

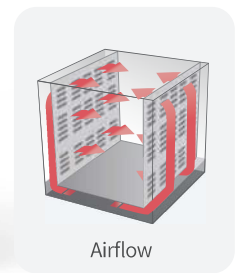
# Natural Convection Oven, Advanced type (ON4-V)



ON4-10V



ON4-10VW



## Intuitive Touch Controller

- Intuitive interface with 5-inch display
- Events and alerts in a single view with real-time graph
- Three frequent temperatures automatically suggested
- 'Wait on / Wait off' timer function



Large intuitive display



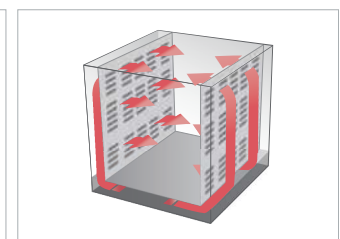
Graphs for real-time process monitoring

## Convenient Structural Functions

- Designed with a depth of less than 750 mm, making it easy and stable on a lab table
- Uniform and stable temperature distribution with multi-path airflow improves reliability of experiment data



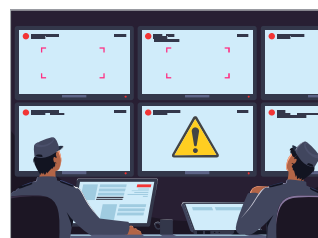
Depth of less than 750 mm allows stable positioning on lab table



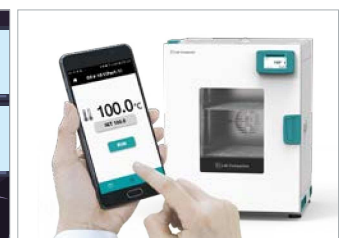
Uniform temperature control with multi-path airflow

## Supervise Equipment with Real-time Monitoring

- Monitor the temperature on BMS (Building Management System) for quick responses to abnormalities. (option)
- Monitor and control anywhere, anytime with LC GreenBox (Mobile Monitoring System, option)



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



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



## Convenient Experiment and Data Checking

- Support RS-232/USB port and software making easy operation and data management from PC
- Test data are automatically stored and easily exported via USB; easy to edit data (in CSV format)
- Logs 36 recent events, including errors, opened door, etc
- Integrated with 21 CFR Part 11 compliant LC DataKeeper, suitable for GMP audits (option)



Data storage using USB ports



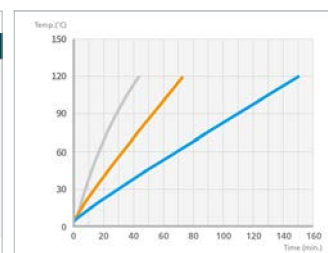
Store recent 36 events

## Reliable Temperature Control Performance

- Wide temperature range of up to 250°C
- Temperature accuracy for wide range by 3-point calibration
- 「 Ramp Control™ 」, function that controls the rate of temperature rise by setting ramping rate(°C/min) per experiment
- Uniform temperature distribution through airflow optimized for uniform heat transfer (within  $\pm 3.6^{\circ}\text{C}$  at  $100^{\circ}\text{C}$ )



Accurate temperature control with 3-point calibration



Ramp Control™ per experiment condition

## Specification

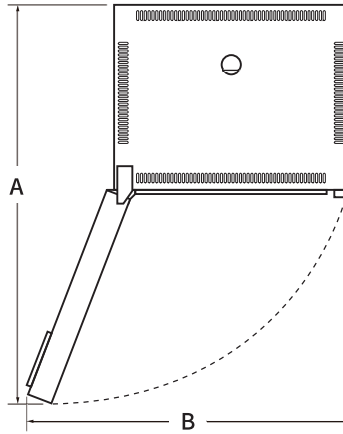
Model	Solid door (without window)	ON4-03V	ON4-05V	ON4-10V	ON4-15V
	Window door	ON4-03VW	ON4-05VW	ON4-10VW	ON4-15VW
Chamber volume (L / cu ft)		26 / 0.92	58 / 2.05	110 / 3.88	147 / 5.19
Temperature	Range (°C / °F)	Amb.+15 ~ 250°C / Amb.+27 ~ 482°F			
	Fluctuation at 100°C (°C / °F)	±0.4 / ±0.72	±0.5 / ±0.9	±0.5 / ±0.9	±0.5 / ±0.9
	Variation at 100°C(°C / °F)	±2.8 / ±5.04	±2.6 / ±4.68	±3.6 / ±6.48	±3.5 / ±6.3
	Heating time to 100°C (min.) <sup>1)</sup>	25	39	22	21
	Recovery time at 100°C (min.)	17	19	10	9
Control panel		5 inch TFT Color LCD			
Communication interface		USB-B, RS-232			
Function	Recently event record	36 ea			
	Recommended temperature	Suggest three frequently used temperature			
	Graph	Available viewing stored and real-time graphs			
	Data storage	Save your experiment data (in CSV format)			
	Temp. ramping rate (°C/min.   °F/min)	0 to 2.2   0 to 3.96	0 to 2   0 to 3.6	0 to 4.4   0 to 7.92	0 to 2.6   0 to 4.68
Dimensions	Interior (W x D x H, mm / inch)	273 x 270 x 350 / 10.75 x 10.63 x 13.78	340 x 390 x 422 / 13.4 x 15.35 x 16.61	441 x 420 x 597 / 17.36 x 16.54 x 23.5	500 x 446 x 659 / 19.69 x 17.56 x 25.95
	Exterior (W x D x H, mm / inch)	478 x 527 x 604 / 18.8 x 20.75 x 23.78	558 x 648 x 684 / 21.97 x 25.5 x 26.93	663 x 677 x 859 / 26.1 x 26.65 x 33.82	728 x 704 x 914 / 28.66 x 27.7 x 36.0
	Net weight (kg / lbs)	33 / 72.8	53 / 116.8	63 / 138.9	73 / 160.9
Shelves	Quantity of shelves (standard/max.)	2 / 4	2 / 5	2 / 8	2 / 9
	Max. Load per shelf (kg / lbs)	20 / 44.09			
Number of air change per hour at 100°C		16			
Electrical requirements	230V, 50/60Hz, A	3.2	3.5	5.7	7.4
Cat. No.	Solid door (without window)	AAH111105K	AAH111115K	AAH111125K	AAH111135K
	Window door	AAH112105K	AAH112115K	AAH112125K	AAH112135K
Electrical requirements	120V, 60Hz, A	6	6.7	10.9	14.2
Cat. No.	Solid door (without window)	AAH111106U	AAH111116U	AAH111126U	AAH111136U
	Window door	AAH112106U	AAH112116U	AAH112126U	AAH112136U

1) Heating time is defined as the time taken to reach 98% of the set temperature.

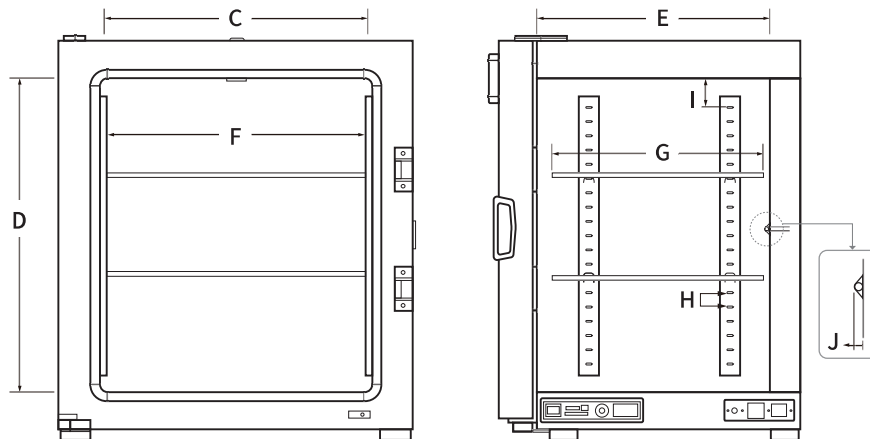
※ Technical data according to DIN 12880

## Dimensions (OF4/ON4)

### Exterior



### Interior



(unit: mm / inch)

Model	OF4-03	ON4-03	OF4-05	ON4-05	OF4-10	ON4-10	OF4-15	ON4-15
<b>A: Maximum depth with door opened</b>	868 / 34.2		1060 / 41.7		1185 / 46.7		1271 / 50.0	
<b>B: Maximum width with door opened</b>	695 / 27.4		809 / 31.9		958 / 37.7		1050 / 41.3	
<b>C: Interior width<sup>1)</sup></b>	300 / 11.8	273 / 10.7	380 / 15.0	340 / 13.4	485 / 19.1	441 / 17.4	550 / 21.7	500 / 19.7
<b>D: Interior height<sup>1)</sup></b>	400 / 15.7	350 / 13.8	480 / 18.9	422 / 16.6	655 / 25.8	597 / 23.5	710 / 28.0	659 / 25.9
<b>E: Interior depth<sup>1)</sup></b>	210 / 8.3	270 / 10.6	330 / 13.0	390 / 15.4	350 / 13.8	420 / 16.5	376 / 14.8	446 / 17.6
<b>F: Shelf width</b>	266 / 10.5		346 / 13.6		451 / 17.8		516 / 20.3	
<b>G: Shelf depth</b>	195 / 7.7		315 / 12.4		335 / 13.2		361 / 14.2	
<b>H: Gap between shelf racks</b>	30 / 1.2		30 / 1.2		30 / 1.2		30 / 1.2	
<b>I: Gap between uppermost shelf and interior ceiling<sup>1)</sup></b>	80 / 3.1	50 / 2.0	90 / 3.5	60 / 2.4	88 / 3.5	57 / 2.2	85 / 3.3	59 / 2.3
<b>J: Space for sensor installation</b>	3.8 / 0.15		3.8 / 0.15		3.8 / 0.15		3.8 / 0.15	

1) ON4 uses a multi-path convection method, which causes differences in internal dimensions.