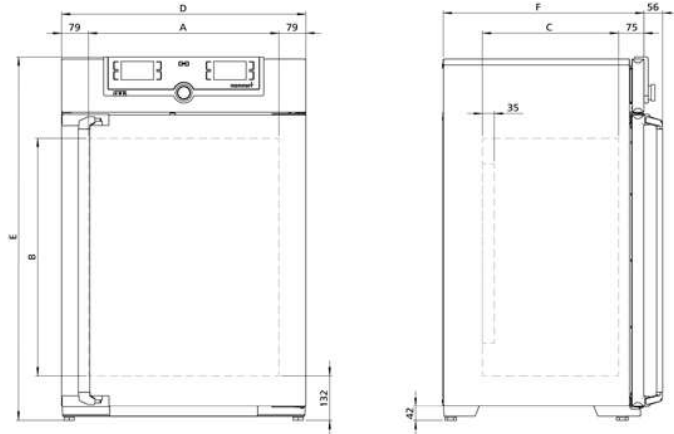# CO₂ INCUBATORS ICO

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), deepdrawn, seamlessly welded
Housing:	textured stainless steel 1.4016 (ASTM 430), rear zinc-plated steel 1.0037 (St37-2), intuitively operated TwinDISPLAY (TFT colour display) with touchscreen
Door:	fully insulated stainless steel door with 2-point locking (compression door lock) and heated inner glass door
Connection:	mains cable with plug (German type)
Installation:	4 adjustable appliance feet
Interfaces:	USB Ethernet LAN

Prices in EUR

Model sizes/Description				50	105	150	240
Stainless steel interior	Volume		l	56	107	156	241
	Width	(A)	mm	400	560		600
	Height	(B)	mm	425	480	700	810
	Depth (less 35 mm for fan)	(C)	mm	330	400		500
	Max. number of grids/shelves		number	5	6	10	12
	Max. loading per grid/shelf		kg		15		
	Max. loading of chamber		kg	75	90	120	140
Textured stainless steel exterior	Width	(D)	mm	559	719		759
	Height	(E)	mm	795	850	1070	1180
	Depth (without door handle, depth of handle +56 mm)	(F)	mm	521	591		691
Standard equipment	Works calibration certificate (measuring point chamber centre) at +37 °C, 5 % CO₂ for standard units				●		
	Works calibration certificate at +37 °C, 5 % CO₂ and 90 % rh (requires option K7); standard equipment for units with active humidity control				●		
	Works calibration certificate at +37 °C, 5 % CO₂, 90 % rh and 10 % O₂ (requires option K7 and option T6); standard equipment for units with O₂ control				●		
	Perforated stainless steel shelf		number	1	2		
	Stainless steel water dish (not applicable with option K7)				●		
	CO₂ connection set: hose with coupling and clamp				●		
	Standard sterilisation programme (without removing the sensors), humidity and CO₂ sensor sterilised inside the CO₂ incubator				60 Minutes at 180 °C		
	Membrane filter (in order to remove impurities and pollutants, all incoming gases pass through a membrane filter before they reach the chamber)				●		
Temperature	Working temperature range		°C	at least 5 above ambient temperature up to +50			
	Setting temperature range		°C	+18 to +50			
	Setting accuracy		°C	0.1			
	Temperature fluctuations with time at +37 °C		K	± 0,1			
	Temperature variation in chamber at +37 °C		K	± 0,3			
Humidity	Setting range active humidity control (with option K7)		% rh	40 to 97 and rh-off			
	Setting accuracy		% rh	0.5			
CO₂ / O₂	Variation in time CO₂		% CO₂	± 0,2			
	Setting accuracy CO₂		% CO₂	0,1			
	Setting range CO₂		% CO₂	0 to 20			
	Setting accuracy O₂		% O₂	0.1			
	Setting range O₂		% O₂	1 to 20			
Further data	Electrical load at 230 V, 50/60 Hz		W	1100	1300	1500	1650
	Electrical load at 115 V, 50/60 Hz		W	1100	1300	1500	1650

Standard equipment included in the standard scope of delivery. 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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Prices in EUR

Model sizes/Description				50	105	150	240
Packing data	Net weight		kg	55	75	90	110
	Gross weight (packed in carton)		kg	74	100	116	145
	Width		mm	730	800		840
	Height		mm	950	1030	1250	1360
	Depth		mm	640	800		900

Order No. CO₂ Incubators

Options	Order No.	50	105	150	240
Voltage 115 V, 50/60 Hz	X2				
Two gas connections with quick release connectors for automatic switch-over of gas cylinders; incl. two CO₂ connection sets: hose with coupling and clamp	T1				
Electropolished interior	T2				
Active microprocessor control for humidifying and dehumidifying (40 - 97 % rh), incl. digital indication and auto-diagnostic system ensures even more rapid reaching of set humidity and very short recovery times while avoiding condensate formation. Humidity supply with water (only for demineralised water with a con-ductivity of 5 to 10 µS/cm and a pH value between 5and 7; from an external tank) by a self-priming pump; integral bacteria block by generating hot steam, dehumidifying via sterile filter (combination of options K7 and F7 for ICO50 not possible)	K7				
Control of oxygen concentration by N₂ inlet; adjustment range 1 % up to 20 % O₂ ; setting accuracy 0.1 % (requires option K7). Incl. N₂ connection set: hose with coupling and clamp	T6				
Peltier cooling unit enables a working temperature of +37 °C even at higher ambient temperatures of up to +35 °C (combination of options K5 and F7 for ICO50 and ICO105 not possible)	K5				
Capacitive humidity sensor for measuring and displaying the relative humidity	K6				
Entry port (silicone), 40 mm clear diameter, moisture tight, can be closed by silicone stopper, at the back, centre right; not available for ICO50 with active humidity control (option K7) or humidity display (option K6)	F7				
4 - 20 mA current loop interface — Temperature controller, actual value (0 to +70 °C = 4 - 20 mA)	V3				
Humidity controller, actual value (0 to 100 % rh = 4 - 20 mA) (requires option K7 or K6)	V7				
CO₂ controller, actual value (0 to 25 % CO₂ = 4 - 20 mA) (requires option T6 or K7)	V9				
O₂ controller, actual value (0 to 25 % O₂ = 4 - 20 mA) (requires option T6 or K7)	V1				
Heated inner door with partitioned glass doors; size105/150/240 has 2/3/4 partitioned glass doors	K4				
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				
MobileALERT, notification by SMS in case of any error or alarm of the device (requires option H6)	C3				
MobileALERT for up to 4 alarm messages (requires option H6 and K6 or K7); alarm via SMS text; temperature and CO₂ alarm (standard), additionally humidity alarm (with option K6 or K7) and O₂ alarm (with option T6)	C4				

Accessories	50	105	150	240
Perforated stainless steel shelf	E35160	E37418		E35158
Central water supply, with filter cartridges for connection to the domestic water supply (requires option K7). Product information on demand		ZWVR6		
Central water supply, without filter cartridges for connection to the domestic water supply (only for demineralised water with a conductivity of 5 to 10 µS/cm and a pH value between 5 and 7, requires option K7). Product information on demand		ZWVR7		
Stacking set (consisting of stacking corners, one connecting plate for the rear, two wall brackets) for stacking of two units of same size (requires subframe B33509 or B43598)		-		B48129
Stacking set (consisting of stacking corners, one connecting plate for the rear, two wall brackets) for stacking of two units of same size		-	B42114	-
Stacking set (4 pcs) for stacking of appliances of same size		B29744		-
Subframe, on castors (height 120 mm; stainless steel, material 1.4301)			-	B43598
Subframe (622 mm high) adjustable in height (sizes 150/240: should not be used for 2 stacked units)	B33504	B33505		B33506
Subframe (130 mm high); sizes 150/240: only in combination with the corresponding stacking sets for stacked appliances	B33507	B33508		B33509
Water dish		B38737		
3 HEPA14-filters (B49800) for chamber according to EN 1822, packed in sterile condition, incl. fixing unit		B39698		
HEPA14-filter for chamber according to EN 1822, packed in sterile condition, incl. fixing unit		B49800		

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Accessories	50	105	150	240
CO$_2$ pressure reducing valve to DIN 8546, incl. gas cylinder monitor		E02087		
N$_2$ pressure reducing valve to DIN EN ISO 2503, incl. gas cylinder monitor (requires option T6)		E06162		
External measuring instrument with additional measuring head for temperature and humidity measurement. Product information on demand		B04714		

Accessories | Software and Connectivity	50	105	150	240
Basic license for „AtmoCONTROL FDA Edition". Meets the requirements for the use of electronically stored records and electronic signatures as specified in the 21 CFR Part 11 regulation by the US Food and Drug Administration (FDA). Respective IQ/OQ documents available in German and English (at no extra charge).		FDAQ1		
FDA integration license for an additional device (up to a maximum of 31 units) into an already purchased FDA basic license.		FDAQ2		
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		B33170		
Ethernet connection cable 5 m for computer interface		E06189		
USB-Ethernet adapter		E06192		

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