



Pharma Chambers

Weiss Umwelttechnik GmbH, Germany is one of the most important producers of standard testing chambers and special test systems for environmental simulation worldwide. The product range comprises temperature and climate testing systems as well as test systems for simulated exposure to weather, temperature shock, corrosion and for long-time testing in various test chamber volumes. To constantly maintain high quality and stability of pharmaceutical and medical products Weiss Umwelttechnik GmbH offers a standard range of stability test chambers in any size depending on your requirement. Walk-in /drive-in chambers and process-integrated plants for environmental simulation and biology and stability chambers are designed, produced and installed in accordance with customer specifications. Weiss Umwelttechnik is certified according to DIN EN ISO 9001.

Structural Solutions Private Limited is the authorized exclusive Indian representative of "Weiss Umwelttechnik GmbH". Structural Solutions Private Limited is a professional Engineering Company engaged in offering high-end technology-intensive products and systems solutions for the complete range of "Environmental Chambers".

The Weiss Pharmaceutical Chambers has been developed with special features to fulfill the requirements of test laboratories in the pharmaceutical industry with three different sizes of Pharma 600, Pharma 1300, Pharma 2000 and Table Top Chambers of 34, 100, 120 & 300 liters

The range of working for these chambers meets the requirements of the ICH Guideline Q1A and also permits the implementation of tests with other specifications in the performance range of respective system.

Temperature and humidity is controlled with highly precise sensors in combination with specially designed control unit. This specially designed control system responds very quickly and corrects the set- point variations caused by the influence of the cabinet's conditions and the external influences.

Standard Features:

- Micro-processor monitoring and control MINCON/32*
- Software Safety temperature limiter to protect the chamber against overheating
- Serial interface RS 232 C
- Lockable doors
- Door Contact Switch
- Transportable on wheels
- 4 castors, 2 of which with brakes
- Water tank, 19 l with automatic and manual water supply of demineralized humidification water.
- Air Cooled refrigeration unit with low noise emission
- Patented vapour humidification system (Sterile Steam System)
- Capacitive humidity sensor
- Entry port, Ø 50mm, in the right side panel
- Control panel with LCD display and key pad for entering of set-point values
- Adjustable specimen protection tmin / tmax as independent temperature limiter.
- Calibration of 2 temperature and 2 humidity values.
- Best accuracies due to Uniflow
- Stainless steel Interior fittings

Options:

- S!MPATI* Pharma software package for recording and processing of measurement values.
- Networking of several test Systems
- Colour touch panel
- Centronics printer interface
- Registration of temperature and humidity
- Additional temperature and humidity sensor
- Lockable Glass door, heated
- Water cooled refrigeration unit
- Acoustic and optical warning signal
- Demineralization unit with exchangeable cartridges for connection to domestic water supply.
- Additional shelves
- Height - adjustable feet
- Additional entry ports
- Qualification documentation for Pharma test chamber and S!MPATI* Pharma Software
- Special voltages
- Calibration Protocols
- Remote alarms by telephone



Technical Data

Type	PHARMA 600	PHARMA 1300	PHARMA 2000
External dimensions (mm)			
Height	1975 ¹⁾ /2030 ²⁾	1975 ¹⁾ /2030 ²⁾	2067 ¹⁾ /2112 ²⁾
Width	740	1460	2155
Depth	1050	1050	1050
Interior dimensions (mm)			
Height	1300	1300	1300
Width	620	1340	2034
Depth	685	685	685
Shelves (pieces) standard (650 x 530 mm)	6 ³⁾	12 ³⁾	18 ³⁾
Storage area (m ²) standard	2.07 ³⁾	4.14 ³⁾	6.21 ³⁾
Climate working range			
Temperature working range	°C	+10 ... +50	
Humidity range	% r.h.	20 ... 90	
Humidity fluctuation, in time	% r.h.	±1 ... ±2	
Dew point temperature range	°C	+5 ... +40	
Temperature fluctuation, in time	K	±0.1 ... ±0.5	
Temperature fluctuation, spatial	K	±0.5 ... ±1.0	
Temperature gradient ⁴⁾	K	1 ... 2	
Electrical supply	1/N/PE AC 230 V ±10%/50 Hz		
Max. installed load (kW)	2.5	3	3.5
Noise level⁵⁾	dB(A) 52	52	52
Humidity water	demineralised water pH-value 6-7 conductivity 5 to 20 Microsiemens/cm		
Weight (kg)	150	250	350

¹⁾ with castors ²⁾ with height-adjustable feet ³⁾ possible additions ⁴⁾ according to IEC 60068-3-5
⁵⁾ free field, 1 m distance from the front, as per DIN 45635, part 1, accuracy class 2
 The performance values refer to an ambient temperature of +25 °C.
 We reserve the right to make technical alterations.

Photostability Test Chamber



The Weiss Photostability test chamber (Pharma 500-L) is portrayed by an ideal light, UV, temperature and humidity distribution and can thus guarantee absolutely reproducible light, UV and climatic conditions.

The lighting equipment of the chamber meets the requirements of ICH guideline Q1B Option 2 and allows the photo stability test s to be carried out in less than 100 hours.

Homogeneous irradiation of the specimens is one of the most important requirements of the photostability tests. To achieve this, all the specimens are placed at same distance from the light source and the inhomogeneous emission of light by florescent lamps is compensated with the help of special light and UV filter systems.

Standard Features :

- 32-bit control system SIMCON/32*-NET with MINCON* Control Panel
- 2 shelves illuminated with UV light
- 2 shelves illuminated with white light
- Light and UV Timer
- Light and UV filter for optimum distribution (ideal homogeneity)
- Specially painted interior for ideal homogeneity
- Counter for total operating hours
- Lockable door
- Water tank 19 l, with possibility of manual automatic water supply
- Patented vapour humidification system (sterile steam system)
- Calibration certificate
- Serial interface RS 232 C

Options:

- Colour Touch panel
- UV and Lux sensors with automatic measurement value integration
- Analog line recorder
- Digital line recorder
- SIMPATI pharma software package complying with FDA 21 CFR Part 11
- Ethernet/ LAN interface (10/100 MBit) in connection with SIMPATI* for integration into a network
- Qualification Documentation
- DKD Calibration certificate
- Spatial measurements for temperature and humidity
- Mapping of light distribution
- Maintenance contracts with response time
- Access ports

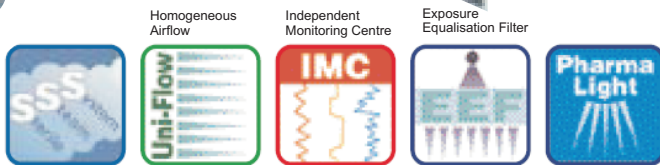
Qualification Documentation :

Documentation Includes

- Analog line recorder
- Digital line recorder
- Digital line recorder, complying with FDA 21 CFR Part 11
- SIMPATI * Pharma software package complying with FDA 21 CFR Part 11 for connecting devices and test chambers to a PC.

Qualification Comprises:

- FAT** Factory Acceptance Test
- DKD** (German calibration service) Calibration Certificates
- DQ** Design Qualification
- IQ** Installation Qualification
- OQ** Operation Qualification
- PQ** Performance Qualification



Technical Data Pharma 500-L

Volume	litres	gross approx. 700 net approx. 460
External dimensions	W x H x D mm	815 x 935 x 2070
Test space dimensions	W x H x D mm	595 x 600 x 1305
Temperature range	°C	+10 ... +50
Humidity range	% r.h.	20 ... 90
Temperature fluctuation, in time	K	±0.1 ... ±0.5
Temperature fluctuation, spatial	K	±0.5 ... ±1.0
Temperature gradient ¹⁾	K	1 ... 2
Humidity fluctuation, in time	% r.h.	±1 ... ±2
Illumination	lx	max. 25000
UV energy	W/m ²	max. 3.7
Light distribution	% r.h.	approx. ±6
UV distribution	% r.h.	approx. ±10
Noise level ²⁾	dB (A)	52
Electrical connection		1N/PE AC 230 V ±10 %, 50 Hz

The performance values refer to an ambient temperature of +25 °C, ¹⁾ according to IEC 60068-3-5, ²⁾ free field, 1m distance from the front, as per DIN 45635, part 1, accuracy class 2

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