

## **Choosing Your Cell Culture Incubator**





Life Science Innovator Since 1966

PHC Corporation, Biomedical Division

Dimensions		MCO-5M	MCO-170M/MCO-170ML	MCO-230AICUV/MCO-230AICUVL	MCO-80IC
External Dimensions (W × D × H) <sup>11</sup>	mm	480 × 548 × 575	620 × 730 × 905	770 × 730 × 905	986 × 945 × 2040 <sup>2)</sup>
Internal Dimensions (W × D × H)	mm	350 × 378 × 375	490 × 523 × 665	643 × 523 × 700	806 × 693 × 1524
Volume	liters	49	161	230	851
Net Weight		50	77	90	275
Performance	kg	50	11	70	275
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
Control	701111	754(5) 0,15	734(5) 015	/38(8/ 013	Normal model over objilightmodel over 70
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	CO2 02	Thermal conductivity (TC)   Stabilized zirconia	Dual filter IR Stabilized zirconia	Dual filter IR   —	IR –
Construction		, ,			
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 (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	49	_	_		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 × D × H)	mm	310 × 310 × 12	470 × 450 × 12	620 × 450 × 12	776 × 659 × 10
			470×450×12	620 × 450 × 12	
Max. Load per Shelf	kg	4			30
Max. Total Load	kg	12	21	28	150
			10	10	10
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 / Position Access Port Diameter	qty mm	1; rear upper left 30 (with silicone (non-VOC) stopper)	1; rear upper left 30 (with silicone (non-VOC) stopper)	1; rear upper left 30 (with silicone (non-VOC) stopper)	2; right side and left side 40 (with silicone (non-VOC) stopper)
Access Port / Position Access Port Diameter Leveling Feet and Casters	qty	1; rear upper left	1; rear upper left	1; rear upper left	2; right side and left side
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control	qty mm qty	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel)
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves	qty mm qty passive	1; rear upper left 30 (with siticone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy)	1: rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy)	1: rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy)	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy)
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System	qty mm qty passive passive/active	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional	1: rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy) Optional
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H;O:) Vapor	qty mm qty passive	1; rear upper left 30 (with siticone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy)	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>3</sup>	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy)
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Alarms	qty mm qty passive passive/active	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional —	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional <sup>30</sup> (V=Visual Alarm, Buzzer A	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>19</sup> Klarm, R=Remote Alarm)	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 teveling feet, 4 casters (swivet) Included (stainless steel copper enriched alloy) Optional —
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Alarms Power Failure	qty mm qty passive passive/active active	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional — R	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional (V=Visual Alarm, Buzzer A R	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>®</sup> Klarm, R=Remote Alarm) R	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional  R
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Alarms Power Failure Temperature or Gas Deviation	qty mm qty passive passive/active	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional — R V-B-R	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional <sup>59</sup> (V=Visual Alarm, Buzzer A R V-B-R	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>sil</sup> Varm, R=Remote Alarm) R V-B-R	2; right side and left side 40 (with siticone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional 
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Alarms Power Failure Temperature or Gas Deviation Supply Empty	qty mm qty passive passive/active active	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional — R V-B-R V-B-R V-B-R	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional <sup>19</sup> (V=Visual Alarm, Buzzer A R V-B-R V-B-R	1 ; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>SI</sup> V-B-R V-B-R V-B-R	2; right side and left side 40 (with siticone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional R V-B-R V-B-R
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Alarms Power Failure Temperature or Gas Deviation Supply Empty Door Open	qty mm qty passive passive/active active	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional — R V-B-R V-B-R V-B-R V-B-R	1; rear upper left 30 (with silicone [non-VOC] stopper] 4 leveling feet Included [stainless steel copper enriched alloy] Optional Optional <sup>19</sup> (V=Visual Alarm, Buzzer A R V-B-R V-B-R V-B-R	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>SI</sup> V-B-R V-B-R V-B-R V-B	2; right side and left side 40 (with siticone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional R V-B-R V-B-R V-B
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCll UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Alarms Power Failure Temperature or Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir	qty mm qty passive passive/active active	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional — R V-B-R V-B-R V-B-R	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional <sup>19</sup> (V=Visual Alarm, Buzzer A R V-B-R V-B-R	1 ; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>SI</sup> V-B-R V-B-R V-B-R	2; right side and left side 40 (with siticone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional R V-B-R V-B-R
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Alarms Power Failure Temperature or Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Noise Level	qty mm qty passive passive/active active high	1; rear upper left 30 (with siticone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional R R V-B-R V-B-R V-B V-B	1 : rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional <sup>31</sup> (V=Visual Alarm, Buzzer A R V-B-R V-B-R V-B-R V-B	1 : rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>3</sup> V-B-R V-B-R V-B-R V-B V-B	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveting feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional - R V-B-R V-B-R V-B V-B V
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCHU UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Alarms Power Failure Temperature or Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Noise Level <sup>4</sup>	qty mm qty passive passive/active active	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional — R V-B-R V-B-R V-B-R V-B-R	1; rear upper left 30 (with silicone [non-VOC] stopper] 4 leveling feet Included [stainless steel copper enriched alloy] Optional Optional <sup>19</sup> (V=Visual Alarm, Buzzer A R V-B-R V-B-R V-B-R	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>SI</sup> V-B-R V-B-R V-B-R V-B	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy) Optional R V-B-R V-B-R V-B
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ] Vapor Alarrs Power Failure Power Failure Temperature or Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Noise Level <sup>4</sup> Options	qty mm qty passive passive/active active high	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional — R V-B-R V-B-R V-B Q-B 24	1: rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional (V=Visual Alarm, Buzzer A R V-B-R V-B-R V-B V-B 29	1: rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>3</sup> Klarm, ReRemote Alarm) R V-B-R V-B-R V-B-R V-B 25	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy) Optional — R V-B-R V-B-R V-B V-B V 33
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (Hy0-) Vapor Alarms Power Failure Power Failure Temperature or Gas Deviation Supply Empty Door Open Low Vater in Humidity Reservoir Noise Level Noise Level Options SafeCell UV Light System	qty mm qty passive passive/active active high	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional R V-B-R V-B-R V-B-R V-B 24 MCO-19UVS-PA/PE/PK	1: rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional (V=Visual Alarm, Buzzer A R V-B-R V-B-R V-B-R V-B A V-B 29 MCO-170UVS-PA/PE <sup>3</sup>	1 : rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>3</sup> V-B-R V-B-R V-B-R V-B V-B	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy) Optional R R V-B-R V-B-R V-B V-B V-B A V-B MCO-80UVS-PE/PK
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (HyO) Vapor Alarms Power Failure Power Failure Temperature or Gas Deviation Supply Empty Door Open Low Vater in Humidity Reservoir Noise Level <sup>4</sup> Options SafeCell UV Light System Humidity Reservoir-Auto Fill System	qty mm qty passive passive/active active high	1; rear upper left 30 (with silicone [non-VOC] stopper] 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional R V-B-R V-B-R V-B V-B 24 MC0-19UVS-PA/PE/PK _	1: rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional (V=Visual Alarm, Buzzer A R V-B-R V-B-R V-B V-B V-B 29 MC0-170UVS-PA/PE <sup>SI</sup>	1 : rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>9</sup> Klarm, R=Remote Alarm) R V-B-R V-B-R V-B-R V-B C S V-B MCO-170UVS-PA/PE <sup>SI</sup>	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional R R V-B-R V-B-R V-B-R V-B V-B V-B N MCO-80UVS-PE/PK MCO-80AS-PW
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H;O.) Vapor Alarms Power Failure Power Failure Temperature or Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Noise Level Noise Level <sup>4</sup> Options SafeCell UV Light System Humidity Reservoir-Auto Fill System	qty mm qty passive passive/active active high	1; rear upper left 30 (with silicone [non-VOC] stopper] 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional R V-B-R V-B-R V-B V-B 24 MCO-19UVS-PA/PE/PK — —	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet 1 1 1 1 1 1 1 1 1 1 1 1 1	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>3</sup> (larm, R=Remote Alarm) R R V-B-R V-B-R V-B-R V-B C S C C C C C C C C C C C C C	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional R V-B-R V-B-R V-B-R V-B V-B V-B N MC0-80UVS-PE/PK MC0-80UVS-PE/PK MC0-80AS-PW —
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor <b>Alarms</b> Power Failure Power Failure Temperature or Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Noise Level Noise Level <sup>4</sup> Option SafeCell UV Light System Humidity Reservoir-Auto Fill System Humidity Reservoir-Auto Fill System	qty mm qty passive passive/active active high	1; rear upper left 30 (with silicone [non-VOC] stopper] 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional R V-B-R V-B-R V-B-R V-B Q 4 24 MC0-19UVS-PA/PE/PK — — — —	1; rear upper left           30 (with silicone (non-VOC) stopper)           4 leveling feet           0           1           0	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>3</sup> (larm, R=Remote Alarm) R V-B-R V-B-R V-B-R V-B-R V-B C S C C C C C C C C C C C C C	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy) Optional C R V-B-R V-B-R V-B-R V-B V-B V-B V-B N MCO-80UVS-PE/PK MCO-80UVS-PE/PK MCO-80UVS-PE/PK C MCO-80AS-PW - -
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Alarms Power Failure Power Failure Temperature or Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Noise Level Noise Level Noise Level SafeCell UV Light System Humidity Reservoir-Auto Fill System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Board Outer Door-Password Access Electronic Lock H <sub>2</sub> O <sub>2</sub> Vapor Generator	qty mm qty passive/active active high dB(A)	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional R V-B-R V-B-R V-B-R V-B Q V-B Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	1: rear upper left         30 (with silicone (non-VOC) stopper)         4 leveling feet         0         1.cluded (stainless steel copper enriched alloy)         Optional         0         0.ptional         V-B-R         V-B-R         V-B-R         V-B         29         29         MC0-170UVS-PA/PE <sup>SI</sup> MC0-170EL-PW <sup>SI</sup> MC0-170EL-PW <sup>SI</sup>	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional <sup>3</sup> (larm, R=Remote Alarm) R R V-B-R V-B-R V-B-R V-B-R V-B R V-B-R V-B R NCO-170UVS-PA/PE <sup>51</sup> MCO-170EL-PW <sup>51</sup>	2; right side and left side 40 (with silicone [non-VOC] stopper] 4 leveling feet, 4 casters (swivel] Included (stainless steel copper enriched alloy Optional R V-B-R V-B-R V-B-R V-B V-B V-B NCO-80UVS-PE/PK MCO-80UVS-PE/PK MCO-80UVS-PE/PK MCO-80US-PE/PK MCO-80US-PE/PK MCO-80US-PE/PK
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Alarms Power Failure Temperature or Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Noise Level Noise Level Noise Level SafeCell UV Light System Humidity Reservoir-Auto Fill System Humidity Reservoir-Auto Fill System Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Board Outer Door-Password Access Electronic Lock H <sub>2</sub> O <sub>2</sub> Reagent	qty mm qty passive/active active high high dB(A) dB(A)	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional R V-B-R V-B-R V-B V-B 24 MCO-19UVS-PA/PE/PK A A A A A A A A A A A A A	1: rear upper left         30 (with silicone (non-VOC) stopper)         4 leveling feet         0         1.cluded (stainless steel copper enriched allow)         Optional         0         0.ptional         V-B         V-B-R         V-B-R         V-B         R         V-B         NCO-170UVS-PA/PE <sup>SI</sup> MCO-170HB-PE/PA <sup>SI</sup> MCO-170EL-PW <sup>SI</sup> MCO-170EL-PW <sup>SI</sup> MCO-170EL-PW <sup>SI</sup>	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet 1000000000000000000000000000000000000	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveling feet, 4 casters (swivel) 10 cuded (stainless steel copper enriched alloy) 0 optional 0 option
Access Port / Position Access Port Diameter Leveling Feet and Casters Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Hydrogen Peroxide (H <sub>2</sub> O) Vapor Alarms Temperature or Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Noise Level Noise Level <sup>4</sup> Option SafeCell UV Light System Humidity Reservoir-Auto Fill System Hydrogen Peroxide (H <sub>2</sub> O) Vapor Board Outer Door-Password Access Electronic Lock H <sub>2</sub> O <sub>3</sub> Kaegent Cio; Gas Pressure Regulator	qty mm qty passive/active active high dB(A)	1; rear upper left 30 (with siticone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional 	1: rear upper left 30 [with silicone [non-VOC] stopper] 4 leveling feet Included [stainless steel copper enriched alloy] Optional Optional <sup>31</sup> (V=Visual Alarm, Buzzer A R R V-B-R V-B-R V-B-R V-B-R V-B-R V-B-R V-B R NCO-170UVS-PA/PE <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup>	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) <b>Standard</b> Optional <sup>31</sup> (larm, R=Remote Alarm) R R V-B-R V-B-R V-B-R V-B-R V-B R N-C-B R NCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup>	2; right side and left side 40 (with silicone [non-VOC] stopper] 4 leveting feet, 4 casters [swivel] Included [stainless steel copper enriched alloy Optional 
Access Port / Position       Access Port Diameter       Leveling Feet and Casters       Decontamination Control       InCu-saFe Chamber, Air Plenum and Shelves       SafeCell UV Light System       Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor       Alarms       Power Failure       Temperature or Gas Deviation       Supply Empty       Door Open       Low Water in Humidity Reservoir       Noise Level <sup>4</sup> Otion       SafeCell UV Light System       Humidity Reservoir-Auto Fill System       Outer Door-Password Access Electronic Lock       H <sub>2</sub> O <sub>2</sub> Vapor Generator       H <sub>2</sub> O <sub>2</sub> Reagent       CO: Gas Pressure Regulator       Automatic CO: Cylinder Changeover System	qty mm qty passive/active active high high dB(A) dB(A)	1; rear upper left 30 (with siticone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional 	1: rear upper left 30 [with silicone [non-VOC] stopper] 4 leveling feet Included [stainless steel copper enriched alloy] Optional <sup>31</sup> (V=Visual Alarm, Buzzer A R V-B-R V-B-R V-B-R V-B-R V-B-R V-B-R V-B MCO-170UVS-PA/PE <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup> MCO-170EL-PW <sup>31</sup>	1: rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) <b>Standard</b> Optional <sup>3</sup> (larm, R=Remote Alarm) Charles Copper enriched alloy) (larm, R=Remote Alarm) Copper enriched alloy Copper enriched alloy	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveting feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional — R N-B-R V-B-R V-B-R V-B-R V-B V-B-R V-B NCO-80UVS-PE/PK MCO-80DUVS-PE/PK MCO-80DUVS-PE/PK — — — MCO-80DUVS-PE/PK MCO-80DUVS-PE/PK
Access Port / Position       Access Port Diameter       Leveling Feet and Casters       Decontamination Control       InCu-saFe Chamber, Air Plenum and Shelves       SafeCell UV Light System       Hydrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ] Vapor       Alarms       Power Failure       Temperature or Gas Deviation       Supply Empty       Door Open       Koise Level <sup>4</sup> Options       SafeCell UV Light System       Hurdidty Reservoir-Auto Fill System       Hurdidty Reservoir-Auto Fill System       Hurdidty Reservoir-Auto Fill System       Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Vapor Board       Outer Door-Password Access Electronic Lock       H <sub>2</sub> O <sub>2</sub> Reagent       CO <sub>2</sub> Gas Pressure Regulator       Automatic CO <sub>2</sub> Cylinder Changeover System	qty mm qty passive/active active high high dB(A) dB(A)	1; rear upper left 30 (with siticone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional 	1: rear upper left 30 [with silicone [non-VOC] stopper] 4 leveling feet Included [stainless steel copper enriched alloy] Optional <sup>9</sup> (V=Visual Alarm, Buzzer A R V-B-R V-B-R V-B-R V-B-R V-B 29 MC0-170UVS-PA/PE <sup>-9</sup> MC0-170UHS-PE/PA <sup>-9</sup> MC0-170HB-PE/PA <sup>-9</sup> MC0-170EL-PW <sup>9</sup> MC0-170EL-PW <sup>9</sup> MC0-H202-PV MC0-10R-PE/PA	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) <b>Standard</b> Optional <sup>31</sup> (larm, R=Remote Alarm) R R C R C R C R C R C R C R C R C R C R C R C R C R C R C C R C C C C C C C C C C C C C	2; right side and left side 40 (with silicone [non-VOC] stopper] 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional — R V-B-R V-B-R V-B-R V-B-R V-B-R V-B-R V-B-R NCO-80UVS-PE/PK MCO-80UVS-PE/PK MCO-80LVS-PE/PK — — — — — — — — — — — — —
Access Port / Position       Access Port Diameter       Leveling Feet and Casters       Decontamination Control       InCu-saFe Chamber, Air Plenum and Shelves       SafeCell UV Light System       Hydrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ] Vapor       Power Failure       Power Failure Or Gas Deviation       Sopply Empty       Door Open       Low Water in Humidity Reservoir       Noise Level <sup>4</sup> Options       SafeCell UV Light System       Hurdigty Reservoir-Auto Fill System       Hurdigty Reservoir-Auto Fill System       Hydrogen Peroxide (H <sub>2</sub> O) Vapor Board       Outer Door-Password Access Electronic Lock       H <sub>2</sub> O <sub>2</sub> Reagent       CO: Gas Pressure Regulator       Automatic CO: Cylinder Changeover System       4-20mA Analog Output	qty mm qty passive/active active high high dB(A) dB(A)	1; rear upper left 30 (with siticone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional 	1: rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional 0 Optional (V=Visual Alarm, Buzzer A R V-B-R V-B-R V-B-R V-B-R V-B 29 C C C C C C C C C C C C C	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet 1000000000000000000000000000000000000	2; right side and left side 40 (with silicone (non-VOC) stopper) 4 leveting feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional — R N-B-R V-B-R V-B-R V-B-R V-B V-B-R V-B NCO-80UVS-PE/PK MCO-80DUVS-PE/PK MCO-80DUVS-PE/PK — — — MCO-80DUVS-PE/PK MCO-80DUVS-PE/PK
Access Port / Position       Access Port Diameter       Leveling Feet and Casters       Decontamination Control       InCu-saFe Chamber, Air Plenum and Shelves       SafeCell UV Light System       Hydrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ] Vapor       Alarms       Power Failure       Temperature or Gas Deviation       Supply Empty       Door Open       Low Water in Humidity Reservoir       Noise Level <sup>4</sup> Options       SafeCell UV Light System       Hydrogen Peroxide (H <sub>2</sub> O) Vapor Board       Oytogen Peroxide (H <sub>2</sub> O) Vapor Board       Hydrogen Peroxide (H <sub>2</sub> O) Vapor Board       Outer Dor-Password Access Electronic Lock       H <sub>2</sub> O <sub>2</sub> Reagent       CO: Gas Pressure Regulator       Automatic CO: Cylinder Changeover System       4-20mA Analog Output       InCu-saFe Shelf – Reinforced	qty mm qty passive/active active high high dB(A) dB(A)	1; rear upper left 30 (with siticone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional R R V-B-R V-B-R V-B-R V-B A V-B A A A A A A A A A A A A A	1: rear upper left         30 (with silicone (non-VOC) stopper)         4 leveling feet         Included (stainless steel copper enriched alloy)         Optional         Optional         V-Visual Alarm, Buzzer A         R         V-B-R         V-B-R         V-B-R         V-B-R         Q         29         MCO-170UVS-PA/PE <sup>SI</sup> MCO-170ULS-PA/PE <sup>SI</sup> MCO-170LL-PW <sup>SI</sup> MCO-H202-PV         MCO-10R-PE/PA <sup>SI</sup> MCO-10R-PW SI         MCO-10R-PW         MCO-226C-PW         MCO-216C-PW         MCO-170ST-PW	1: rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) <b>Standard</b> Optional. <sup>9</sup> (Jarren, Remote Alarm) Coptional. <sup>9</sup> (V-B-R V-B-R V-B-R V-B-R V-B-R V-B-R (N-C-170E) (N-C-170E) NCO-170E) NCO-170E) MCO-170EI-PW <sup>31</sup> MCO-170EI-PW <sup>31</sup> MCO-210C7-PW	2; right side and left side 40 (with silicone [non-VOC] stopper] 4 leveling feet, 4 casters (swivel) Included (stainless steel copper enriched alloy Optional — R V-B-R V-B-R V-B-R V-B-R V-B-R V-B-R V-B-R NCO-80UVS-PE/PK MCO-80UVS-PE/PK MCO-80LVS-PE/PK — — — — — — — — — — — — —
Access Port / Position         Access Port Diameter         Leveling Feet and Casters         Decontamination Control         InCu-saFe Chamber, Air Plenum and Shelves         SafeCell UV Light System         Hydrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ] Vapor         Attrams         Power Failure         Fomperature or Gas Deviation         Supply Empty         Door Open         Low Water in Humidity Reservoir         Noise Level <sup>4</sup> Options         SafeCell UV Light System         Humidity Reservoir-Auto Fill System         Hudrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ) Vapor Board         Oyapor Generator         Hydrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ) Vapor Board         Outors         SafeCell UV Light System         Humidity Reservoir-Auto Fill System         Hydrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ) Vapor Board         Outor Door-Password Access Electronic Lock         H <sub>2</sub> O <sub>2</sub> Reagent         CO: Gas Pressure Regulator         Automatic CO: Cylinder Changeover System         Hudmatic CO: Cylinder Changeover System         LocusaFe Shelf         InCu-saFe Shelf - Reinforced         Double Stacking Bracket <sup>4</sup>	qty mm qty passive/active active high high dB(A) dB(A)	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional R R V-B-R V-B-R V-B-R V-B 24 MC0-19UVS-PA/PE/PK 4 MC0-19UVS-PA/PE/PK - MC0-101R-PW MC0-5GC-PW MC0-5GC-PW MC0-30ST-PW - Included	1: rear upper left         30 (with silicone (non-VOC) stopper)         4 leveling feet         1         1         1         0 <td>1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional.<sup>9</sup> (VB-R V-B-R V</td> <td>2; right side and left side 40 (with silicone [non-VOC] stopper] 4 leveting feet, 4 casters (swivel) 10 10 10 10 10 10 10 10 10 10</td>	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional. <sup>9</sup> (VB-R V-B-R V	2; right side and left side 40 (with silicone [non-VOC] stopper] 4 leveting feet, 4 casters (swivel) 10 10 10 10 10 10 10 10 10 10
Access Port / Position         Access Port Diameter         Leveling Feet and Casters         Decontamination Control         InCu-saFe Chamber, Air Plenum and Shelves         SafeCell UV Light System         Hydrogen Peroxide [H <sub>2</sub> O <sub>3</sub> ] Vapor         Attrams         Power Failure         Fomperature or Gas Deviation         Supply Empty         Door Open         Low Water in Humidity Reservoir         Noise Level <sup>4</sup> Options         SafeCell UV Light System         Humidity Reservoir-Auto Fill System         Hudrigt Reservoir-Auto Fill System         Hudrogen Peroxide (Log) Vapor Board         Outor Door-Password Access Electronic Lock         H <sub>2</sub> O, Yapor Generator         H <sub>2</sub> O, Reagent         CO: Gas Pressure Regulator         Automatic CO: Cylinder Changeover System         Hutoratic CD: Cylinder Changeover System         LouzaFe Shelf - Reinforced         Double Stacking Bracket <sup>st</sup> Rouler Base	qty mm qty passive/active active high high dB(A) dB(A)	1; rear upper left 30 (with silicone [non-VOC] stopper] 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional N-B-R V-B-R V-B-R V-B-R V-B 24 MC0-19UVS-PA/PE/PK 4 MC0-19UVS-PA/PE/PK 1 MC0-101R-PW MC0-5GC-PW MC0-5GC-PW MC0-420MA-PW MC0-30ST-PW - Included MC0-SRB-PW	1: rear upper left         30 (with silicone (non-VOC) stopper)         4 leveling feet         1         0.0	1; rear upper left 30 (with silicone [non-VOC) stopper] 4 leveling feet 1ncluded (stainless steel copper enriched alloy) Standard Optional <sup>30</sup> (VB-R V-B-R V	2; right side and left side 40 (with silicone [non-VOC] stopper] 4 leveling feet, 4 casters (swivel) 10 10 10 10 10 10 10 10 10 10
Access Port / Position         Access Port Diameter         Leveling Feet and Casters         Decontamination Control         InCu-saFe Chamber, Air Plenum and Shelves         SafeCell UV Light System         Hydrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ] Vapor         Attrams         Power Failure         Fomperature or Gas Deviation         Supply Empty         Door Open         Low Water in Humidity Reservoir         Noise Level <sup>4</sup> Options         SafeCell UV Light System         Humidity Reservoir-Auto Fill System         Hudrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ) Vapor Board         Oyapor Generator         Hydrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ) Vapor Board         Outors         SafeCell UV Light System         Humidity Reservoir-Auto Fill System         Hydrogen Peroxide [H <sub>2</sub> O <sub>2</sub> ) Vapor Board         Outor Door-Password Access Electronic Lock         H <sub>2</sub> O <sub>2</sub> Reagent         CO: Gas Pressure Regulator         Automatic CO: Cylinder Changeover System         Hudmatic CO: Cylinder Changeover System         LocusaFe Shelf         InCu-saFe Shelf - Reinforced         Double Stacking Bracket <sup>4</sup>	qty mm qty passive/active active high high dB(A) dB(A)	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Optional Optional R R V-B-R V-B-R V-B-R V-B 24 MC0-19UVS-PA/PE/PK 4 MC0-19UVS-PA/PE/PK - MC0-101R-PW MC0-5GC-PW MC0-5GC-PW MC0-30ST-PW - Included	1: rear upper left         30 (with silicone (non-VOC) stopper)         4 leveling feet         1         1         1         0 <td>1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional.<sup>9</sup> (VB-R V-B-R V</td> <td>2; right side and left side 40 (with silicone [non-VOC] stopper] 4 leveling feet, 4 casters [swivel] 10 10 10 10 10 10 10 10 10 10</td>	1; rear upper left 30 (with silicone (non-VOC) stopper) 4 leveling feet Included (stainless steel copper enriched alloy) Standard Optional. <sup>9</sup> (VB-R V-B-R V	2; right side and left side 40 (with silicone [non-VOC] stopper] 4 leveling feet, 4 casters [swivel] 10 10 10 10 10 10 10 10 10 10

<sup>10</sup> Exterior dimensions of main cabinet only, excluding handle and other external projections
 <sup>21</sup> Exterior dimensions of cabinet excluding handle, rear stand-off brackets and other external projections.
 <sup>31</sup> Ambient temperature 23°C, setting 37°C, Co<sub>2</sub> 5%, no load, air temperature measured at incubator center
 <sup>41</sup> Nominal value – Background noise 20dB(A)
 <sup>41</sup> MCO-170M/L 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.

