Peltier-cooled incubator IPPeco
with SingleDISPLAY
Peltier-cooled incubator IPPecoplus
with TwinDISPLAY
with Advanced Peltier Technology
AtmoCONTROL software

Model sizes:
IPP: 30 / 55
IPPeco: 110 / 260 / 410 / 750 / 1060
0 °C to +70 °C

Model sizes:
IPPeco: 1400 / 2200
+15 °C to +60 °C

PELTIER-COOLED INCUBATOR IPPeco Heating and cooling seamlessly with one system thanks to Peltier technology. In this respect, cooled incubators IPPeco not only contribute to climate protection, but it also achieves an additional decrease in operating costs of up 90 % compared to compressor technology. This perfect development from the environmentally friendly and energy-saving heating/cooling technology by Memmert convinces by outstanding control precision and extremely small fluctuations.
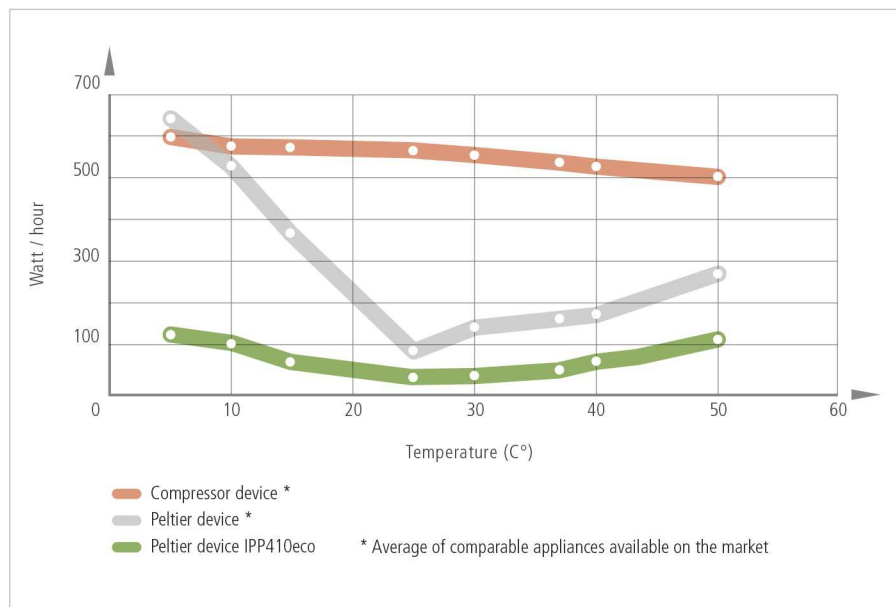
Smooth running

The fact that no compressor is required saves space and brings peace and quiet to the laboratory. As Peltier-cooled incubators IPPeco are almost vibration-free, they can also be applied in entomology. If defined humidity is also required, an alternative would be the constant climate chamber HPPeco, which is also equipped with the Advanced Peltier technology.

No condensation in the interior chamber

Due to the closed Peltier cooling system, no outside air is exchanged. Physically derived, unavoidable formation of condensation during the cooling process does not take place in the interior chamber but on the outside heat sink. In addition, the in the Peltier elements integrated fans ensure a rapid transport of energy as well as an absolutely homogenous distribution of temperature.

Despite the significantly reduced energy consumption, the IPPeco's perfromance is impressive. Heating up, cooling down and recovering after opening the door occur fine-tuned and yet at top speed.

Watt / hour

700

500

300

100

0   10   20   30   40   50   60

Temperature (C°)

■ Compressor device *
■ Peltier device *
■ Peltier device IPP410eco   * Average of comparable appliances available on the market

PELTIER-COOLED INCUBATORS IPPeco

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: $C\,\epsilon$ EHC

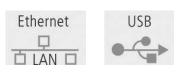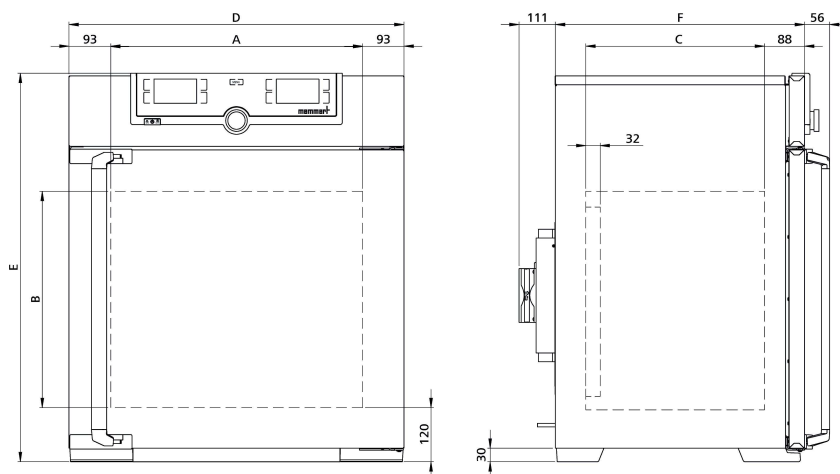|	
Interior:	Stainless steel, material 1.4301 (ASTM 304), deep-drawn
Housing:	Textured stainless steel, rear zinc-plated steel, intuitively operated SingleDISPLAY or TwinDISPLAY (TFT colour display) with touchscreen
Double doors:	Outside stainless steel, fully insulated, inside glass (size 1400/2200 stainless steel doors with glass sector, fully heated inner glass panes integrated in the full-sight glass door with 2-point locking – compression door lock). Sizes 750, 1060 and 1400 two leaves, size 2200 three leaves
Connection:	Mains cable with plug (German type)
Installation:	4 feet; sizes 410, 750 and 1060 mounted on lockable castors, 1400 and 2200 mounted on height-adjustable and lockable castors
Interfaces:	Ethernet / LAN, USB

USB: only for TwinDISPLAY

Model sizes/Description			30	55	110	260	410	750	1060	1400	2200
Stainless steel interior	Volume	approx. l	32	53	108	256	384	749	1060	1360	2140
	Width (A)	mm	400	400	560	640	640	1040	1040	1250	1972
	Height (B)	mm	320	400	480	800	1200	1200	1200	1450	1450
	Depth (less 10 mm (sizes 30 and 55), less 32 mm (sizes 110 to 2200) for fan – Peltier) (C)	mm	250	330	400	500	500	600	850	750	750
	Max. number of grids/shelves	number	3	4	5	9	14	14	14	28	42
	Max. loading per grid/shelf	kg	20	20	20	20	20	20	30	20	30
	Max. loading of chamber	kg	60	80	150	200	200	200	200	250	330
	Max. loading per slide-in drip tray	kg	1,5	1,5	3	4	4	8	8	-	-
	Max. loading per bottom drip tray	kg	1,5	1,5	3	4	4	8	8	-	-
Textured stainless steel exterior	Width (D)	mm	585	585	745	824	824	1224	1224	1435	2157
	Height (sizes 410, 750, 1060 with castors) (E)	mm	704	784	864	1183	1720	1720	1720	1913	1913
	Depth (without door handle, depth of handle +56 mm) (F)	mm	434	514	555	655	655	755	1005	905	905
Standard equipment	Stainless steel grids, electropolished	number	1	1	2	2	2	2	2	4	6
	Standard works calibration certificate (measuring point chamber center)	°C	+10 and +37							+25 and +40	
Temperature	Working temperature range without light	°C	0 (at least 20 below ambient temperature) to +70							+15 (at least 10 below ambient temperature) to +60	
	Working temperature range with light	°C	-	-	+10 to +40					-	-
	Setting temperature range	°C	0 to +70							+15 to +60	
	Setting accuracy	°C	0.1								
Further data	Electrical load at 230 V, 50/60 Hz	approx. W	140	275	320	600	600	1200	1200	1200	1800
	Electrical load at 115 V, 50/60 Hz	approx. W	140	275	320	600	600	1200	1200	1200	-
	Peltier elements in the rear	number	1	1	1	2	2	4	4	4	6
Packing data	Net weight	approx. kg	40	52	78	114	157	230	255	450	493
	Gross weight (packed in carton)	approx. kg	56	71	103	165	210	301	419	639	730
	Width	approx. mm	660	730	830	930	930	1330	1370	1560	2300
	Height	approx. mm	890	950	1050	1380	1930	1910	1970	2200	2200
	Depth	approx. mm	650	670	800	930	930	1050	1300	1190	1190
Order No. Peltier-Cooled Incubators			IPP30	IPP55	IPP110eco	IPP260eco	IPP410eco	IPP750eco	IPP1060eco	IPP1400eco	IPP2200eco
			IPP30plus	IPP55plus	IPP110ecoplus	IPP260ecoplus	IPP410ecoplus	IPP750ecoplus	IPP1060ecoplus	IPP1400ecoplus	IPP2200ecoplus

IPP = Peltier-Cooled Incubators
plus = Model with TwinDISPLAY
(IPP1400eco/ IPP1400ecoplus and IPP2200eco/ IPP2200ecoplus available from Q2 2021)

Options	30	55	110	260	410	750	1060	1400	2200
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 (standard with 1060)		-				K1		-	
Light module cold white 6,500 K: light strips arranged on the side walls of the interior, 10 strips for model 110, 14 for model 260/410/750, programme-controlled dimming from 0 to 100 % (in 1 % steps), ramp programming in combination with temperature (only with TwinDISPLAY; not in combination with F6, F7, D8)	-			T7			-		
Light module cold white 6,500 K + warm white 2,700 K: LED light strips - 10 strips for model 110, 14 for model 260/410/750 - (6 resp. 8 alternating cold white light strips and 4 resp. 6 warm white light strips) on the side walls of the interior, programme-controlled dimming from 0 to 100 % (in 1 % steps), ramp programming in combination with temperature (only with TwinDISPLAY; not in combination with F6, F7, D8)	-			T8			-		
Light module warm white 2,700 K: light strips arranged on the side walls of the interior, 10 strips for model 110, 14 for model 260/410/750, programme-controlled dimming from 0 to 100 % (in 1 % steps), ramp programming in combination with temperature (only with TwinDISPLAY; not in combination with F6, F7, D8)	-			T9			-		
Interior socket, ampacity 230 V/2.2 A, can be switched off with the On/Off switch, cannot be switched individually, moisture tight IP68				R3				-	
Entry port, 23 mm clear diameter, for introducing connections at the side, can be closed by flap, standard positions (F0 and F2 not for model size 260 with light module; F0 - F3 not for model size 110 with light module) — 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 (please state location) — left				F4					
right				F5					
rear				F6				-	
Entry port, 38 mm clear diameter, can be closed by flap, in special positions in the back wall (please state location; not in combination with T7, T8, T9)				F7				-	
Entry port (silicone), 40 mm clear diameter, moisture tight, can be closed by silicone stopper, standard position rear (not in combination with T7, T8, T9)				D8					
4 - 20 mA current loop interface (-10 to +80 °C = 4 - 20 mA) — Temperature controller, actual value				V3					
Works calibration certificate for 3 temperatures: +5, +37, +60 °C				D00129				-	
Works calibration certificate for one (freely selectable) temperature value according to customer specification				D00109					
Door with lock and key (safety lock) — One lock				B6				-	
Two locks (one each door)				-				B62	-
Three locks (one each door)						-			B63
Door hinged on the left			B8				-		
Potential-free contact for combination error message (e.g. supply failure, sensor fault, fuse)				H6					
Process-dependent programmable door lock (only for units with TwinDISPLAY) — One				D4				-	
Two (one each door)				-				D42	-
Three (one each door)						-			D43
Door-open-recognition (only for units with TwinDISPLAY) — One				V5				-	
Two (one each door)				-				V52	-
Three (one each door)						-			V53
MobileALERT, notification by SMS in case of any error or alarm of the device (requires option H6)				C3					
Castor frame (2-part), height 140 mm			R9				-		

Accessories	30	55	110	260	410	750	1060	1400	2200
Stainless steel grid, electropolished	E28884	E20164	E20165	E28891		E20182	B41251	B38955	
Reinforced stainless steel grid, electropolished, max. loading 60 kg; size 750 with guide bars and fixing screws (requires option K1). Please consider max. loading of chamber	-		E29767	E29766		B32190	B32550	-	
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	B32549	-	
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	B32599	-	
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	B29769	-	
Stainless steel bottom drip tray, 15 mm rim (may affect the temperature distribution, only in connection with option K1)				-		B34055		-	

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.

Mar-2021

Accessories	30	55	110	260	410	750	1060	1400	2200
Guarantee extension by 1 year		GA1Q5			GA2Q5			GA4Q5	
USB-Ethernet adapter					E06192				
Ethernet connection cable 5 m for computer interface					E06189				
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			-				
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), with air slots	B29728	B29730	B29734	B29738	B42116	B29742		-	
Flush-fit unit (stainless steel frame covering gap between oven and wall opening), without air slots	B29729	B29731	B29735	B29739	B42117	B29743		-	
Subframe, adjustable in height (size 30 and 55: height 600 mm, size 110 and 260: height 500 mm)	B29745	B29747	B29749	B29751		-			
Subframe, on castors (size 30 and 55: height 660 mm, size 110: 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				
External measuring instrument with sensors for daylight and UV-light. Product information on demand (models IPPecoplus/ IPPplus)		B04713				-			
External measuring instrument with additional measuring head for temperature and humidity measurement. Product information on demand (models IPPecoplus/ IPPplus)					B04714				
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, 2200) and 26 measuring points (size 1400) according 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 - 1060, 2200) and 26 measuring points (size 1400) 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 IPP/ IPPeco - carrying out and documentation according to Memmert maintenance plan (excluding travel costs, not subject to discount, GER, AT, FR only)					S00317				
Maintenance contract IPP/ IPPeco - carrying out and documentation according to Memmert maintenance plan, minimum duration 3 years (excluding travel costs, not subject to discount, GER, AT, FR only)					S00317J				
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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