



Ecocell heating and drying ovens are equipped with a natural gravity convection system, providing gentle airflow with low vibration and exceptional temperature uniformity.

The Ecocell is ideal for carefully drying sensitive materials, including light powders and compounds, while also being suitable for industrial materials testing applications, warming blankets and bedding, and sterilizing laboratory glassware and media.

Key Benefits:

- Pharmaceutical-grade stainless steel chamber for easier cleaning and sterilization.
- Natural gravity convection system provides gentle airflow with precise temperature uniformity.
- Temperature ramping and cycling.

Temperature:

Ambient + 5°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
230V 50/60Hz: 222, 404, 707

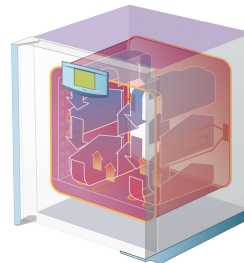
Optional Equipment:

- Stainless steel exterior: AISI 304 or 316
- ECO plus: add 6 program segments for a total of 8 segments and 9 programs.
- 1" (25mm) / 2" (50mm) / 4" (100mm) access port.
- Flexible PT 100 temperature probe.
- Ethernet communication port.
- Wire or perforated stainless steel shelves.
- Exhaust port extension to allow connection to external exhaust.
- Automatic key and door lock.
- Door sensor and alarm.
- Rolling cart for 22, 55, 111, 222.
- Interior electrical socket: 115V / 230V.
- BMS contacts (24V, 1A).
- 4-20mA contacts.
- IQ/OQ protocols with 9pt. or 27pt. temperature mapping.
- USB drive, 30-day data logging: 22, 55, 111.
- Warmcomm 4.0 data capture software.
- Durocell option: Interpon coated chamber protects against corrosive substances.



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.



Natural Gravity Convection System

With nearly undetectable noise and vibration, the natural gravity convection system produces gentle airflow with even temperature uniformity throughout the chamber. Fanless operation reduces particle movement, preventing sample contamination, and significantly reduces power consumption.

Ecocell Technical Data			Model	22	55	111	222	404	707
Interior Dimensions Chamber: AISI 304 stainless steel (AISI 316 stainless steel option available)	Volume	ft³	0.8	2	4	8	14.3	25	
		liters	22	55	111	222	404	707	
	Width	inches	9.4	15.7	21.3	21.3	21.3	37	
		mm	240	400	540	540	540	940	
	Depth	inches	13.8	14.6	14.6	20.5	20.5	20.5	
		mm	350	370	370	520	520	520	
	Height	inches	11.8	13.8	20.9	29.9	55.7	55.7	
		mm	300	350	530	760	1415	1415	
Exterior Dimensions (Including door and handle)	Width	inches	16	24.4	29.9	29.9	29.9	45.7	
		mm	406	620	760	760	760	1160	
	Depth	inches	22	26.8	26.8	32.7	31.1	31.1	
		mm	560	680	680	830	790	790	
	Height	inches	24	26.8	33.9	42.9	75.2	75.2	
		mm	610	680	860	1090	1910	1910	
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	28.4	28.4	33.9	33.9	35.8	
		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	
		# included	2	2	2	2	2	2	
Shelf Distance	Min. distance between trays	inches	2.8	2.8	2.8	2.8	2.8	2.8	
		mm	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	
		mm	185x265	380x335	520x335	520x485	520x485	920x485	
Maximum Shelf Load	Per shelf	lbs	22	44	44	66	66	110	
		kg	10	20	20	30	30	49.9	
	Total Per Unit	lbs	55	110	110	154	220	286	
		kg	24.9	49.9	49.9	69.9	99.8	129.7	
Doors		No.	1	1	1	1	1	2	
Operation Temperature	From 5°C above ambient	up to °C	250 (300)	250 (300)	250 (300)	250 (300)	250 (300)	250 (300)	
Temperature Deviation From Operation Temperature	Temperature Distribution	± % temp.	2.7	2	2	2	2.5	3.5	
	Uniformity	± °C	1.0	0.3	≤0.8	≤0.8	≤1	≤1	
Time to Reach Temperature of 250°C with closed flap and 230V Power		min	54	59	60	99	85	95	
Air Exchange @ 250°C		per hour	6	8	12	5	4	3	
Heat Emission		W	300	590	760	990	1940	2550	
Noise Level of Complete Device		dB	0	0	0	0	0	0	
Electrical Data	Max Consumption 50/60Hz	kW	.92	1.2	1.8	1.8	3.6	4.5	
		W	920	1196	1806	1806	3611	3128	
		A	8	10.4	15.6	15.6	15.7	13.6	
		V	115	115	115	115/230**	230 3P	230 3P	
IP Code			IP20	IP20	IP20	IP20	IP20	IP20	
Weight	Net	lbs	68.34	121.3	165	221	331	474	
		kg	31	55	75	100	150	215	
	Gross	lbs	79.4	134.5	185	258	364	514	
		kg	36	61	84	117	165	233	

**230V for 300°C models: 222, 404, 707