



Blanket warmer IFbw with SingleDISPLAY  
Forced air circulation  
AtmoCONTROL software

Model sizes:  
110 / 260 / 450 / 750  
+20 °C to +80 °C

**BLANKET WARMER IFbw** In this special heating oven, your precisely pre-warmed blankets and cloths are always close to hand. Especially in emergency rooms, blanket warmers are indispensable when attending to seriously injured patients, but they also perform well every day in the delivery room or in the recovery room after an operation.



## Blanket warmer IFbw is a medical device

Memmert blanket warmers IFbw are class I medical devices according to EU Directive 93/42/EEC.

The Memmert blanket warmer IFbw is ideal for warming non-sterile blankets and cloths in hospitals or other medical facilities.

### Know-how: Elaborate safety functions




The Memmert blanket warmer IFbw has an impressive range of built-in safety features:

- The heating power is limited to 80 °C to prevent overheating the cotton fabrics if the chamber is overloaded
- Hermetically sealed interior
- Permanent air circulation
- Constant surface temperature monitoring with two additional Pt100 sensors
- Automatic door-open-recognition ensures that the heating and fan are turned off when the door is opened
- The power supply is cut by mechanical temperature limiters as soon as the temperature reaches 85 °C



## BLANKET WARMERS IFbw

according to DIN 12880:2007-05, EN 61010-1 (IEC 61010-1), EN 61010-2-010

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

**Interior:** Stainless steel, material 1.4301 (ASTM 304) with all-round deep-drawn ribs to integrate the large-area heating with ceramic-metal sheath

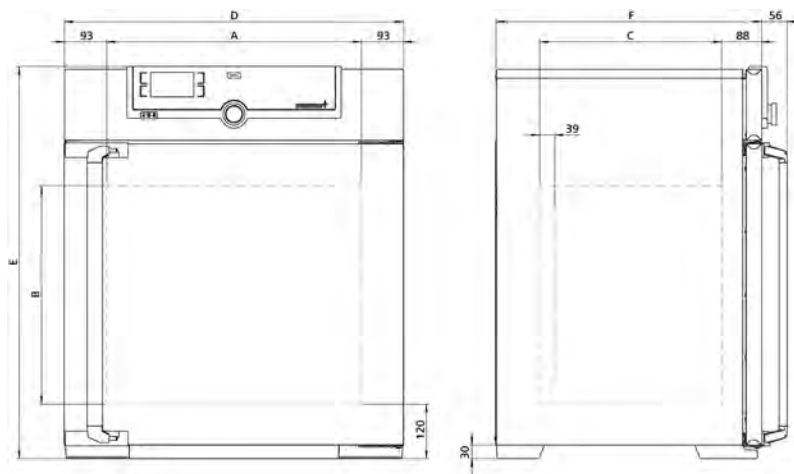
**Housing:** Textured stainless steel, rear zinc-plated steel, intuitively operated SingleDISPLAY (TFT colour display) with touchscreen; outside fully insulated stainless steel door (from size 450 two leaves)

**Connection:** Mains cable with plug (German type)

**Installation:** 4 feet; size 450 and 750 mounted on lockable castors

**Interfaces:**

- Ethernet
- LAN



Model sizes/Description			110	260	450	750
Stainless steel interior	Volume	approx. l	108	256	449	749
	Width	(A) mm	560	640	1040	
	Height	(B) mm	480	800	720	1200
	Depth (less 39 mm for fan)	(C) mm	400	500	600	
	Max. number of grids/shelves	number	5	9	8	14
	Max. loading per grid/shelf	kg	20		30	
	Max. loading of chamber	kg	175	300		
Textured stainless steel exterior	Width	(D) mm	745	824	1224	
	Height (size 450, 750 with castors)	(E) mm	864	1183	1247	1720
	Depth (without door handle, depth of handle +56 mm)	(F) mm	584	684	784	
Standard equipment	Stainless steel grids, electropolished	number	2			
	Forced convection fix at 100%		●			
	Door-open-recognition		●			
	Works calibration certificate (measuring point chamber centre)	°C	+37			
Temperature	Working temperature range	°C	at least 10 above ambient temperature up to +80			
	Setting temperature range	°C	+20 to +80			
	Setting accuracy	°C	0.1			
Further data	Electrical load at 230 V, 50/60 Hz	approx. W	1400	1700	1800	2000
	Electrical load at 115 V, 50/60 Hz	approx. W	900		1500	1800
Packing data	Net weight	approx. kg	74	110	161	217
	Gross weight (packed in carton)	approx. kg	99	161	227	288
	Width	approx. mm	830	930	1330	
	Height	approx. mm	1050	1380	1440	1910
	Depth	approx. mm	800	930	1050	
<b>Order No. Blanket warmers</b>						
I = Incubator						
F = Forced convection						
bw = Blanket warmer						
			IF110bw	IF260bw	IF450bw	IF750bw

Options	110	260	450	750
Voltage 115 V, 50/60 Hz	X2			
Accessories	110	260	450	750
Stainless steel grid, electropolished	E20165	E28891	E20182	
Perforated stainless steel shelf	B00325	B29725	B00328	
Wall bracket for wall mounting	B29758	-		
Guarantee extension by 1 year	GA1Q5	GA2Q5		
USB-Ethernet adapter	E06192			
Ethernet connection cable 5 m for computer interface	E06189			
USB stick with documentation software AtmoCONTROL and operation manual. When reordering please specify serial number	B33172			
Stacking set (4 pcs) for stacking of appliances of same size	B29744	-		
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), with air slots	B29734	B29738	B29740	B29742
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots	B29735	B29739	B29741	B29743
Subframe, adjustable in height (height 500 mm)	B29749	B29751	B29753	-
Subframe, on castors (height 560 mm)	B29750	-		
Subframe, adjustable in height, height 130 mm, for example for units with fresh air filter	B33661	B33664	-	
DAkkS calibration for one free-selectable temperature value according to method C (DKD-R 5-7)	E39696			
DAkkS calibration for further temperature values according to method C (DKD-R 5-7)	E39697			
IQ document with device-specific works test data, OQ/PQ check list as support for validation by customer	D00124			
IQ/OQ document with device-specific works test data for one free-selectable temperature value, incl. temperature distribution survey at Memmert for 27 measuring points to DIN 12880:2007-05. PQ check list as support for validation by customer. 305 € for further temperature values	D00127			
On-site IQ/OQ for a freely selectable temperature value, including temperature distribution survey for 27 measuring points to DIN 12880:2007-05 (excluding travel costs, not subject to discount, GER, AT, FR only)	DLQ100			
Extension of DLQ100 by an additional freely selectable temperature value (not subject to discount)	DLQ100A			
Individual on-site Performance Qualification (PQ)	DLQ200			
Maintenance UIS - carrying out and documentation according to Memmert maintenance plan (excluding travel costs, not subject to discount, GER, AT, FR only)	S00311			
Maintenance contract UIS - carrying out and documentation according to Memmert maintenance plan, minimum duration 3 years (excluding travel costs, not subject to discount, GER, AT, FR only)	S00311J			
Calibration of one freely selectable temperature value (excluding travel costs, not subject to discount, GER, AT, FR only)	S00205			
Calibration of an additional temperature value (not subject to discount)	S00215			

## INTENDED USE AS MEDICAL DEVICE

### Intended use as medical device

Every Memmert medical device is subject to a specific classification according to its intended use. Below you will find an overview of the respective use:



Type	Intended use as medical device	Classification according to MPG
UNmplus, UFmplus	The appliance may be used for heating fango, silicate and APS packs for physical therapy and keeping them warm.	I
UNm, UFm, INm, IFm	The appliance may be used for heating fango, silicate and APS packs for physical therapy and keeping them warm.	I
INmplus, IFmplus	The appliance may be used for temperature control of rinsing and infusion solutions and contrast agents.	I
IFbw	The appliance may be used for heating non-sterile covers and cloths.	I

Memmert is bringing medical devices of class I according to EU Directive 93/42/EEC into circulation until the regulation MDR (EU) 2017/745 comes into force. After the new regulation comes into force, Memmert will bring medical devices of class I into circulation according to MDR.

Type	Intended use as medical device	Classification according to MPG
SNplus, SFplus	The product is intended for the sterilisation of medical devices with dry heat at atmospheric pressure.	IIb
SN, SF	The product is intended for the sterilisation of medical devices with dry heat at atmospheric pressure.	IIb
IComed	The product is intended for the creation and maintenance of constant environmental conditions for application in the field of in Vitro fertilisation (IVF), especially for the incubation of oocytes, spermatozoa and zygotes in special culture dishes for IVF application as well as for gene expression and the biosynthesis of RNA and proteins.	IIa

Memmert is bringing medical devices of class IIa and IIb into circulation according to MDD 93/42/EEC until 26 May 2024 according to the transitional provisions by the (EU) 2017/745 article 120 (2).



## MODEL VARIANTS

SingleDISPLAY ControlCOCKPIT with one TFT display	TwinDISPLAY ControlCOCKPIT with two TFT displays
<b>AVAILABLE APPLIANCES</b> UN / UF / IN / IF / IPPeco / IPP / UNm / UFm / INm / IFm / SN / SF / IFbw	<b>AVAILABLE APPLIANCES</b> HPPeco / ICHeco / ICH / HCP / UNplus / UFplus / UF TS / UNpa / VO / INplus / IFplus / ICO / IPPecoplus / IPPplus / ICPeco / ICP / UNmplus / UFmplus / INmplus / IFmplus / SNplus / SFplus / ICOfmed
One high-resolution TFT colour display with touch-sensitive buttons for selection of functions	Two high-resolution TFT colour displays with touch-sensitive buttons for selection of functions
Available parameters on the ControlCOCKPIT: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, programme time	Available parameters on the Control COCKPIT: All parameters of the SingleDISPLAY and device-specific parameters like relative humidity, illumination and CO <sub>2</sub>
One temperature sensor Pt100 DIN class A in a 4-wire circuit	Two Pt100 sensors DIN class A in a 4-wire circuit for mutual monitoring, taking over functions in case of an error
	HeatBALANCE function for application specific adjustment of heat output distribution (balance) between the upper and lower heating groups in an adjustment range between -50 % and +50 % (not valid for models 30, HPP110eco, IPP110ecoplus, ICPeco, ICP, ICHeco, ICH)
AtmoCONTROL software <sup>1)</sup> for reading out, managing and organising the data logger via Ethernet interface (temporary trial version can be downloaded). USB stick with AtmoCONTROL software available as accessory (on demand)	AtmoCONTROL software <sup>1)</sup> on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port
	ControlCOCKPIT with USB port for uploading programmes, reading out protocol logs, activating the User-ID function
	Displaying of already logged protocol data on the ControlCOCKPIT (max 10,000 values correspond to approx. 1 week)
Ethernet interface on the rear of the appliance for reading out the protocol log and for online logging	Ethernet interface on the rear of the appliance for reading out the protocol log and for uploading programmes and for online logging
Double overtemperature protection: Electronic temperature monitoring with freely adjustable monitoring temperature, for models U, I, S with option A6 TWW/TWB (protection class 3.1 or 2), mechanical temperature limiter TB acc. to DIN 12880	Multiple overtemperature protection: Electronic temperature monitoring TWW/TWB (protection class 3.1 or 2 resp. 3.3 for units with active cooling) and mechanical temperature limiter TB (protection class 1) acc. to DIN 12880, AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting individual MIN / MAX values for over/undertemperature and also for all other parameters such as relative humidity, CO <sub>2</sub>
PID microprocessor control with integrated auto-diagnostic system	
Structured stainless steel housing, scratch-resistant, robust and durable; rear of zinc-plated steel	
High-temperature connectors on the rear of the appliance for single-phase power connection according to country specific systems and IEC standards	
Internal data logger with a storage capacity of at least 10 years	
German, English, French, Spanish, Polish, Czech, Hungarian language settings available on the ControlCOCKPIT	
Digital backwards counter with target time setting, adjustable from 1 minute to 99 days	
The SetpointWAIT function guarantees that the process time does not start until the set temperature is reached at all measuring points – optional for temperature values recorded by the freely positionable Pt100 sensors inside the chamber	
Adjustment of three calibration values for temperature and additional appliance specific parameters directly at the ControlCOCKPIT	

<sup>1)</sup> As a manufacturer, Memmert GmbH + Co. KG clearly labels its devices, which are medical devices in the sense of the European legislation. The AtmoCONTROL software is not a medical device. All Memmert medical devices can be used for their purpose without the software AtmoCONTROL. AtmoCONTROL is only intended for reading the data logging in conjunction with Memmert GmbH + Co. KG medical devices.

## SOFTWARE AtmoCONTROL

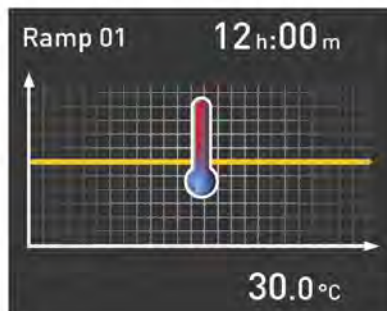
### AtmoCONTROL

The innovative control and logging software

Parameters such as temperature and humidity as well as the process time can be set directly at the ControlCOCKPIT. Ramp programming is done via the control and logging software AtmoCONTROL.

### Drag, drop & go!

Numerical and graphic programming of complex processes is a thing of the past. Today, programming is done via AtmoCONTROL by means of the mouse or touchpad on your notebook. Even the most complex ramp programmes are created within minutes. Simply drag & drop the graphical symbols for the desired parameters to the input field and change the values according to your wishes with a mouse click.



### Programme functions for appliances with SingleDISPLAY and TwinDISPLAY

- Reading out, managing and organising the data logger
- Saving the log memory in various formats
- Online monitoring of up to 32 connected appliances
- Optical alarms when the alarm limits individually set at the ControlCOCKPIT are exceeded
- Automatic alarm to one or several e-mail addresses

### Additional functions for appliances with TwinDISPLAY

- Intuitive programming and archiving of ramps and programme sequences
- Synchronous visualisation of the created programme sequence during programming
- Application-specific repeat functions (loops) can be inserted within a temperature control programme in any place
- Simple creation of repeating weekly programmes
- Programming, managing and transferring programmes via Ethernet interface or USB port

