

# CO<sub>2</sub>CELL

## CO<sub>2</sub> incubator



Latest generation of CO<sub>2</sub> incubators is focused on constant and repeatable conditions for cell growth procedures, tissue and other culturing procedures. Direct heating system eliminates the need of fan and consequently eliminates the risk of vibrations and cross-contamination. Drift-free infrared sensor provides maximum reliability and measurement precision during the whole process. Thanks to the unique 6-sided direct heated chamber, installation and maintenance is very easy. Inner glass door are sealed towards the chamber insulation which allows you to check the samples without losing the internal conditions. Outer door is also sealed with it's own external sealing. Range of useful options supports features like sterilization on 200 °C while CO<sub>2</sub> / O<sub>2</sub> sensor remains inside the machine, multi inner glass door to minimize loss of chamber conditions after door opening, Oxygen control, etc.

**Inner volume:** 50, 190 litres  
**Working temperature:** 5 °C above ambient temperature up to 60 °C  
**Non-controlled relative humidity:** up to 95 % RH at 37 °C  
**CO<sub>2</sub> concentration:** 0,1 % up to 20 %  
**CO<sub>2</sub> sensor:** Drift-free infrared (IR) sensor  
**Interior:**  
Standard: Stainless steel DIN 1.4571 (AISI 304)  
Comfort: Stainless steel DIN 1.4571 (AISI 316)

### The versatile Standard line with microprocessor control unit

### CO<sub>2</sub>Cell Standard available options:

- anti-microbiological paint
- internal glass door
- contamination risk avoided by using no fan
- 2 x 3 LED display
- continuous indication of actual temperature and CO<sub>2</sub> concentration
- audio and visual alarm
- infrared drift free CO<sub>2</sub> sensor
- independent safety thermostat
- HEPA filter on incoming CO<sub>2</sub> tubing
- seamless inner chamber with rounded corners
- direct 6-sided heating system for maximum homogeneity of internal conditions
- 25 mm access port in the back of the machine



- 160 °C decontamination (only 190 litres)
- 3-split inner glass door (only 50 litres)
- 6-split inner glass door (only 50 litres)
- 8-split inner glass door (only 190 litres) with shelves dividers
- CO<sub>2</sub> Inline pressure regulator
- two stage CO<sub>2</sub> regulator
- automatic change over unit
- stacking kit for two machines (of same volume)
- cart-type underframe with 4 castors (two castors lockable)
- IQ/OQ protocols
- left hinged door

...Standard line

### The high-tech Comfort line with advanced touch screen control unit

### CO<sub>2</sub>Cell Comfort available options:

- anti-microbiological paint
- internal glass door
- contamination risk avoided by using no fan
- large color touch screen display, simple icon navigation
- continuous indication of actual temperature, CO<sub>2</sub> concentration, time and alarm limits
- audio and visual alarm
- infrared drift free CO<sub>2</sub> sensor
- independent safety thermostat
- SD card system saving the data in MS Excel format
- RS 232 port, BMS relay alarm contact
- HEPA filter on incoming CO<sub>2</sub> / NO<sub>2</sub> tubing
- seamless inner chamber with rounded corners
- direct 6-sided heating system for maximum homogeneity of internal conditions
- on board data-logging facility with graphs
- high process security – users protected by passwords (5 users, 1 admin)
- event log of all relevant data and events
- 25 mm access port in the back of the machine



- 200 °C Sterilization
- oxygen control 1-19 %
- humidity display
- dual temp
- 3-split inner glass door (only 50 litres)
- 6-split inner glass door (only 50 litres)
- 8-split inner glass door (only 190 litres) with shelves dividers
- two stages N<sub>2</sub> pressure regulator
- CO<sub>2</sub> Inline pressure regulator
- two stage CO<sub>2</sub> regulator
- automatic change over unit
- stacking kit for two machines (of same volume)
- cart-type underframe with 4 castors (two castors lockable)
- IQ/OQ protocols
- left hinged door
- Ethernet connection port
- 4-20 mA re-transmitt

...Comfort line

Technical data		Model	50	190
Interior dimensions				
	volume	l	50	190
	width	mm	402	632
	depth	mm	300	440
	height	mm	402	686
Shelves (trays)* High-quality stainless steel	number	max. stand.	3 3	8 4
External dimensions				
	width	max. mm	534	765
	depth	max. mm	460	734
	height	max. mm	717	862
Weight	netto Standard / Comfort brutto Standard / Comfort	kg kg	38 / 40 50 / 52	94,5 / 104 109 / 117,5
Temperature data				
Temperature deviations at 37 °C	measurement spatially in time	(±) °C (±) °C (±) °C	≤0,1 ≤0,25 ≤0,1	≤0,1 ≤0,25 ≤0,1
Recovery rate		% / min	≤0,8	
Required CO <sub>2</sub> pressure		bar / psi	0,3-0,7 / 5-10	
Relative humidity	humidity dish volume	litres	0,5	1,5
Humidity level at 37 °C, 5 °C CO <sub>2</sub>		% RH	up to 95	
Electric parameters				
	max output / sterilization	W	350 / 950	380 / 1800
	consumption (to maintain 37 °C)	kWh	0,072	0,058
	voltage (50 / 60 Hz)	V	230**	

\*) Approx. 50 % of the tray area can be filled in a way a uniform air circulation is enabled inside the chamber

\*\*) Voltage ±10 %

Changes in the design and make reserved.



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