

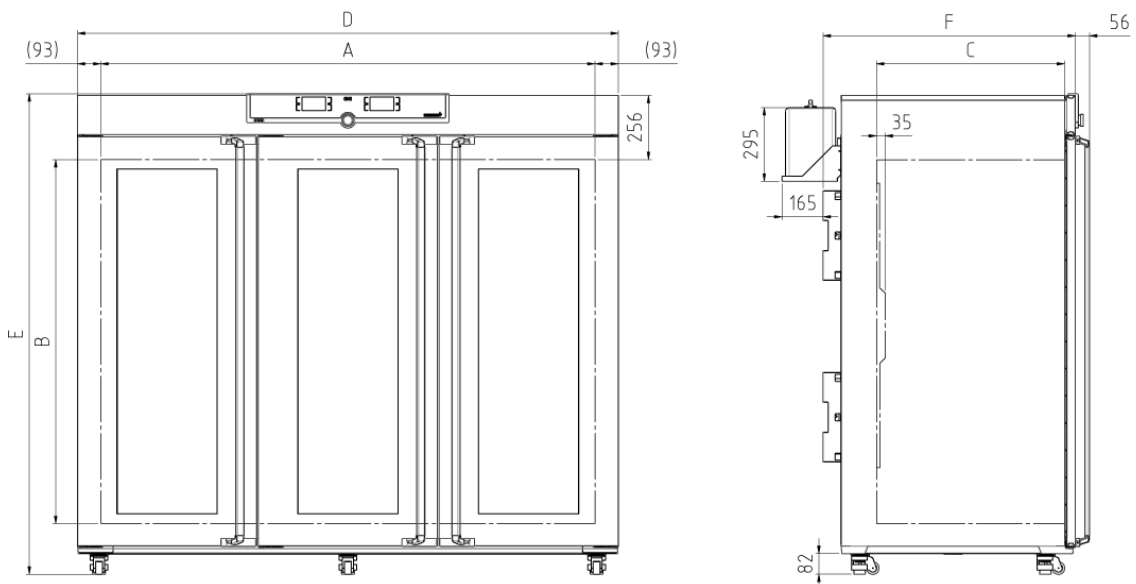


Constant climate chamber HPP2200

Our constant climate chamber is tailored to environmental simulation, material testing and stability testing in accordance with the ICH guidelines.



On this page, you can find all the essential technical data on the Memmert stability chamber HPP. Our customer relations team will be pleased to help if you want further information.



Temperature

| | |
|-------------------------------------|--|
| Working-temperature range | +15 °C (at least 10 below ambient) up to +60 °C |
| Setting accuracy temperature | 0.1 °C |
| Temperature | 2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error |

Humidity

| | |
|----------------------------------|--|
| Setting range humidity | 10 - 80 % rh |
| Humidity | humidity supply with distilled water from external tank by self-priming pump |
| Humidification | humidification by hot steam generator |
| Dehumidification | dehumidification by cold trap using the Peltier technology |
| Setting accuracy humidity | 0.5 % rh |

Control technology

| | |
|------------------------------|--|
| ControlCOCKPIT | TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-color displays. |
| Language setting | German, English, Spanish, French, Polish, Czech, Hungarian |
| adjustable parameters | temperature (Celsius or Fahrenheit), relative humidity, timer |
| Timer | Digital backwards counter with target time setting, adjustable from 1 minute to 99 days |
| Function HeatBALANCE | adapting the distribution of the heating performance of the upper and lower heating circuit from -50 % to +50 % |
| Function SetpointWAIT | the process time does not start until the set temperature is reached |
| Calibration | three freely selectable values each, temperature and humidity |

Communication

| | |
|----------------------|--|
| Interface | Ethernet LAN, USB |
| Documentation | program stored in case of power failure |
| Programming | AtmoCONTROL software on a USB stick for programming, managing and transferring programs via Ethernet interface or USB port |

Safety

| | |
|------------------------------|--|
| Temperature control | over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display |
| AutoSAFETY | additionally integrated over- and undertemperature protection "ASF", automatically following the setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating function is switched off in case of overtemperature, cooling function in case of undertemperature |
| Autodiagnostic system | integral fault diagnostics for temperature and humidity control |
| Alarm | visual and acoustic |

Heating concept

Peltier energy-saving Peltier heating-/cooling system integrated in the rear (heat pump principle)

Standard equipment

Works calibration certificate for +25 °C/40 % rh and +40 °C/75 % rh

Internals 6 stainless steel grid(s), electropolished

Door Stainless steel doors with glass sectors, fully heated inner glass panes integrated in the full-sight glass door with 2-point locking (compression door lock)

Standard accessories Water tank including connection hose

Stainless steel interior

Volume 2140 l

Dimensions $w_{(A)} \times h_{(B)} \times d_{(C)}$: 77.6" x 57.1" x 29.5"

Max. number of internals 42

Max. loading of chamber 727 lbs

Max. loading per internal 66 lbs

Textured stainless steel casing

Installation on lockable castors, adjustable in height

Dimensions $w_{(D)} \times h_{(E)} \times d_{(F)}$: 84.9" x 75" x 39.6"

Housing rear zinc-plated steel

Electrical data

Voltage 230 V (\pm 10%), 50/60 Hz

Electrical load approx. 15.2 A @ 230 V

Ambient conditions

Set Up The distance between the wall and the rear of the appliance must be at least 6 inches. The clearance from the ceiling must not be less than 8 inches and the side clearance from walls or nearby appliances must not be less than 2 inches.

Ambient temperature 16 °C to 40 °C

Humidity rh max. 70 %, non-condensing

Altitude of installation max. 2,000 m above sea level

Overvoltage category II

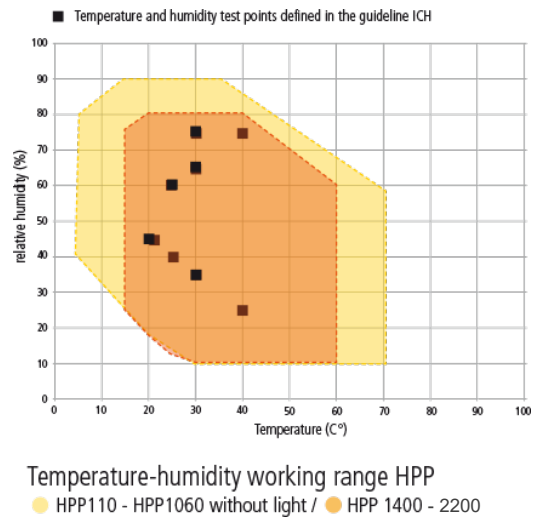
Pollution degree 2

Packing/shipping data

| | |
|---|--|
| Transport information | The appliances must be transported upright |
| Customs tariff number | 8419 8998 |
| Country of origin | Federal Republic of Germany |
| WEEE-Reg.-No. | DE 66812464 |
| Dimensions approx incl. wooden box | w x h x d: 91" x 87" x 49" |
| Net weight | approx. 1,087 lbs |
| Gross weight wooden box | approx. 1,610 lbs |

Temperature-humidity working range HPP

Not all climate chambers are the same. The humidity content of the chamber load, the ambient conditions and the respective temperature-humidity working range are decisive factors in the selection of the right appliance. In the adjacent diagram, you can see the possible temperature/humidity combinations for our constant climate chamber HPP. Within the respective temperature-humidity range, condensation-free permanent operation is possible. To which extent condensation may occur in the threshold range depends on the humidity content of the chamber load and the ambient conditions.



Standard devices are safety-tested and bear the marks:

