



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

Ecocell ovens are ideal for carefully drying sensitive materials, including light powders and compounds, while also being suitable for industrial material 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 (Incucell) 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.
- 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.

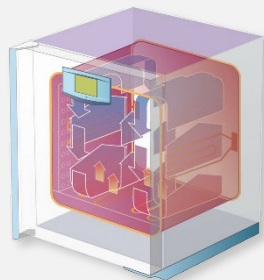


### EVO Controller:

- 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.

EcoCell Technical Data		Model	22	55	111	222	404	707
<b>Interior Dimensions</b>  <b>Chamber:</b> AISI 304 stainless steel (AISI 316 stainless steel option available)	Volume	ft <sup>3</sup>	0.8	1.9	3.9	7.8	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	
<b>Exterior Dimensions</b> (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 (Legs L, Casters C)	inches	24	26.8	33.9	42.9	75.2	75.2
		mm	610L	680L	860L	1090L	1910C	1910C
<b>Shipping Dimensions</b>	Width	inches	18.31	27.98	33.46	33.46	33.46	49.21
		mm	465	710	850	850	850	1250
	Depth	inches	26.18	28.35	28.38	33.86	33.86	35.83
		mm	665	730	730	860	860	860
	Height	inches	25.79	35.43	42.52	52	84.65	84.65
		mm	655	900	1080	1320	2150	2150
<b>Shelves: Stainless Steel</b>	Capacity: # of shelf guides in chamber side walls	maximum #	4	4	7	10	19	19
		# included	2	2	2	2	2	2
<b>Shelf Distance</b>	Min. distance between trays	inches	2.8	2.8	2.8	2.8	2.8	2.8
		mm	70	70	70	70	70	70
<b>Useable Shelf Area</b>	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
<b>Maximum Shelf Load</b>	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
<b>Doors</b>		No.	1	1	1	1	1	2
<b>Operation Temperature</b>	From 5°C above ambient	up to °C	250 (300)	250 (300)	250 (300)	250 (300)	250 (300)	250 (300)
<b>Temperature Deviation From Operation Temperature</b>	Temperature Distribution	± % temp.	2.7	2	2	2	2.5	3.5
	Uniformity	± °C	1.0	0.3	≤0.8	≤0.8	≤1	≤1
<b>Time to Reach Temperature of 250°C with closed flap and 230V Power</b>		min	54	59	60	99	85	95
<b>Air Exchange @ 250°C</b>		per hour	6	8	12	5	4	3
<b>Heat Emission</b>		W	300	590	760	990	1940	2550
<b>Noise Level of Complete Device</b>		dB	0	0	0	0	0	0
<b>Electrical Data</b>	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
<b>IP Code</b>			IP20	IP20	IP20	IP20	IP20	IP20
<b>Weight</b>	Net	lbs	68.34	121.25	165	221	331	474
		kg	31	55	75	100	150	215
	Gross	lbs	79.37	134.5	185	258	364	514
		kg	36	61	84	117	165	233

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



#### Natural Gravity Convection System

Natural gravity convection heating system operates with no noise or vibration and provides gentle airflow and even temperature distribution throughout the chamber. The lack of a fan inside the chamber also reduces particle movement and power consumption.