


 Lab equipment

Exceptional environmental control

Heratherm Stability Chambers



Thermo Scientific™ Heratherm™ Stability Chamber, Cat. No. ESS750

Applications

- Stability testing
- Shelf-life testing
- Environmental testing
- Other quality control environments

Benefits

- Sustainable features
- Meets requirements for ICH Q1A (R2) and enables 21 CFR Part 11
- Programmable for restricted access
- Easy to program and operate
- Easy to maintain and move
- Extensive alert and alarm functions
- Choice of exterior solid door with interior glass door or exterior glass door
- 24-month warranty

The Heratherm Stability Chamber is an exceptional choice for use in quality control laboratories where stability or shelf-life testing is required. The chamber meets ICH stability testing guidelines for stability testing according to ICH Q1A (R2).

A broad relative humidity range covers many application needs including humidity levels below ambient. Peltier technology supports temperature stability while offering lower energy usage, compared to traditional compressors.

The humidification system with integrated water tank has a low water consumption, with no need for a drain. Very accurate relative humidity levels help provide process reliability, the heated door is minimizing potential condensate in standard applications.

Achieve data traceability and sample protection when using the restricted access functions found through the touchscreen user interface. Data logging enables 21 CFR Part 11 and IQ/OQ qualification can be implemented with service package.

The internal chamber has rounded corners, removable shelves, and other components to help facilitate easy care maintenance.

Heratherm Stability Chambers

Product specifications

Specification	Description
Models	Cat. No.
Solid door with inner glass door	ESS750
Exterior glass door	ESG750
Overview	
Chamber size	750 L / 26.5 cu. ft.
Controller	Microprocessor, PID - temperature, relative humidity (RH), with programmability
User interface	7-in. display with capacitive touchscreen
Temperature	
Temperature range	0 to 70 °C / 15 to 40 °C with optional sockets
Temperature range with humidity	0 to 70 °C (see Figure 1)
Temperature increments	0.1 °C
Peltier cooling / heating capacity	$\Delta T \geq 25 \text{ °C} / \Delta T \geq 52 \text{ °C}$
Temp. uniformity at 20°C to 37°C	$\leq \pm 0.1 \text{ °C}$
Temp. stability at 20°C to 37°C	$\leq \pm 0.1 \text{ °C}$
Heat up time to 37°C	$\leq 50 \text{ min}$
Heat up time to 60°C	$\leq 110 \text{ min}$
Cool down time to 0°C	$\leq 200 \text{ min}$
Recovery time at 37°C	$\leq 7 \text{ min}$
Humidity	
Humidity range at 37°C	10 - 90% RH (see Figure 1)
Humidity increments	0.1 °C
Humidity stability	$\leq \pm 2\%$
Water consumption	0.15 L - 1 L per day*
Water specification	DeminerIALIZED water, resistance = 0.05 - 1 M Ω
Water supply	Water reservoir 5L
Electrical	
Voltage, power	100 - 240 V, 50/60 Hz, 1400 W
Energy consumption	5 - 15 kWh per day*
Power plug	Standard plug, based on country: US, EU (Schuko), UK, CN, IN, AU, CH, JP**, DK**
Power cord length	2 m power cord
Shelving / load	
Shelves (std. / positions)	3 / 36
Shelf construction	Perforated stainless steel, Type 1.4301 / AISI 304
Shelf dimensions (w x d)	795 x 575 mm / 31.3 x 22.6 in.
Shelf surface area	0.46 m ² / 4.9 ft ²
Max. load on shelf	15.9 kg / 35 lbs. (pulled out) / 30 kg / 66.1 lbs. (stationary)
Max. load on reinforced shelf	90 kg / 198.4 lbs. (stationary)
Max. total load	210 kg / 463 lbs.
Dimensions	
Internal dimensions (WxHxD)	840 x 1450 x 630 mm / 33.07 x 57.09 x 24.8 in.
Exterior dimensions (WxHxD)	1080 x 1835 x 885 mm / 42.52 x 72.24 x 34.84 in.
Shipping weight	ESS750: 381 kg / 840 lbs. ESG750: 372 kg / 820 lbs.
Installation space requirements	Back wall: 200 mm / 7.9 in. Side wall: 150 mm / 5.9 in. Ceiling: 570 mm / 22.5 in.
General information	
Connectivity	Back: Ethernet, USB, Dry contact; Front: USB
Access port - standard	2 - right and left side
Calibration certificate included	30 °C / 60% RH
Certifications	UL, CE

Note: all values are measured according to DIN12880

* Value depends on settings, usage, and environmental conditions

** Cord length of 2.5 m / 8.2 ft

Stability Chamber with temperature & RH control

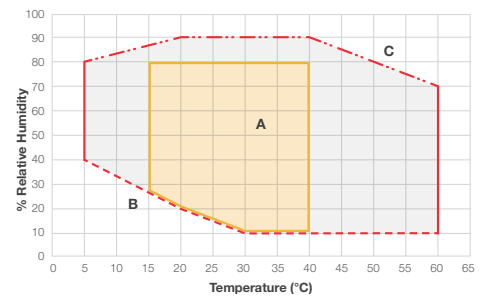


Figure 1.

Relative humidity – temperature

(Reference ambient condition: 22°C; <50% rel. humidity)

Area A

Effective temperature and humidity range. (Condensate-free area)

Area B

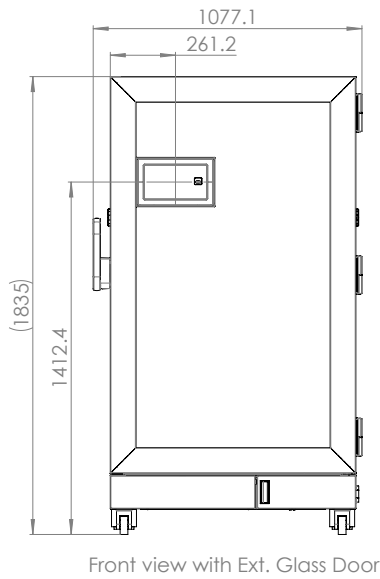
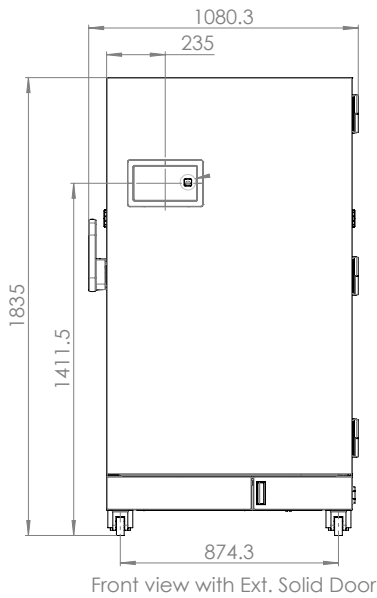
Very low temperature and humidity area. Reachable only if the ambient condition is significantly lower and the chamber samples are very dry.

Area C

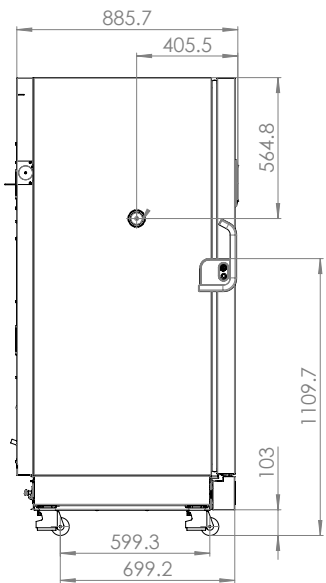
Immediate condensation formation area at coldest point of unit.

- - - - -	Maximum humidity, LED light off (Condensate-free boundary line)
- - - - -	Minimum humidity, LED light off
—————	Limited range factory-installed electrical socket options When electrical sockets are installed, temperature and relative humidity levels are limited

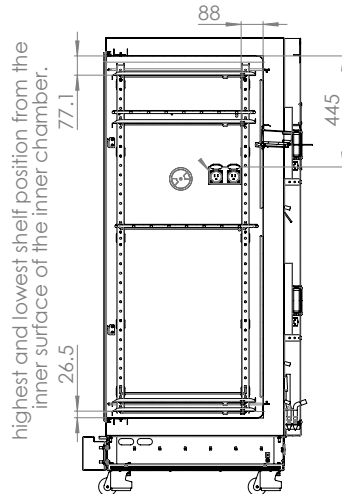
Front view



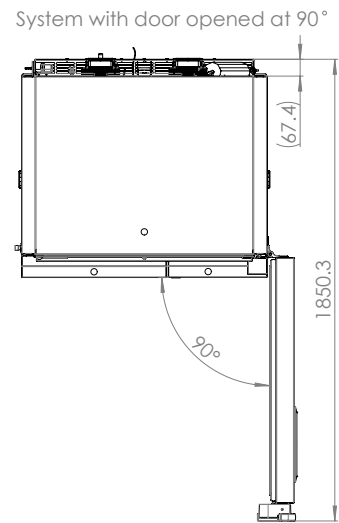
Side view



Side view - interior



Top view



Note: measurements in mm.

Learn more at thermofisher.com/chambers

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