



Lab equipment

Precise control, exceptional results

Thermo Scientific Heratherm
Environmental Chambers



Heratherm Environmental Chambers offer exceptional environmental control in a hassle-free chamber that is easy to program and use.



Modern appearance, advanced performance

Sleek in appearance, our chambers blend aesthetics and precise environmental controls with cutting-edge technology. Thermo Scientific™ Heratherm™ Environmental Chambers offer reliable and consistent performance supported by data capture and validation for 21 CFR Part 11. They are excellent for use in controlled environments with flexible configurations to meet the demands of academic and industrial workflows.

Our commitment to sustainability ensures responsible workflows.

Reduce your environmental footprint* while achieving outstanding results with Heratherm Environmental Chambers' decreased water and energy consumption and Peltier technology.

- Water-efficient humidification system with integrated water tank and optional clean water connection.
- Peltier technology supports temperature stability and uniformity with lower energy usage compared to traditional compressors.
- Vertical low-energy LED lighting includes UV light and programmable light spectrum and day/night cycles.

* When you upgrade from current models to new models.

Additional advanced features of Heratherm Environmental Chambers include:

- Four models available offering various controlled climates including humidity, temperature, light and UV light for testing, and CO₂ incubation.
- Appropriate for controlled environments:
 - Programmable interface for open or restricted user modes
 - Data logging for 21 CFR Part 11 and remote data monitoring needs
 - ICH stability and photostability testing – addressing temperature, humidity, light, and UV exposure according to guidelines Q1A(R2) and Q1B
 - Available IQ/OQ qualifications service; visit thermofisher.com/chamberservice
- Security features including overtemperature alarm and switch off features, door alarms, restricted protocol programming, various alerts, and manual/automated door locking.
- Ease-of-use features including dual access ports for maximum flexibility and rounded corners for easy cleaning.

At-a-glance environmental chamber comparison

Chamber type	Size	Temperature range	Humidity	Light	CO ₂	Cat. No.
Heratherm Light Chamber						
Solid exterior door with interior glass door	750 L (26.5 cu. ft.)	0 – 70°C (15 – 45°C)*	10 – 90% RH	LED technology	–	ELS750
Glass exterior door	750 L (26.5 cu. ft.)	0 – 70°C (15 – 45°C)*	10 – 90% RH	LED technology	–	ELG750
Heratherm Stability Chamber						
Solid exterior door with interior glass door	750 L (26.5 cu. ft.)	0 – 70°C	10 – 90% RH	–	–	ESS750
Glass exterior door	750 L (26.5 cu. ft.)	0 – 70°C	10 – 90% RH	–	–	ESG750
Heratherm CO₂ Chamber						
Solid exterior door with interior glass door	750 L (26.5 cu. ft.)	0 – 45°C	10 – 90% RH	–	0 – 20% v/v	ECS750
Glass exterior door	750 L (26.5 cu. ft.)	0 – 45°C	10 – 90% RH	–	0 – 20% v/v	ECG750
Heratherm Incubation Chamber						
Solid exterior door with interior glass door	750 L (26.5 cu. ft.)	0 – 70°C	–	–	–	EIS750
Glass exterior door	750 L (26.5 cu. ft.)	0 – 70°C	–	–	–	EIG750

* with LED light switched on

Heratherm Stability Chambers

Gain confidence in your product when testing stability and shelf life with robust chambers designed to meet a variety of quality control demands.



Temperature and humidity controls, well suited for stability testing, shelf-life testing, and environmental testing. Features include:

- Broad relative humidity range to cover many applications, including humidity levels below ambient.
- Environmentally friendly water-efficient humidification system.
- Minimal condensate in standard applications.*
- Integrated water tank; fixed water connection for in-house purified water option available.
- Energy-efficient Peltier technology supports temperature stability and uniformity with lower energy usage compared to traditional compressors and without hazardous refrigerant.
- Two access ports for independent data capture, and internal documentation of set and actual parameter values, along with event log to meet 21 CFR Part 11 requirements for process documentation.
- Data retrieval via USB stick, Ethernet connection, or Thermo Cloud via OPC-UA standard.
- Sample and process protection: Assign personalized access with user IDs; restrict access with standard door lock, or optional automated door lock; various alarm options to prevent operator or process issues.
- Intuitive touchscreen interface with easy programmability of temperature cycles and process duration.
- Simplified setup with no technician required; install using standard power cord.
- IQ/OQ qualifications and other services available; visit thermofisher.com/chamberservice.
- Inner glass door keeps environment stable, even when opening outer door. Glass door also available.
- Rounded corners and removable shelving offer easy cleaning to help prevent cross-contamination.

CO₂ with temperature and humidity option is available for incubation of mammalian cells. All features remain the same with the addition of CO₂ capability and:**

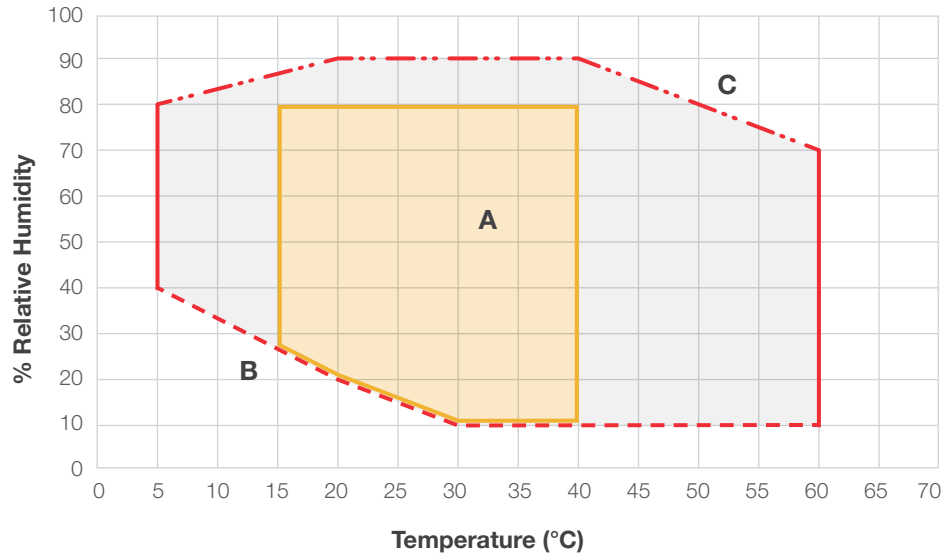
- Precisely control the essential parameters of your distinct cell growth conditions — active humidity controls the incubation environment with accuracy.

* As shown in graph area A, based on testing June 2023 to April 2024

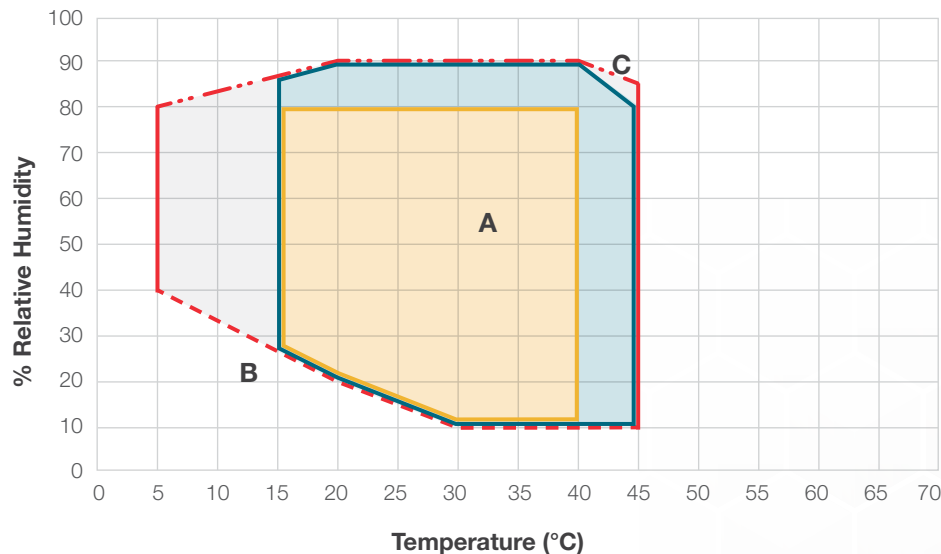
** No medical device certification.

Temperature and relative humidity ranges

Stability Chamber with temperature & RH control



CO₂ Chamber with temperature & RH control



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 in CO₂ Chambers**
CO₂ Chambers have limited temperature and relative humidity levels
- Limited range factory-installed electrical socket options**
When electrical sockets are installed, temperature and relative humidity levels are limited

CO₂ Chamber temperature/humidity diagram

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

With activated CO₂ Control:

Temp: 15 – 45°C

RH: 10 – 90%



Specifications

Heratherm Stability Chambers and CO₂ Chambers

Specifications	Stability Chamber	CO ₂ Chamber
Catalog numbers	ESS750 / ESG750	ECS750 / ECG750
Chamber size	750 L (26.5 cu. ft.)	750 L (26.5 cu. ft.)
Door type	Solid / Glass	Solid / Glass
Temperature		
Temperature range	0 – 70°C	0 – 45°C
Temperature increments	0.1°C	0.1°C
Humidity		
Humidity range at 37°C	10 – 90% RH	10 – 90% RH
Humidity increments	0.1%	0.1%
Water consumption	0.2 – 1 L per day*	0.2 – 1 L per day*
CO₂		
CO ₂ range	—	0 – 20% v/v
CO ₂ increments	—	1%
Electrical		
Voltage, power	100 – 240 V, 50/60 Hz, 1400 W	100 – 240 V, 50/60 Hz, 1400 W
Power plug**	Standard plug, based on country	Standard plug, based on country
Energy consumption	3 to 15 kWh per day *	3 to 15 kWh per day *
Shelving		
Shelves (std. / positions)	3 / 36	3 / 36
Shelf construction	Perforated stainless steel Type 1.4301 / AISI 304	Perforated stainless steel Type 1.4301 / AISI 304
Dimensions		
Internal dimensions (WxHxD)	840 x 1450 x 630 mm (33.07 x 57.09 x 24.8 in.)	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.)	1080 x 1835 x 885 mm (42.52 x 72.24 x 34.84 in.)
Shipping weight	381 kg (840 lbs.)	372 kg (820 lbs.)
Certifications		
	UL, CE	UL, CE

NOTE: 24-month warranty standard with Heratherm Environmental Chambers

* Value depends on settings, usage and environmental conditions.

** Standard power cords are available for all countries. Please reach out to your representative for more information.

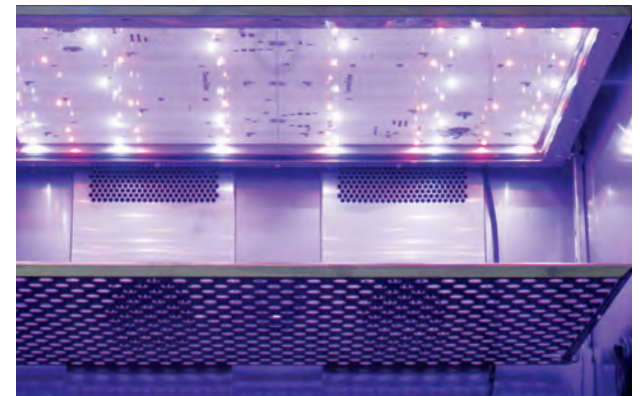
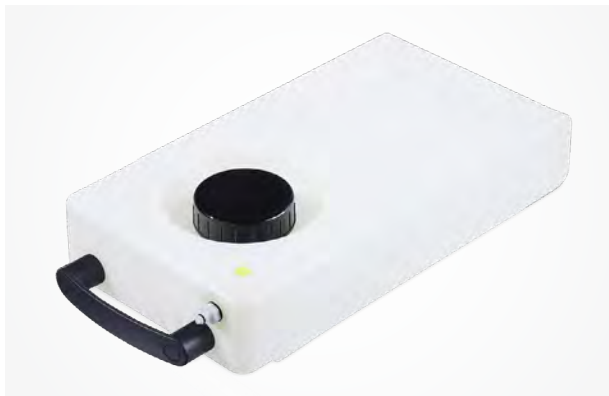
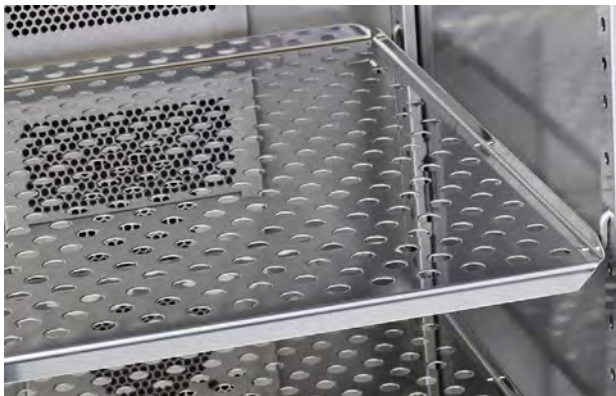
Environmental chamber factory-installed options

Factory-installed options must be selected when ordering an environmental chamber. These options cannot be retrofitted after delivery.

Option	Description	Includes	Cat. No.
Electrical outlets USA	Two interior electrical outlets US. Available with models EIS750, EIG750, ESS750, ESG750, ECS750, ECG750	Two electrical outlets with cover, on left side of inner chamber, US NEMA 5-15, 120 V, 60 Hz. NOTE: Maximum settings of temperature / humidity levels are restricted to 40°C / 80% with this option.	OUTLUS
Electrical outlets EU (Schuko)	Two interior electrical outlets EU (Schuko). Available with models EIS750, EIG750, ESS750, ESG750, ECS750, ECG750.	Two electrical outlets with cover, on left side of inner chamber, EU Schuko, 230 V, 50 Hz. NOTE: Maximum settings of temperature / humidity levels are restricted to 40°C / 80% with this option.	OUTLEU
Electrical outlets China	Two interior electrical outlets China. Available with models EIS750, EIG750, ESS750, ESG750, ECS750, ECG750.	Two electrical outlets with cover, on left side of inner chamber, China, 230 V, 50 Hz. NOTE: Maximum settings of temperature / humidity levels are restricted to 40°C / 80% with this option.	OUTLCH
Electrical outlets UK	Two interior electrical outlets UK. Available with models EIS750, EIG750, ESS750, ESG750, ECS750, ECG750.	Two electrical outlets with cover, on left side of inner chamber, UK, 230 V, 50 Hz. NOTE: Maximum settings of temperature / humidity levels are restricted to 40°C / 80% with this option.	OUTLUK
Electrical outlets India	Two interior electrical outlets India. Available with models EIS750, EIG750, ESS750, ESG750, ECS750, ECG750.	Two electrical outlets with cover, on left side of inner chamber, India, 230 V, 50 Hz. NOTE: Maximum settings of temperature / humidity levels are restricted to 40°C / 80% with this option.	OUTLIND
Electrical outlets Australia	Two interior electrical outlets Australia. Available with models EIS750, EIG750, ESS750, ESG750, ECS750, ECG750.	Two electrical outlets with cover, on left side of inner chamber, Australia, 230 V, 50 Hz. NOTE: Maximum settings of temperature / humidity levels are restricted to 40°C / 80% with this option.	OUTLAUS
Electrical outlets Switzerland	Two interior electrical outlets Switzerland. Available with models EIS750, EIG750, ESS750, ESG750, ECS750, ECG750.	Two electrical outlets with cover, on left side of inner chamber, Swiss outlet, 230 V, 50 Hz. NOTE: Maximum settings of temperature / humidity levels are restricted to 40°C / 80% with this option.	OUTLSWI
Left hinge door	Left hinge door	Door with left hinge.	LHDOOR
Automated door lock	Automated, motorized door lock: opening and closing is done via the user interface.	Door lock is automated and can be locked / unlocked by user interface. Protection with user ID / password.	AUTOLOCK
Shaker shelving	Shaker shelving: 1 shaker shelf installed at middle of workspace (please add interior outlet choice as a separate line item if needed)	Note that changes in position of the shelf or additional shaker shelves need to be installed by a qualified technician for safety reasons. Standard shelves can be used as needed in addition.	SHAKESH
External water connection	Chamber does not contain a water tank. An external water connection must be connected to the chamber for water supply.	Note the required water quality resistance range of 50 K to 1 M Ohm*cm.	EXTWATER

Environmental chamber accessories

Accessory	Description	Includes	Cat. No.
Shelving			
Perforated stainless steel shelf kit 750L	Perforated stainless steel shelf, including shelf holders for 750 L models of the Heratherm environmental chambers: 30 kg max. capacity	1 perforated shelf and 2 shelf supports	333946
Reinforced stainless steel shelf kit 750L	Reinforced stainless steel shelf, including shelf holders for 750 L models of the Heratherm environmental chambers: 90 kg max. capacity	1 reinforced perforated shelf and 2 shelf supports	333950
Wire mesh shelf kit 750L	Wire mesh shelf, including shelf holders for 750 L models of the Heratherm environmental chambers; 30 kg max. capacity	1 wire mesh shelf and 2 shelf supports	333948
Humidity system			
Water tank	Extra tank, includes tubing	1 water tank (5L), tubing to connect	33267G01
Light system			
Light module 1	Light module for ICH, with white, red and blue LED lights, and UV LED light	1 module with LED, connection and 2 shelf supports	333979
Light module 2	Light module plant / animal with white, red and blue LED lights	1 module with LED, connection and 2 shelf supports	333980





Learn more at thermofisher.com/chambers

thermoscientific

For laboratory use. It is the customer's responsibility to ensure that the performance of the product is suitable for the customer's specific uses or applications.

© 2024 Thermo Fisher Scientific Inc. All rights reserved. OPC UA is a trademark of OPC Foundation. All other trademarks are the property of Thermo Fisher Scientific or its subsidiaries. **EXT6463 0424**