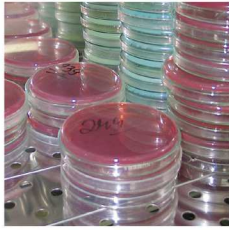Incubator IN and IF with SingleDISPLAY
Incubator INplus and IFplus
with TwinDISPLAY
Natural convection or forced air circulation
AtmoCONTROL software

Model sizes:
30 / 55 / 75 / 110 / 160 / 260 / 450 / 750
+20 °C to +80 °C

INCUBATOR I Memmert incubators I are at home in the world of research, pharmaceutics and food technology. The heating and control system are especially optimised for low temperatures of up to +80 °C. To prevent temperature overshoots, temperature is increased within a very narrow control range and kept exactly at the setpoint value. As required, the models with natural convection or with forced air circulation are available.

As little air circulation as possible in the incubator

Forced air convection may destroy the protective layer from moist air that is generated during incubation over the samples. This would lead to dehydration of the culture. In a Memmert incubator, the perfect combination of all-round surface heating and temperature control system ensures that incubation generally takes place without forced air circulation. Provided the chamber is fully loaded and forced air circulation is required, it can be precisely adjusted in 10 % steps from 0 to 100 %.
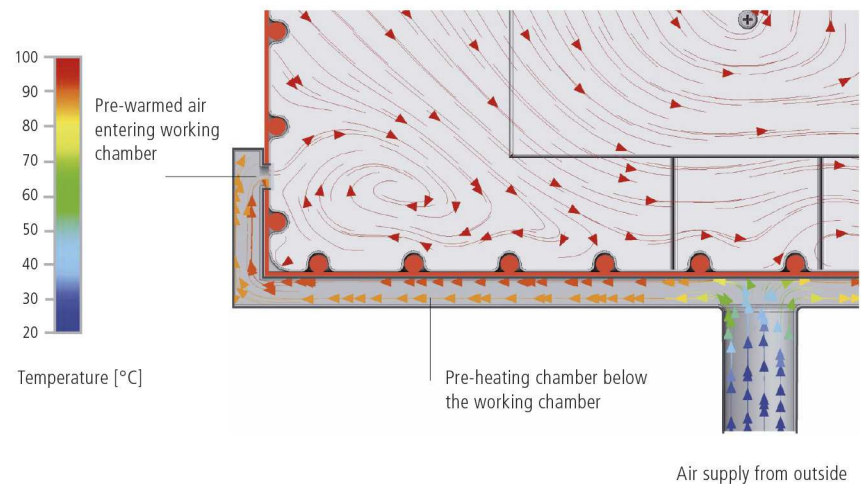
Sterilisation

The chamber of the incubators INplus/IFplus, including all installations and sensors, can be sterilised at +160 °C in a 4-hour programme to guarantee optimum hygiene.

Fresh air is preheated

Temperature deviations caused by fresh air can influence sample characteristics or prolong drying. In Memmert incubators, the fresh air is therefore fed through a pre-heating chamber and seamlessly introduced into the working chamber.

Pre-warmed air entering working chamber

Temperature [°C]

Pre-heating chamber below the working chamber

Air supply from outside

INCUBATORS I

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: CE

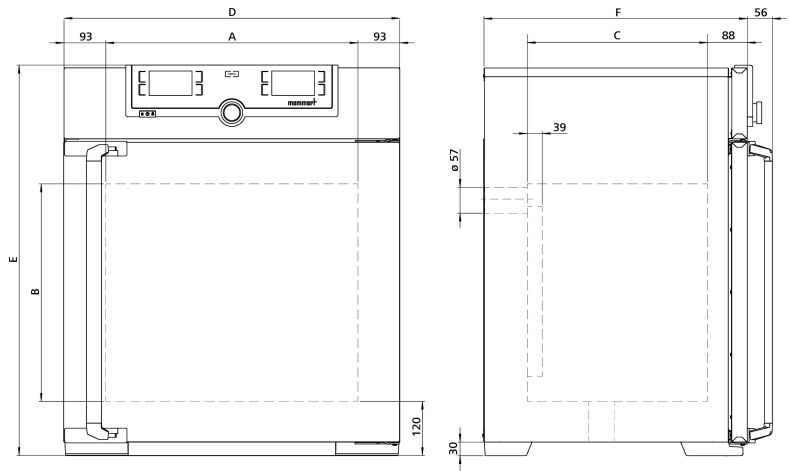| Interior: | Stainless steel, material 1.4301 (ASTM 304) with all-round deep-drawn ribs to integrate the large-area heating with ceramic-metal sheath |
Housing:	Textured stainless steel, rear zinc-plated steel, intuitively operated SingleDISPLAY or TwinDISPLAY (TFT colour display) with touchscreen; inner glass door, outside fully insulated stainless steel door (from size 450 two leaves)
Fresh air:	Admixture of pre-heated fresh air by electronically adjustable airflap
Connection:	Mains cable with plug (German type)
Installation:	4 feet; sizes 450/750 mounted on lockable castors
Interfaces:	Ethernet LAN / USB USB: only TwinDISPLAY

Model sizes/Description				30	55	75	110	160	260	450	750
Stainless steel interior	Volume		approx. l	32	53	74	108	161	256	449	749
	Width	(A)	mm		400			560	640	1040	
	Height	(B)	mm	320	400	560	480	720	800	720	1200
	Depth (less 39 mm for fan)	(C)	mm	250	330		400		500	600	
	Max. number of grids/shelves		number	3	4	6	5	8	9	8	14
	Max. loading per grid/shelf		kg				20			30	
	Max. loading of chamber		kg	60	80	120	175	210		300	
	Max. loading per slide-in drip tray		kg		1,5		3		4	8	
	Max. loading per bottom drip tray		kg		1,5		3		4	8	
Textured stainless steel exterior	Width	(D)	mm		585			745		824	1224
	Height (size 450, 750 with castors)	(E)	mm	704	784	944	864	1104	1183	1247	1720
	Depth (without door handle, depth of handle +56 mm)	(F)	mm	434	514		584		684	784	
Standard equipment	Stainless steel grids, electropolished		number		1			2			
	Standard works calibration certificate (measuring point chamber center)		°C				+37				
Temperature	Working temperature range		°C			at least 5 (IN/INplus) 10 (IF/IFplus) 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	1600	1000	1250	1400	1600	1700	1800	2000
	Electrical load at 115 V, 50/60 Hz		approx. W	800			900			1500	1800
Packing data	Net weight		approx. kg	48	57	66	76	96	110	161	217
	Gross weight (packed in carton)		approx. kg	64	76	85	101	122	161	227	288
	Width		approx. mm	660	730		830		930	1330	
	Height		approx. mm	890	950	1130	1050	1300	1380	1440	1910
	Depth		approx. mm	650	670		800		930	1050	
Order No. Incubators				IN30	IN55	IN75	IN110	IN160	IN260	IN450	IN750
				IN30plus	IN55plus	IN75plus	IN110plus	IN160plus	IN260plus	IN450plus	IN750plus
				IF30	IF55	IF75	IF110	IF160	IF260	IF450	IF750
				IF30plus	IF55plus	IF75plus	IF110plus	IF160plus	IF260plus	IF450plus	IF750plus

I   = Incubator
N   = Natural convection
F   = Forced convection
plus = Model with TwinDISPLAY

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Options	30	55	75	110	160	260	450	750
Voltage 115 V, 50/60 Hz				X2				
Extended overtemperature protection by additionally integrated Pt100 sensor for independent temperature monitoring for models with SingleDISPLAY				A6				
Chamber modification for the application of reinforced perforated stainless steel shelves or stainless steel grids (bearing rails mounted in the working chamber) - includes replacement of standard grids by reinforced grids			-				K1	
Interior lighting for observing the load				R0				
Interior socket (can only be ordered with limited temperature range - max. +70 °C), ampacity 230 V, 2.2 A, can be switched off with the On/Off switch, cannot be switched individually, moisture tight IP68 (only with SingleDISPLAY), (option A8 necessary)				R3				
Entry port, 23 mm clear diameter, for introducing connections at the side, can be closed by flap and silicone stopper, standard positions — left centre/centre				F0				
left centre/top				F1				
right centre/centre				F2				
right centre/top				F3				
Entry port, 23 mm clear diameter, can be closed by flap, in special positions (please state location) — left				F4				
right				F5				
rear				F6				
Entry port, 14 mm clear diameter, can be closed by flap, in special positions in the back wall (please state location)				D6				
Entry port, 38 mm clear diameter, can be closed by flap, in special positions in the back wall (please state location)				F7				
Entry port, 57 mm clear diameter, can be closed by flap, in special positions in the back wall (please state location; not possible for IF/IFplus size 30-75)				F8				
Entry port, 100 mm clear diameter, can be closed by flap, in special positions in the back wall (please state location; not possible for IF/IFplus size 75)	-				F9			
4 - 20 mA current loop interface (0 to +90 °C = 4 - 20 mA) — Temperature controller, actual value				V3				
Temperature of a Pt100 sensor positioned flexibly in chamber for external temperature monitoring (max. 1 SingleDISPLAY, max. 3 TwinDISPLAY) - price per sensor				V6				
Fan speed monitoring with switching-off the heating and with alarm in case of failure - only for IFplus				V4				
Works calibration certificate for 3 temperatures: +37, +52, +70 °C				D00126				
Works calibration certificate for one (freely selectable) temperature value according to customer specification				D00109				
Door with lock and key (safety lock)				B6				
Door hinged on the left			B8				-	
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)				H6				
Door-open-recognition (only for units with TwinDISPLAY)				V5				
MobileALERT, notification by SMS in case of any error or alarm of the device (requires option H6)				C3				
Temperature restriction; Temperatures: +50, +55, +60, +65, +70 or +75 °C (Please indicate upon ordering)				A8				
Fresh-air filter (filtration efficiency 80 %) mounted at the appliance bottom (for IF/IFplus, for sizes 30 – 260 requires castor frame R9 or subframe)				R8				
Castor frame (2-part), height 140 mm			R9				-	

Accessories	30	55	75	110	160	260	450	750
Stainless steel grid, electropolished	E28884	E20164		E20165		E28891	E20182	
Reinforced stainless steel grid, electropolished, max. loading 60 kg; from size 450 with guide bars and fixing screws (only in connection with option K1). Please consider max. loading of chamber		-		E29767		E29766	B32190	
Perforated stainless steel shelf	B29727	B03916		B00325		B29725	B00328	
Reinforced stainless steel shelf, max. loading 60 kg; with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber			-				B32191	
Stainless steel slide-in drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1)	E02070	E02072		E02073		E29726	E02075	
Stainless steel slide-in drip tray, 15 mm rim, with guide bars and fixing screws (may affect the temperature distribution, only in connection with option K1)			-				B32763	
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, not in connection with option K1)	B04356	B04358		B04359		B29722	B04362	
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, only in connection with option K1)			-				B34055	
Wall bracket for wall mounting	B29755	B29756	B29757	B29758	B29759		-	
Guarantee extension by 1 year			GA1Q5				GA2Q5	
USB-Ethernet adapter				E06192				
Ethernet connection cable 5 m for computer interface				E06189				

Prices for options are only valid when ordering new appliances.
Not all options/accessories are combinable with each other. Please contact us for individual combination requests.

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Accessories	30	55	75	110	160	260	450	750
USB User-ID stick (with User-ID licence): Oven-linked authorisation licence (User-ID-programme) on Memory-stick, prevents undesired manipulation by unauthorised third parties. When reordering please specify serial number (only for units with TwinDISPLAY)	B33170							
USB stick with documentation software AtmoCONTROL and operation manual for products with SingleDISPLAY (the standard equipment of appliances with TwinDISPLAY includes one USB stick with AtmoCONTROL). When reordering please specify serial number	B33172							
Set of height adjustable feet (4 pcs)	B29768						-	
Stacking set (4 pcs) for stacking of appliances of same size	B29744				-			
Plug-in tube extension (outer diam. 60.3 mm, inner 57 mm), straight, for exhaust air ducting (if necessary for connection by hose)	B29718							
Plug-in tube extension (outer diam. 60.3 mm, inner 57 mm), angled, for exhaust air ducting (if necessary for connection by hose)	B29719							
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), with air slots	B29728	B29730	B29732	B29734	B29736	B29738	B29740	B29742
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots	B29729	B29731	B29733	B29735	B29737	B29739	B29741	B29743
Subframe, adjustable in height (size 30 to 75: height 600 mm, size 110 to 450: height 500 mm)	B29745	B29747		B29749		B29751	B29753	-
Subframe, on castors (size 30 to 75: height 660 mm, size 110 to 160: height 560 mm)	B29746	B29748		B29750		-		
Subframe, adjustable in height, height 130 mm, for example for units with fresh air filter	B33657	B33659		B33661		B33664	-	
Software conforming to FDA AtmoCONTROL. Meets the requirements for the use of electronically stored data sets and electronic signatures as laid down in Regulation 21 CFR Part 11 of the US Food and Drug Administration (FDA). Base licence for the control of one unit (only for units with TwinDISPLAY). Respective IQ/OQ documents available in German and English language (without surcharge)	FDAQ1							
Integration of one additional unit (up to max. 31 units) into an already existent FDA-software licence (only for units with TwinDISPLAY)	FDAQ2							
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 9 measuring points (size 30), 27 measuring points (sizes 55 - 1060) to DIN 12880:2007-05. PQ check list as support for validation by customer. 305 € for further temperature values	D00125	D00127						
On-site IQ/OQ for a freely selectable temperature value, including temperature distribution survey for 9 measuring points (size 30), 27 measuring points (sizes 55 - 750) 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							

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