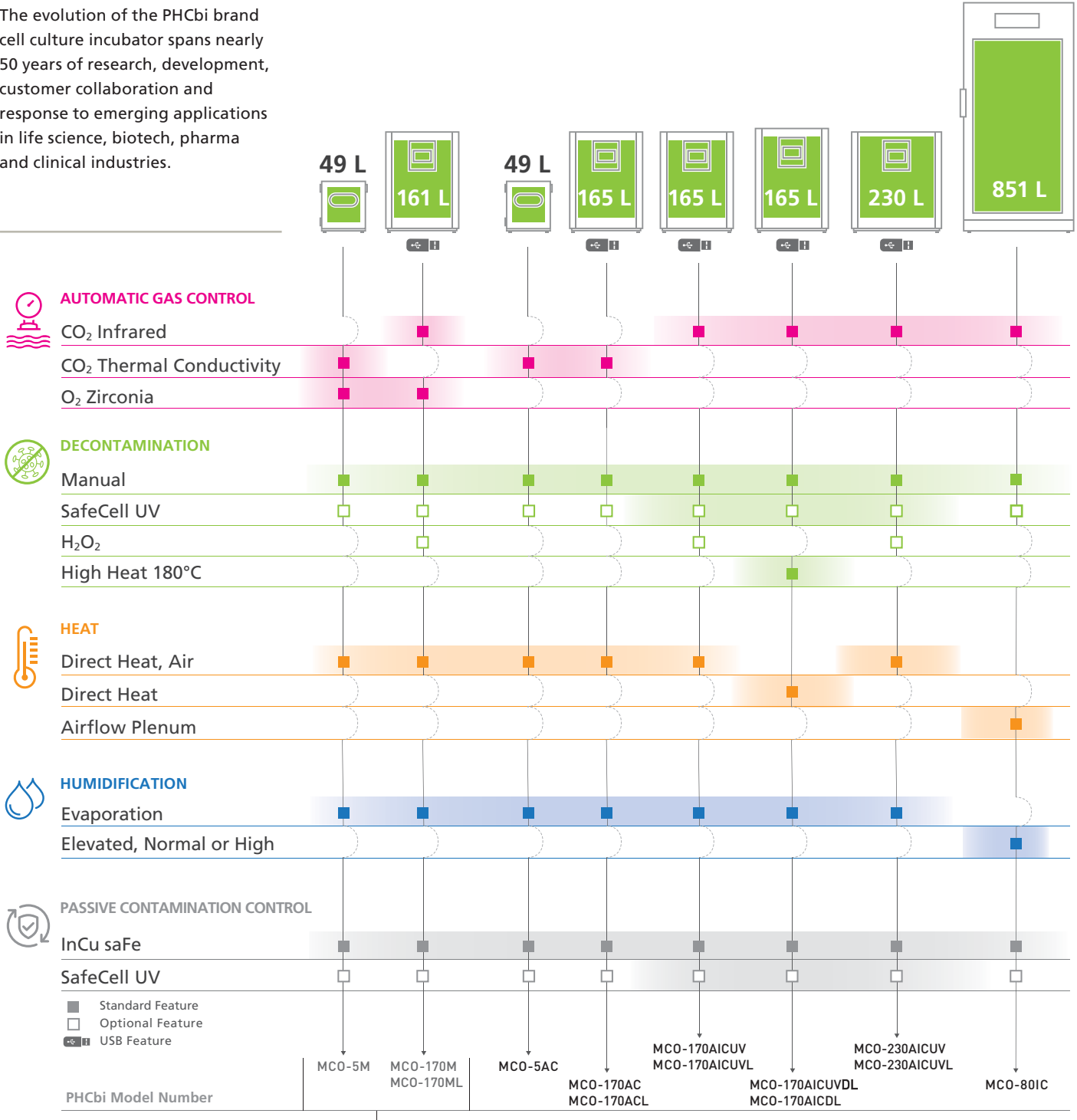


## Choosing Your Cell Culture Incubator

The evolution of the PHCbi brand cell culture incubator spans nearly 50 years of research, development, customer collaboration and response to emerging applications in life science, biotech, pharma and clinical industries.



Dimensions		MCO-5M	MCO-170M/MCO-170ML	MCO-230AICUV/MCO-230AICUVL	MCO-80IC
External Dimensions (W x D x H) <sup>1)</sup>	mm	480 x 548 x 575	620 x 730 x 905	770 x 730 x 905	986 x 945 x 2040 <sup>2)</sup>
Internal Dimensions (W x D x H)	mm	350 x 378 x 375	490 x 523 x 665	643 x 523 x 700	806 x 693 x 1524
Volume	liters	49	161	230	851
Net Weight	kg	50	77	90	275
<b>Performance</b>					
Temperature Control Range and Fluctuation <sup>3)</sup>	°C	+5 above ambient to +50, ± 0.1	+5 above ambient to +50, ± 0.1	+5 above ambient to +50, ± 0.1	+5 above ambient to +50, ± 0.1
Temperature Uniformity <sup>3)</sup>	°C	± 0.25	± 0.25	± 0.25	± 0.5 (9 point measurement)
CO <sub>2</sub> Control Range and Fluctuation <sup>3)</sup>	%	0 to 20, ± 0.15	0 to 20, ± 0.15	0 to 20, ± 0.15	0 to 20, ± 0.15
O <sub>2</sub> Control Range and Fluctuation <sup>3)</sup>	%	1 to 18 and 22 to 80, ± 0.2	1 to 18 and 22 to 80, ± 0.2	—	—
Humidity Level & Fluctuation	% RH	95 at 37°C, ± 5	95 at 37°C ± 5	95 at 37°C ± 5	Normal mode: over 80 [high mode: over 90]
<b>Control</b>					
Controller with Thermistor Sensor		Microprocessor – softkey 7 button menu	Microprocessor	Microprocessor	Microprocessor
Display	qty	3; LED (temperature, CO <sub>2</sub> and O <sub>2</sub> ) readable to 0.1 increments	Color LCD touchscreen readable to 0.1 increments	Color LCD touchscreen readable to 0.1 increments	2; LED (1 for temperature and 1 for CO <sub>2</sub> ) readable to 0.1 increments
Sensor	CO <sub>2</sub>   O <sub>2</sub>	Thermal conductivity (TC)   Stabilized zirconia	Dual filter IR   Stabilized zirconia	Dual filter IR   —	IR   —
<b>Construction</b>					
Exterior Material		Painted steel (rear cover coated steel)	Painted steel (rear cover coated steel)	Painted steel (rear cover coated steel)	Painted steel
Interior Material		Stainless steel copper enriched alloy	Stainless steel copper enriched alloy	Stainless steel copper enriched alloy	Stainless steel copper enriched alloy
Outer Door	qty	1	1	1	1; Dual pane heated glass with latch (provision for padlock)
Field Reversible Door		Included	Included	Included	—
Inner Door	qty	1 (sealing tempered glass with positive latch)	1 (stainless steel frame sealing with positive latch + 4 tempered glass sealing with positive latches)	1 (sealing tempered glass with positive latch)	Optional
Humidity Pan	qty	1 (stainless steel)	1 (stainless steel)	1 (stainless steel)	—
Humidity Reservoir Drain	qty	—	—	—	Drain valve – lower side front (tray provided)
Humidity Reservoir Material		—	—	—	Stainless steel
Shelves	qty	3 (stainless steel copper enriched alloy)	3 (stainless steel copper enriched alloy)	4 (stainless steel copper enriched alloy)	5 (stainless steel copper enriched alloy)
Shelf Dimension (W x D x H)	mm	310 x 310 x 12	470 x 450 x 12	620 x 450 x 12	776 x 659 x 10
Max. Load per Shelf	kg	4	7	7	30
Max. Total Load	kg	12	21	28	150
Max. Shelf Capacity	qty	6	10	10	18
Access Port / Position	qty	1; rear upper left	1; rear upper left	1; rear upper left	2; right side and left side
Access Port Diameter	mm	30 (with silicone (non-VOC) stopper)	30 (with silicone (non-VOC) stopper)	30 (with silicone (non-VOC) stopper)	40 (with silicone (non-VOC) stopper)
Leveling Feet and Casters	qty	4 leveling feet	4 leveling feet	4 leveling feet	4 leveling feet, 4 casters (swivel)
<b>Decontamination Control</b>					
InCu-saFe Chamber, Air Plenum and Shelves	passive	Included (stainless steel copper enriched alloy)	Included (stainless steel copper enriched alloy)	Included (stainless steel copper enriched alloy)	Included (stainless steel copper enriched alloy)
SafeCell UV Light System	passive/active	Optional	Optional	Standard	Optional
Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor	active	—	Optional <sup>5)</sup>	Optional <sup>5)</sup>	—
<b>Alarms</b> (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)					
Power Failure		R	R	R	R
Temperature or Gas Deviation	high	V-B-R	V-B-R	V-B-R	V-B-R
Supply Empty		V-B-R	V-B-R	V-B-R	V-B-R
Door Open		V-B	V-B	V-B	V-B
Low Water in Humidity Reservoir		—	—	—	V
<b>Noise Level</b>					
Noise Level <sup>4)</sup>	dB(A)	24	29	25	33
<b>Options</b>					
SafeCell UV Light System		MCO-19UVS-PA/PE/PK	MCO-170UVS-PA/PE <sup>5)</sup>	MCO-170UVS-PA/PE <sup>5)</sup>	MCO-80UVS-PE/PK
Humidity Reservoir–Auto Fill System		—	—	—	MCO-80AS-PW
Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Board		—	MCO-170HB-PE/PA <sup>5)</sup>	MCO-170HB-PA/PE <sup>5)</sup>	—
Outer Door–Password Access Electronic Lock		—	MCO-170EL-PW <sup>5)</sup>	MCO-170EL-PW <sup>5)</sup>	—
H <sub>2</sub> O <sub>2</sub> Vapor Generator		—	MCO-HP-PW <sup>5)</sup>	MCO-HP-PW <sup>5)</sup>	—
H <sub>2</sub> O <sub>2</sub> Reagent	package of 6	—	MCO-H202-PV	MCO-H202-PV	—
CO <sub>2</sub> Gas Pressure Regulator	psi	MCO-010R-PW	MCO-010R-PW	MCO-010R-PW	—
Automatic CO <sub>2</sub> Cylinder Changeover System		MCO-5GC-PW	MCO-21GC-PW	MCO-21GC-PW	MCO-80GC-PW
4-20mA Analog Output		MCO-420MA-PW	MCO-420MA-PW	MCO-420MA-PW	—
InCu-saFe Shelf		MCO-30ST-PW	MCO-170ST-PW	MCO-230ST-PW	MCO-80ST-PW
InCu-saFe Shelf–Reinforced		—	MCO-170RT-PW	MCO-230RT-PW	—
Double Stacking Bracket <sup>5)</sup>		Included	MCO-170SB-PW	MCO-230SB-PW	—
Roller Base		MCO-5RB-PW	MCO-170RB-PW	MCO-230RB-PW	—
Inner Door Kit		—	Included	—	MCO-80ID-PW
Cell Roller Mounting Ramp Kit		—	—	—	MCO-80RBS-PW

<sup>1)</sup> Exterior dimensions of main cabinet only, excluding handle and other external projections

<sup>2)</sup> Exterior dimensions of cabinet excluding handle, rear stand-off brackets and other external projections.

<sup>3)</sup> Ambient temperature 23°C, setting 37°C, CO<sub>2</sub> 5%, no load, air temperature measured at incubator center

<sup>4)</sup> Nominal value – Background noise 20dB(A)

<sup>5)</sup> MCO-170M/MCO-170ML and MCO-230AICUV/MCO-230AICUVL require MCO-170HB, MCO-170EL, MCO-170UVS and MCO-HP for H<sub>2</sub>O<sub>2</sub> Decontamination

Specifications are subject to change without notice.