AAH12975K	AAH12985K
Electrical requirements (120V, 60Hz, A)		12.3			
Cat. No.	Solid door (without window)	AAH12916U	AAH12926U	AAH12936U	AAH12946U
	Window door	AAH12956U	AAH12966U	AAH12976U	AAH12986U

1) Data measured at fan speed 3, with possible increase of Fluctuation and Variation values at fan speeds 1 and 2 (According to DIN 12880, pre-2013)

2) Data measured at fan speed 3, with possible decreases in Air change at fan speeds 1 and 2. (According to ASTM D 5374, reapproved 1999)

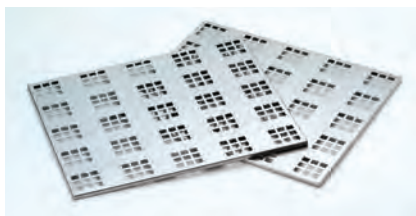
Accessories for Oven & Furnace

Shelves



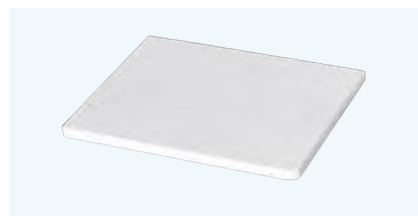
Wire Shelf (Oven)

- 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

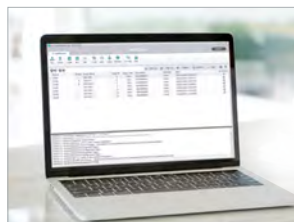
(Mobile Monitoring System)

- 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.