



Temperature range:	+5°C – 250°C (300°C EVO)
Vacuum rating:	5x10 ⁻⁴ mbar (0.0005 mbar)
Chamber leak rate:	5x10 ⁻³ mbar (0.005 mbar)
Chamber volume:	0.8 cu.ft. (22 L), 2 cu.ft. (55 L), 4 cu.ft. (111 L)
Controller:	ECO standard, EVO advanced, microprocessor
Housing material:	Galvanized mild steel, painted
Chamber material:	AISI 316 stainless steel, pressure resistant
Regulatory labels:	CE, UL, CSA-listed



ECO Controller:

- 3" LCD display with keypad operation
- Analog pressure display
- 9 programs, 2 segments each, up to 99 cycles
- Real-time programming, optional temperature ramp settings
- Cycle status display
- Acoustic and visual alarms; temperature, time
- USB, RS 232, optional Ethernet connectivity
- Keypad lock against unauthorized access



EVO Controller:

- 5.7" touch display, color, glove-friendly operation
- Pressure monitoring down to 10 mbar (0.1 achievable with optional Pfeiffer sensor)
- 100 programs, 100 segments each, unlimited cycles
- Real-time programming with temperature ramp settings
- Graphic cycle display
- Acoustic and visual alarms; temperature, time
- USB, SD card, RS 232, optional Ethernet connectivity
- Multi-level secure user authentication

Standard Equipment:

- Servotherm direct heat transfer system for fast and gentle drying of sensitive or oxidative samples and solvents.
- Fuzzy logic microprocessor for real-time adaptive control.
- Integrated 30-day data logger with Excel-formatted export.
- AISI 316 stainless steel chamber, pressure resistant
- Servotherm aluminum shelving fully contacts chamber walls for efficient, uniform heat transfer to the load.
- Fully removable for easy cleaning and maintenance.
- Five layers of insulation to minimize heat loss and efficiently maintain chamber conditions.
- Patented Ventiflex safety glass, 2 cm, mounted on guide rails and springs to relieve pressure in an overpressure event.
- Patented 4-point door locking system securely seals the door to the chamber
- Inert gas connection, max pressure 20 PSI
- Needle valve for fine dosing.
- Connecting kit DN mm (ISO KF) 16.
- 1.5" (40mm) access port for routing sensors, probes or external connections.

Optional Equipment:

- Stainless steel exterior, AISI 304 or 316
- ECO+, add 6 program segments for a total of 8
- Vacuum pump specific to user application
- Vacustation vacuum pump housing
- Flexible PT 100 temperature sensor
- Ethernet communication port
- Automatic key and door lock
- Door sensor and alarm
- Interior electrical socket, 115V
- Rolling cart: 22, 55, 111
- BMS contacts (24V, 1A)
- IQ/OQ protocols with 9-pt. 27-pt. temperature mapping
- Warmcomm software:
 - 4.0B, data monitoring
 - 4.0P, data monitoring and control
 - 4.0F, FDA 21 CFR Part 11 compliance



Vacucell

Vacuum Drying Ovens

	Unit	22 ECO	55 ECO	111 ECO	22 EVO	55 EVO	111 EVO
Temperature							
Working temperature from ambient	°C	+5 – 250	+5 -250	+5 – 250	+5 – 300	+5 – 300	+5 – 300
Temp. distribution, aluminum shelves @100°C	±°C	2	2	3	2	2	3
Temp. distribution, aluminum shelves @200°C	±°C	5	6	7	5	6	7
Temp. distribution, *SS shelves @100°C	±°C	10	10	11	10	10	11
Temp. distribution, *SS shelves @200°C	±°C	18	23	26	18	23	26
Temperature uniformity, aluminum shelves	±°C	0.4	0.4	0.4	0.4	0.4	0.4
Temperature uniformity, *SS shelves	±°C	0.5	1	1	0.5	1	1
Time to reach 100°C, aluminum shelves	±°C	60	65	110	60	65	110
Time to reach 200°C, aluminum shelves	±°C	80	85	130	80	85	130
Time to reach 100°C, *SS shelves	±°C	130	140	170	130	140	170
Time to reach 200°C, *SS shelves	±°C	170	180	220	170	180	220
Heat emission @ 100°C	watts	150	260	370	150	260	370
Heat emission @ 200°C	watts	300	520	750	300	520	750
Vacuum							
Chamber vacuum rating	mbar	5x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴	5x10 ⁻⁴
Vacuum leak rate	mbar	5x10 ⁻³	5x10 ⁻³	5x10 ⁻³	5x10 ⁻³	5x10 ⁻³	5x10 ⁻³
Vacuum connection	DN mm	16	16	16	16	16	16
Measuring port	DN mm	40	40	40	40	40	40
Inert gas/air connection, needle valve	ø mm	8	8	8	-	-	-
Inert gas/air connection, programmable filling	ø mm	-	-	-	8	8	8
Chamber							
Capacity	cu.ft. / liters	0.8 / 22	2 / 55	4 / 111	0.8 / 22	2 / 55	4 / 111
Doors	#	1	1	1	1	1	1
Shelves (standard / max)	#	2 / 5	2 / 8	2 / 9	2 / 5	2 / 8	2 / 9
Shelf distance	in / mm	1.4 / 36	1.7 / 43	1.7 / 43			
Useable shelf area (w x d)	Inches	11 x 9.3	13. x 11.7	18.9 x 15.2	11 x 9.3	13. x 11.7	18.9 x 15.2
Maximum shelf load	lbs / kg	44 / 20	55 / 25	55 / 25	44 / 20	55 / 25	55 / 25
Maximum unit load	lbs / kg	77 / 35	99 / 45	143 / 65	77 / 35	99 / 45	143 / 65
Overall Dimensions							
Width	in / mm	22.1 / 561	24.4 / 620	29.9 / 760	22.1 / 561	24.4 / 620	29.9 / 760
Depth	in / mm	19.7 / 500	22.1 / 560	25.6 / 650	19.7 / 500	22.1 / 560	25.6 / 650
Height	in / mm	30.7 / 780	35.8 / 910	37.8 / 960	30.7 / 780	35.8 / 910	37.8 / 960
Weight	lbs / kg	143 / 65	216 / 98	287 / 130	150 / 68	223 / 101	293 / 133
Internal Dimensions							
Width	in / mm	13.4 / 340	15.7 / 400	21.3 / 540	13.4 / 340	15.7 / 400	21.3 / 540
Depth	in / mm	10.2 / 259	12.6 / 320	16.1 / 410	10.2 / 259	12.6 / 320	16.1 / 410
Height	in / mm	11.8 / 300	16.9 / 430	18.9 / 480	11.8 / 300	16.9 / 430	18.9 / 480
Electrical							
Voltage	volts	115	115	115	115	115	115
Wattage	watts	805	1208	1806	805	1208	1806
Amperage	amps	7	10.5	15.7	7	10.5	15.7
IP code		IP20	IP20	IP20	IP20	IP20	IP20

*SS = stainless steel