



Constant Climate Chamber 'HPP'eco Series



constant climate chambers HPPeco are simply unbeatable in energy efficiency. Furthermore, as constant climate chambers HPPeco have a very long, almost maintenance free service life, they are perfectly suited for stability tests, storage in controlled environment and conditioning. The high precision temperature control from 0° C to $+70^{\circ}$ C as well as active humidification and dehumidification from 10% to 90% rh were particularly adapted to the ICH guidelines, option Q1A, for stability tests.

Standard Equipment

Interior: Stainless steel, material 1.4301(ASTM 304),

deep-drawn

Housing: Textured stainless steel, rear zinc-plated steel,

intuitively operated TwinDISPLAY (TFT colour

display) with touchscreen

Double Outside stainless steel, fully insulated, inside glass (size 1400/2200 stainless steel doors

with glass sector, fully heated inner glass panes integrated in the full-sight glass door with 2-point locking – compression door lock).

Sizes 750, 1060 and 1400 two leaves,

size 2200 three leaves

Connection: Mains cable with plug (German type)

Installation: 4 feet; size 410, 750 and 1060 mounted on

lockable castors, 1400 and 2200 mounted on

height-adjustable and lockable castors

Interfaces:





Salient Features

- Stainless steel interior and exterior
- Inner glass door as standard
- Extremely guiet and vibration free operation
- Reduction in energy consumption up to 90%
- Stable and precise long term test
- Perfect controllability of temperature and humidity
- Energy saving heating / cooling using Peltier technology
- Internal data logger with over 10 years storage
- AtmoCONTROL software TwinDISPLAY
- Standard works calibration certificate at +10°C, +37°C as well as 60 % rh at +30°C measuring point chamber centre



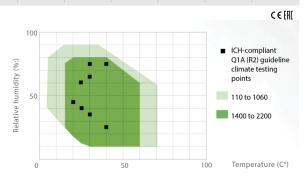


Constant Climate Chamber HPPeco (108 to 2140 Litres)

Model sizes/Descrip			110	260	410	750	1060	1400	2200	
Stainless steel interior	Volume	approx. l	108	256	384	749	1060	1360	2140	
	Width	(A) mm	560	640		1040		1250	1972	
	Height	(B) mm	480	80 800 120		1200	1450		50	
	Depth (less 10 mm for fan – Peltier)	(C) mm	400	500		600	850	750		
	Max. number of grids/shelves	number	5	9		14		28	42	
	Max. loading per grid/shelf	kg		20		30	20	3	0	
	Max. loading of chamber	kg	150	150 200		00		250 330		
	Max. loading per slide-in drip tray	kg	3	4			8		-	
	Max. loading per bottom drip tray	kg	3	4		8	-			
Textured stainless steel exterior	Width	(D) mm	745	5 824 1224		224	1435	2157		
	Height (sizes 410, 750, 1060, 1400 and 2200 with castors)	(E) mm	864	1183 1720			1913			
	Depth (without door handle), door handle + 56 mm	(F) mm	656	75	56	856	1107	10	07	
Standard equipment	Stainless steel grids, electropolished	number		2					6	
	Water tank including connection hose (sizes 110 - 750: 2.5 litres, sizes 1060/1400/2200: 10 litres)			•						
	Standard works calibration certificate (measuring point chamber center)		+10	+10 °C, 37 °C and 30 °C/60 % rh +2			+25 °C/40	°C/40 % rh and +40 °C/75 rh		
Temperature	Working temperature range without light, without humidity	°C	0 (at le	0 (at least 20 below ambient temperature) to +70 +15 (at least 10 below ambient temperature) to +6						
	Working temperature range without light, with humidity	°C	+5 (at	+5 (at least 20 below ambient temperature) to +70					least 10 imbient ire) to +6	
	Working temperature range with light, without or with humidity	°C		+15 to +40				-		
	Setting temperature range without light, with humidity	°C		+5 to +70				+15 to +60		
	Setting temperature range with light, with humdity	°C		+5 to +70			-			
	Setting temperature range with light, without humditiy	°C		0 to +70				-		
	Setting temperature range without light, without humidity	°C		0 to +70 +15 to +60						
	Setting accuracy	°C		0.1						
Humidity	Setting range humidity with light	% rh		10 to 85						
	Setting range humidity without light	% rh		10 to 90					10 to 80	
	Setting accuracy	% rh		0.5						
Further data	Electrical load at 230 V, 50/60 Hz	approx. W	650	920	1300	1500	1600	3100	3500	
	Electrical load at 115 V, 50/60 Hz	approx. W	650	920	1300	1500	1600	3100	-	
	Peltier elements in the rear	number		2 3 4 6				10		
Packing data			77	122	160	208	260	450	493	
racking data	Net weight Gross weight (packed in carton)	approx. kg	102	173	213	208	424	639	730	
	Width	approx. kg	830		213 30	1330	1370	1560	2300	
		approx. mm								
	Height	approx. mm		1050 1380 1930 1910 800 930 1050		1970	2200 1190			
	Depth	approx. mm	800	9:	30	1050	1300	11	90	

Energy consumption during ICH-compliant Q1A (R2) guideline long-term tests (12 months)





Accessories

- 1. Stainless steel grid and shelf
- 2. Reinforced stainless steel grid and shelf

Options

- Entry port 23 mm, 40 mm
- Software conforming to FDA AtmoCONTROL
- LED light module: cold-white light (6,500 K), warm white light (2700K) or cold-white plus warm-white light(HPP110-HPP750)

product range

Ovens Incubators

Sterilisers

■ Vacuum Ovens

■ CO₂ Incubators

■ Peltier Cooled Incubators

- Constant Climate Chambers
- Water & Oil Baths
- I Humidity Chambers
- I Clean Room Drying Ovens
- Stability Test Chambers
- Pass Through Ovens

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