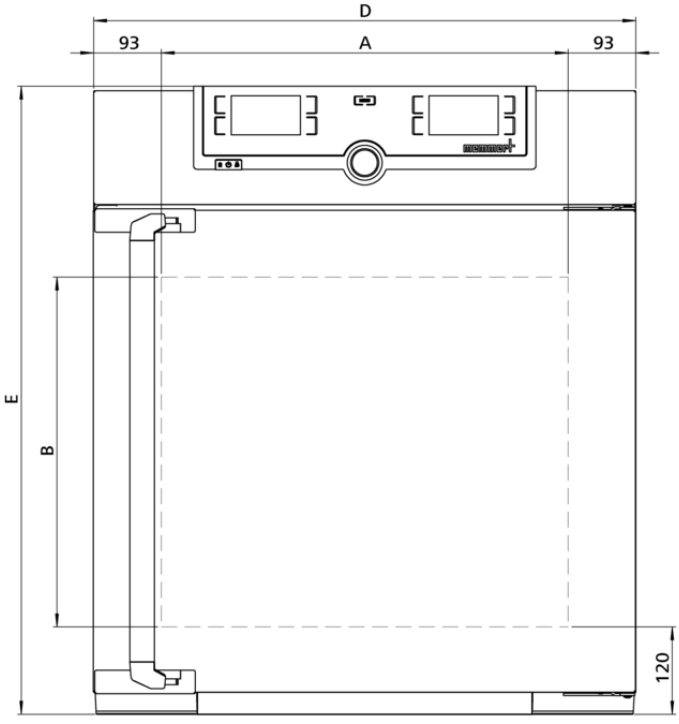
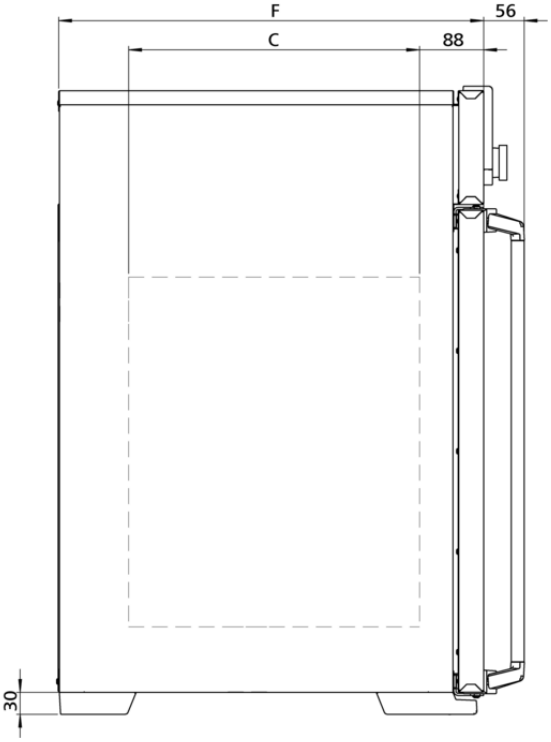
## UN110pa

For many years, and with great precision, our paraffin oven UNpa has served users in science and research in sample preparation.



The universally applicable oven is our classic appliance for temperature control in science, research and material tests in industry. The technologically perfected masterpiece made of high-quality, hygienic, easy-to-clean stainless steel leaves nothing to be desired in terms of ventilation and control technology, overtemperature protection and precisely tuned heating technology.





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## Temperature

| | |
|---|---|
| **Setting temperature range** | +20 to +80 °C |
| **Working temperature range** | at least 5 above ambient temperature to +80 °C |
| **Setting accuracy temperature** | 0.1 °C |
| **Temperature sensor** | 2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error |

## Control technology

| | |
|---|---|
| **ControlCOCKPIT** | TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays. |
| **Language setting** | German, English, Spanish, French, Polish, Czech, Hungarian, Italian, Chinese |
| **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 temperature values |
| **adjustable parameters** | temperature (Celsius or Fahrenheit), programme time, time zones, summertime/wintertime |

## Ventilation

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|---|---|
| **Convection** | natural convection |

## Communication

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|---|---|
| **Documentation** | programme stored in case of power failure |
| **Programming** | AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port |

## Safety

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|---|---|
| **Temperature control** | mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature |
| **Temperature control** | overtemperature monitor TWW, protection class 3.1 or adjustable temperature limiter TWB, protection class 2, selectable on display |
| **AutoSAFETY** | additionally integrated over- and undertemperature monitor "ASF", automatically following the setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating is switched off in case of overtemperature |
| **Autodiagnostic system** | for fault analysis |
| **Alarm** | visual and acoustic |

## Stainless steel interior

| | |
|---|---|
| **Interior** | nearly gas-tight interior |
| **Interior** | easy-to-clean interior,made of stainless steel, reinforced by deep drawn ribbing with integrated and protected large-area heating on four sides |
| **Volume** | 108 l |
| **Dimensions** | $w_{(A)}$ x $h_{(B)}$ x $d_{(C)}$: 560 x 480 x 400 mm |
| **Max. number of internals** | 5 |
| **Max. loading of chamber** | 175 kg |
| **Max. loading per internal** | 20 kg |

## Standard equipment

| | |
|---|---|
| **Works calibration certificate** | for +80°C |
| **Door** | fully insulated stainless steel door with 2-point locking (compression door lock) |
| **Internals** | 2 stainless steel grid(s), electropolished |

## Textured stainless steel casing

| | |
|---|---|
| **Dimensions** | w(D) x h(E) x d(F): 745 x 864 x 584 mm (d +56mm door handle) |
| **Housing** | rear zinc-plated steel |

## Electrical data

| | |
|---|---|
| **Voltage**<br>**Electrical load** | 230 V, 50/60 Hz<br>approx. 1400 W |
| **Voltage**<br>**Electrical load** | 115 V, 50/60 Hz<br>approx. 900 W |

## Ambient conditions

| | |
|---|---|
| **Altitude of installation** | max. 2,000 m above sea level |
| **Ambient temperature** | +5 °C to +40 °C |
| **Humidity rh** | max. 80 %, non-condensing |
| **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. carton** | w x h x d: 830 x 1050 x 800 mm |
| **Net weight** | approx. 75 kg |
| **Gross weight carton** | approx. 100 kg |

**Standard units are safety-approved and bear the test marks**

