Venticell

Heating & Drying Ovens

Patented Forced Air Convection

404 / 14.3ft³ **707** / 25ft³ **1212** / 43ft³

22 / 0.8ft³ **55** / 2ft³ **111** / 4ft³ **222** / 8ft³

Venticell heating and drying overns are equipped with our patented forced air convection system, which provides simultaneaous vertical and horizontal airflow for precise temperature uniformity and fast drying times.

Applications for the Venticell include sterilizing or drying glassware, as well as drying textiles, soils, and non-flammable chemicals. The Venticell is also suitable for industrial materials testing and ageing studies.

Key Benefits:

- Pharmaceutical-grade stainless steel chamber for easier cleaning and sterilization.
- Patented forced air convection system with simultaneous vertical and horizontal airflow for precise temperature uniformity and rapid heating times.
- Temperature ramping and cycling.

Temperature:

Ambient + 10°C up to 250°C *(300°C max temp. option available)*

Chamber:

- AISI 304 stainless steel (AISI 316 option available).
- Double wall, seamless main chamber with removable inner chamber.
- Patented 4-point door locking system securely seals the door to the chamber.
- Optional heavy load chamber with internal frame and reinforced shelving.

Electrical:

115V 50/60Hz: 22, 55, 111, 222
208-3P 50/60Hz: 707
230V 50/60Hz: 222, 404, 1212

Optional Equipment:

- Stainless steel exterior: AISI 304 or 316.
- ECO plus: add 6 program segments for a total of 8 segments and 9 programs.
- Clean room / pass-through models (p. 5).
- 1" (25mm) / 2" (50mm) / 4" (100mm) access port.
- Flexible PT 100 temperature sensor.
- Heavy load chamber.
- Ethernet communication port
- Automatic key and door lock.
- Door sensor and alarm.
- Interior electrical socket: 230V.
- Rolling cart for 22, 55, 111, 222.
- BMS contacts (24V, 1A).
- IQ/OQ protocols with 9pt. or 27pt. temperature mapping.
- USB drive, 30-day data logging: 22, 55, 111.
- Warmcomm software:
  - 4.0B - data monitoring.
  - 4.0P - data monitoring and control.
  - 4.0F - FDA 21 CFR part 11 compliance.

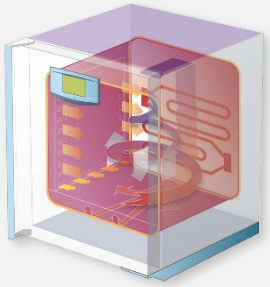
ECO Controller:

- 3" LCD display.
- Fuzzy Logic algorithm constantly monitors chamber conditions and continuously optimizes parameters.
- (9) programs with (2) segments each for varying loads and parameters.
- Real-time programming and cycling.
- Programmable audible & visual alarms – temperature and time.
- USB flash & device, RS232 & optional Ethernet port.
- Integrated USB 30-day data logger for temperature measurement & recording.
- Keypad lock against unauthorized access.
- Optional FDA CFR 21 part 11 compliance.

EVO Controller:

- 5.7" LCD touch display.
- Fuzzy Logic algorithm constantly monitors chamber conditions and continuously optimizes parameters.
- (100) programs with (100) segments each for varying loads and parameters.
- Real-time programming and cycling with settings for temperature ramping.
- Fan adjustments in 1% increments.
- Programmable audible & visual alarms – temperature, time & humidity.
- Service programs for quick error diagnostics.
- USB device, RS232 & optional Ethernet port.
- Integrated SD card 30-day data logger & multi-level secure user authentication.
- Optional FDA CFR 21 part 11 compliance.

Venticell Technical Data		Model	22	55	111	222	404	707	1212
Interior Dimensions **Chamber:** AISI 304 stainless steel *(AISI 316 stainless steel option available)*	Volume	ft^3	.8	1.9	3.9	7.8	14.3	25	43
		liters	22	55	111	222	404	707	1212
	Width	inches	9.4	15.7	21.3	21.3	21.3	37	3x21.3
		mm	240	400	540	540	540	940	3x540
	Depth	inches	12.6	15.4	15.4	21.3	21.3	21.3	21.3
		mm	320	390	390	540	540	540	540
	Height	inches	11.6	13.8	20.9	29.9	55.5	55.5	55.5
		mm	295	350	530	760	1410	1410	1410
Exterior Dimensions (Including door and handle)	Width	inches	16	24.4	29.9	29.9	29.9	45.7	85.9
		mm	406	620	760	760	760	1160	2175
	Depth	inches	22.4/22.83	25.2	25.2	31.1	31.1	31.1	33.3
		mm	560S/580 C	640	640	790	790	790	845
	Height (Legs L, Casters C)	inches	25.2	26.8	33.9	42.9	75.2	75.2	75.2
		mm	640L	680L	860L	1090L	1910C	1910C	1910C
Shipping Dimensions	Width	inches	18.3	28	33.5	33.5	33.5	49.2	-
		mm	465	710	850	850	850	1250	-
	Depth	inches	26.2	28.7	28.7	33.9	33.9	35.9	-
		mm	665	730	730	860	860	860	-
	Height	inches	25.8	35.4	42.5	52	84.7	84.7	-
		mm	655	900	1080	1320	2150	2150	-
Shelves: Stainless Steel	Capacity: # of shelf guides in chamber side walls	maximum #	4	4	7	10	19	19	3x19
		# included	2	2	2	2	2	2	6
Shelf Distance	Min. distance between trays	inches	2.4	2.8	2.8	2.8	2.8	2.8	2.8
		mm	60	70	70	70	70	70	70
Useable Shelf Area	Width x Depth	inches	7.3x10.4	15x13.2	20.5x13.2	20.5x19.1	20.5x19.1	36.2x19.1	20.5x19.1
		mm	185x265	380x335	520x335	520x485	520x485	920x485	520x485
Maximum Shelf Load	Per shelf	lbs	22.1	44.1	44.1	66.1	66.1	110.2	66.1
		kg	10	20	20	30	30	50	30
	Total Per Unit	lbs	55.1	110.2	110.2	154.3	220.5	286.6	661.4
		kg	25	50	50	70	100	130	300
Doors		No.	1	1	1	1	1	2	3
Operation Temperature	From 5°C above ambient	up to °C	250 (300)	250 (300)	250 (300)	250 (300)	250 (300)	250 (300)	250 (300)
Temperature Deviation from Operation Temperature	Temperature Distribution	± % temp.	1.1	1	1	1	1.5	2.5	4
	Uniformity	± °C	0.3	0.4	0.4	0.4	0.4	0.4	1.3
Time to Reach Temperature of 250°C with closed air flap and 230V Power		minutes	28	49	53	70	58	64	68
Number of Air Exchanges @ 250°C		per hour	45	45	49	24	18	12	16
Heat Emission @ 250°C		W	350	590	760	990	1940	2550	5920
Noise Level of Complete Device		dB	<55	<55	<55	<55	<58	<58	<58
Electrical Data	Max Consumption 50/60Hz	kW	.96	1.3	1.9	1.8	3.7	4.9	11.3
		W (standby mode)	5	5	5	5	5	5	-
		A	4.2	11.3	16.5	16.5	16	14	-
		V	115	115	115	230	230	208-3P	230-3P
IP Code			IP20	IP20	IP20	IP20	IP20	IP20	IP20
Weight	Net	lbs	68.3	121.3	165.3	220.5	330.7	474	1047.2
		kg	31	55	75	100	150	215	475
	Gross	lbs	79.4	134.5	185	258	364	514	1157.4
		kg	36	61	84	117	165	233	525



Patented Forced Air Convection

patented force air convection system and for precise temperature uniformity and fast heating and cooling times. The process of heating from the bottom of the chamber to the top mimics natural airflow, allowing for simulation of conditions.