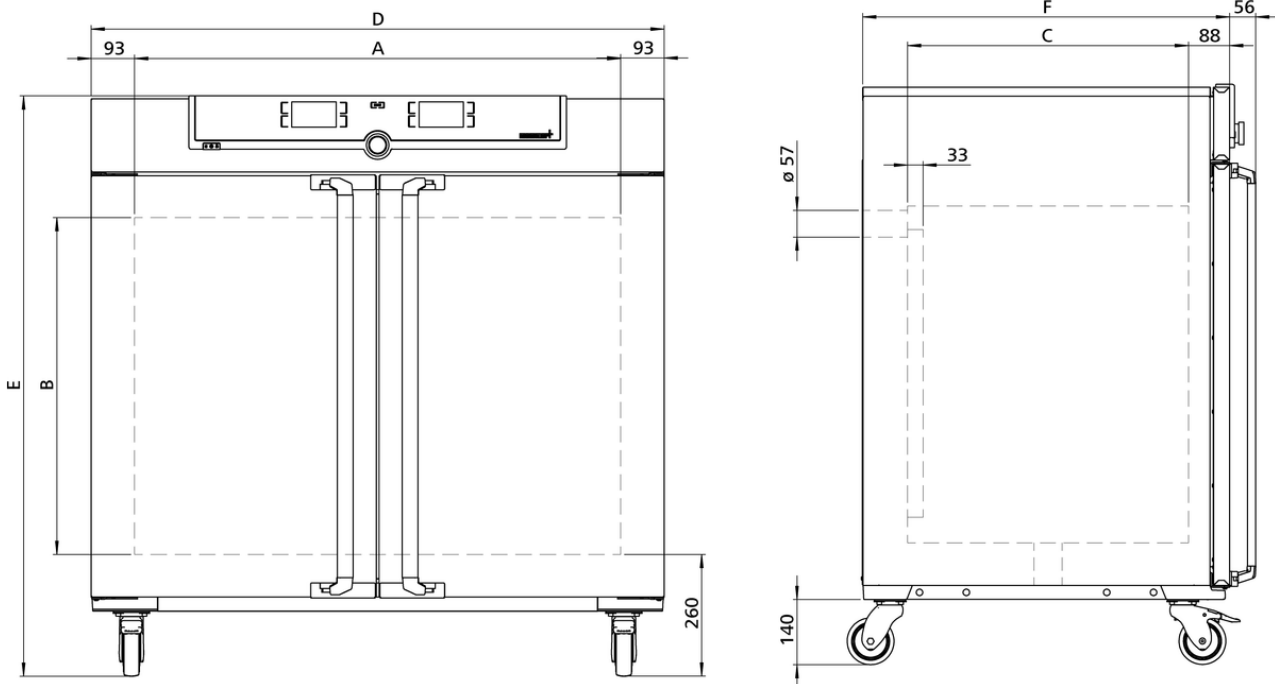


## Incubator IF450plus

The incubator I is at home everywhere in the world of research, medicine, pharmaceuticals and food analytics, as well as food chemistry.



The heating of this incubator is optimally tuned for forced air circulation; the fan can also be switched off completely, and valuable chamber loads for research, pharmaceuticals, medicine and food chemistry are warmed up very carefully. On this page, you can find all the essential technical data on our incubator. Our customer relations team will be pleased to help if you want further information. If you should require a customized special solution, please contact our technical specialists at [info@memmertusa.com](mailto:info@memmertusa.com).



## Temperature

<b>Setting temperature range</b>	+20 to +80 °C
<b>Working temperature range</b>	min. 10°C above ambient up to +80°C
<b>Setting accuracy temperature</b>	0.1 °C
<b>Temperature sensor</b>	2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error

## Control technology

<b>ControlCOCKPIT</b>	TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-color displays.
<b>Language setting</b>	German, English, Spanish, French, Polish, Czech, Hungarian
<b>Timer</b>	Digital backwards counter with target time setting, adjustable from 1 minute to 99 days
<b>Function HeatBALANCE</b>	adapting the distribution of the heating performance of the upper and lower heating circuit from -50 % to +50 %
<b>Function SetpointWAIT</b>	the process time does not start until the set temperature is reached
<b>Calibration</b>	three freely selectable temperature values
<b>adjustable parameters</b>	temperature (Celsius or Fahrenheit), fan speed, air flap position, timer
<b>Sterilization</b>	fixed sterilization program (4 hours/160°C) for sterilization of working chamber, not for sterilizing the load

## Ventilation

<b>Fan</b>	forced air circulation by quiet air turbine, adjustable in 10 % steps for each segment individually
<b>Fresh air</b>	Admixture of pre-heated fresh air by electronically adjustable air flap
<b>Vent</b>	vent connection with restrictor flap

## Communication

<b>Documentation</b>	program stored in case of power failure
<b>Programming</b>	AtmoCONTROL software on a USB stick for programming, managing and transferring programs via Ethernet interface or USB port

## Safety

<b>Temperature control</b>	mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature
<b>Temperature control</b>	overtemperature monitor TWW, protection class 3.1 or adjustable temperature limiter TWB, protection class 2, selectable on display
<b>AutoSAFETY</b>	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
<b>Autodiagnostic system</b>	for fault analysis
<b>Alarm</b>	visual and acoustic

### Standard equipment

<b>Shelving</b>	2 stainless steel grids, electropolished
<b>Works calibration certificate</b>	incl. works calibration certificate for +37°C
<b>Door</b>	inner glass doors
<b>Door</b>	fully insulated stainless steel doors with 2-point locking (compression door lock)

### Stainless steel interior

<b>Dimensions</b>	$w_{(A)} \times h_{(B)} \times d_{(C)}$ : 40.9 x 28.3 x 23.6 inches (d less 1.5" for fan)
<b>Interior</b>	easy-to-clean interior, made of stainless steel, reinforced by deep drawn ribbing with integrated and protected large-area heating on four sides
<b>Volume</b>	449 l / 15.9 cu ft
<b>Max. number of shelves</b>	8
<b>Max. loading of chamber</b>	661 lbs
<b>Max. loading per shelf</b>	66 lbs

### Textured stainless steel casing

<b>Dimensions</b>	$w_{(D)} \times h_{(E)} \times d_{(F)}$ : 48.2 x 48.3 x 30.9 inches (d +2.2" door handle)
<b>Installation</b>	on lockable castors
<b>Housing</b>	rear zinc-plated steel

### Electrical data

<b>Voltage</b>	230 V ( $\pm 10\%$ ), 50/60 Hz
<b>Electrical load</b>	approx. 1800 W / 7.9 A
<b>Voltage</b>	115 V ( $\pm 10\%$ ), 50/60 Hz
<b>Electrical load</b>	approx. 1500 W / 13.1 A

### Ambient conditions

<b>Set Up</b>	The distance between the wall and the rear of the appliance must be at least 6". The clearance from the ceiling must not be less than 8" and the side clearance from walls or nearby appliances must not be less than 2".
<b>Altitude of installation</b>	max. 2,000 m above sea level
<b>Ambient temperature</b>	+5 °C to +40 °C
<b>Humidity rh</b>	max. 80 %, non-condensing
<b>Overvoltage category</b>	II
<b>Pollution degree</b>	2

### Packing/shipping data

<b>Transport information</b>	The appliances must be transported upright
<b>Customs tariff number</b>	8419 8998
<b>Country of origin</b>	Federal Republic of Germany
<b>WEEE-Reg.-No.</b>	DE 66812464
<b>Dimensions approx incl. carton</b>	w x h x d: 53 x 57 x 42 inches
<b>Net weight</b>	approx. 355 lbs
<b>Gross weight carton</b>	approx. 501 lbs

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

