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PHARMAEVENT PHOTOSTABILITY CHAMBERS



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PharmaEvent Photostability Reach-In Chambers

Pharmaceutical · Nutraceutical · Biotech · Food · Flavors · Fragrances · Cosmetics

Photostability Testing According to ICH Q1B

Our PharmaEvent photostability chambers have been designed to specifically meet the stringent light testing requirements of the life sciences industry. These chambers are designed to specifically meet the requirements of ICH guideline Q1B Option 2, which specifies exposure to lighting from cool white and ultraviolet-A fluorescent lamps. The chamber features the specific lamps that are the spectral reference of the ICH guidelines. With built-in light sensors, Weiss provides a unique integration calculator to automatically expose product to a programmable setting of 1.2 million lux-hours and 200 watt-hours per square meter; full exposure testing is complete in less than 3 days. Exceptional quality, innovative product features, high accuracy sensors and smart touchscreen controls provide optimum conditions for your photostability testing.



- Benchtop model C/250/L: 2 tiers, 9 ft.3
- Fullsize model C/500/L: 4 tiers, 18 ft.3
- Range of operation (lights on): 5 50°C., 20 90% RH
- ✓ Control capability: ± 0.1°C., ± 1.0% RH
- 7" WebSeason touchscreen control interface
- ✓ 21 CFR Part 11 compliant control system
- 5°C operation provides cold storage simulation
- Lamps fully compliant to the ICH guideline Q1B option 2
- Calibrated light sensors for light level feedback
- Light equalization filters for uniform exposure
- Automatic exposure timing to ICH guidelines
- White interior surfaces for maximum reflectivity
- GMP compliant design & documentation
- Compact, easy fit through common doorways
- Ultra low heat of rejection to lab space
- Whisper quiet operation
- Integral humidity water tank or external water feed
- Patented high efficiency humidification system
- Run time totalizer and maintenance indicator
- Analog outputs for building monitoring systems
- Optional dimming control for lower light levels
- Optional SIMPATI® Pharma Software
- Optional IQ/OQ documentation & site execution packages
- Optional water cooled refrigeration
- Optional cooling via building chilled water
- Optional LED lamps to replicate modern illumination



Photostability Testing to ICH guideline QIB

Photostability chambers are available in two sizes - a compact benchtop and a spacious upright model for uniform constant temperature and humidity testing (models C/250/L and C/500/L). The photostability testing chambers are characterized by an ideal white light, UV-A, temperature and humidity distribution. The lighting system lamps comply with the ICH Guideline Q1B Option 2, and the power levels allow photostability tests to be carried out in as little as 3 days.

One of the most important requirements in photostability testing is the uniform irradiation of the test specimens. For this reason, all the specimens should be positioned at the same distance from the light source, which is properly fixed within the chamber. The naturally non-uniform emission of lamps at close distance is rebalanced by special visible light and UV filter

systems for uniform irradiation of the shelving area. For recording of the cool white light illumination and UV-A irradiance, this system is equipped with corresponding light sensors. This allows the entering of setpoint values in Ixh and Wh/m² (e.g. 1.2 million Ixh and 200 Wh/m²) for a fully automated and user friendly process. The additional option of SIMPATI® Pharma software provides for a fully documented, GMP compliant process.



Shelf with UV-A lamps



Shelf with cool white lamps



Benchtop Model C/250/L (2 light tiers)



PharmaEvent Photostability Chambers

PharmaEvent Specifications

	C/250/L	C/500/L
Workspace Volume cu. ft. (liters)	9 (235 I)	18 (460 l)
Internal Dimensions In (mm)	20.9"W x 26.5"D x 25.2"H (530 x 673 x 641)	20.9"W x 27"D x 51.4"H (530 x 687 x 1305)
External Dimensions In (mm)	45.6"W x 34.3"D x 40"H (1159 x 872 x 1017)	31.6″W x 41.7″D x 80.9″H (803 x 1060 x 2055)
Light Tiers	1 UV, 1 CW light	2 UV, 2 CW light
Shelving Storage area (sqft/m²)	7.7/0.71	15.6/1.45
Load per shelf (lb/kg)	55/25 (distributed load)	
Max load total (lb/kg)	110/50	220/100
Temperature Range	+5°C to +50°C (Lights off) +5°C to +50°C (250 L), +10°C to +50°C (500 L) (Lights on)	
Temperature Control (in time)	±0.1°C to ±0.5°C	
Temperature Uniformity (in space)	±0.5°C to ±1.0°C (1.5 with lighting)	
Gradient (acc. to IEC 60068-3-5)	±1 to ±2	
Humidity Range	20% to 90% RH	
Humidity Control (in time)	±1 to ±2% RH	
Humidity Uniformity (in space) ¹	±3 to ±5% RH	
Dewpoint Temp Range	+5°C to +40°C	
Water Supply Tank	3.4 gal (13 l)	4.9 gal (19 l)
Water Specification	Demineralized or R.O. water PH value range = 6 to 7, Conductivity range = 5 to 20 microsiemens/cm	
Cool White Light Intensity (lux)	~ 5,500 at +5 C. (250/L) ~ 12,000 at +15 C ~ 18,000 at +25 C ~ 25,000 @ + 45 C	
UV-A Light Intensity (W/m2)	~ 0.65 at +5 C. (250/L) ~ 1.5 at +15 C ~ 3.0 at +25 C ~ 3.7 at +45 C	
Cool White uniformity (%)	~ ±8 from median reading	
UV-A Uniformity (%)	~ ±12 from median reading	
Factory Calibrations	+25°C/60 % RH and +40°C/75 % RH	
Power Consumption (kW)	1.4	2.6
Power Mains	220/230 VAC ±10 %, 1 ph, 50/60 Hz	
Noise Level dB(A) ¹	52	
Heat Rejection BTU (kW)	2400/0.7	4400/1.3

This data is based on an ambient temperature of +25°C (77°F), 230 V nominal voltage, without specimen, without additional equipment and heat compensation. This standard product contains fluorinated greenhouse gases with a global warming potential of 150 or more. Based on ICH Q1B conditions. ¹ Measured at 5 ft / 1.6 m height under free field conditions at 3 ft / 1 m distance from the front of the system.





Standard Features (USA Stock)

- Monitoring and Control S!MPAC[®] with 7" Multi-User Interface WEBSeason[®] and audit trail, alarm management, trend screen viewing
- Ethernet interface
- Fully integrated user management of controls¹
- Cool white and UV-A fluorescent lamps per ICH
- Cool white light and UV-A exposure timers
- Cool white light and UV-A filters for even distribution (EEF)
- Factory calibration of 2 temperature and 2 humidity values
- Software and independent temperature limiter for min. and max. test space temperatures
- Alarm system according to GAMP
- Interior fittings made of stainless steel
- Door contact switch
- Lockable doors
- Water storage reservoir for automatic and manual water supply of purified humidification water

- Alarm output (potential free contact) for monitoring of temperature and/or humidity
- Rollable castors, with brakes (500/L)
- Adjustable leveling feet (250/L)
- Stacking capability for (250/L)
- Air-cooled refrigeration unit with low noise emission
- Patented vapor humidification system (SSS)
- Capacitive humidity sensor
- Entry port, 2 in (50 mm) In the right side panel
- Digital counter for total operating hours of chamber
- Operating manual with schematics, parts list, certificates, user instructions
- Multi-language touch panel (German, English, French, Spanish, Czech, Russian, Chinese, Korean, Italian, Portuguese)
- ¹ User management performed remotely with S!MPATI® Pharma software package.

Popular Options

- LED lamps in various color temperature
- S!MPATI[®] Pharma software package
- Chart recorder for temperature and/or humidity
- Integrated UPS to maintain recording during power failure
- Factory and/or on-site mapping of cool white and UV-A light distribution
- Additional temperature and/or humidity sensor
- High prominence visual and audible alarm
- Water-cooled refrigeration system
- Chilled water-cooling system
- Additional entry ports and variable sizes

- Demineralization or reverse osmosis unit for purified water
- Compressed air drier for low dewpoint operation
- RS-232 serial interface
- RS-422/485 serial interface
- Single or multi-point factory calibrations
- Preventatative maintenance, calibration, service contracts
- Spare parts package
- Qualification documentation and site execution for chamber and/or S!MPATI® Pharma software
- Spare parts package
- 120V Transformer (250/L)



Cincinnati Sub-Zero is a product brand of Weiss Technik North America, Inc. Weiss Technik North America is a member of the Weiss Technik group of companies, a division of the Schunk Group with its headquarters in Heuchelheim, Germany. Weiss Technik is the world's largest manufacturer of environmental simulation systems and employs more than 2,900 people in 18 group companies in 15 countries.

Request Information

Additional life science solutions are available.

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Stability Rooms

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 PharmaEvent Stability Testing





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