

# ESCO

WORLD CLASS. WORLDWIDE.



## CelCulture® CO<sub>2</sub> Incubator

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### CRADLE for BEAUTIFUL CELLS

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**VivoCell™ Precise Temp, CO<sub>2</sub> Control and High Humidity:** Stable, uniform distribution; fast recovery after door opening without overshoot.

**CelSafe™ Robust Contamination Control:** ULPA filter enables rapid recovery to ISO Class 5 conditions; 90°C moist heat overnight decon. cycle (validated!); full stainless steel interior, ISOCIDE antimicrobial coating on exterior surfaces; all gas inputs are filtered via 0.2 micron in-line filter.

**Intelligent Data & Event Logger:** Records all incubator parameters for on screen recall.

**CelAlert™ Alarm System:** Reminds user to replace expired / depleted parts; ULPA filter replacement reminder alarm; CO<sub>2</sub> tank low alarm; low CO<sub>2</sub> alarm.

Please Visit Us at [www.co2incubators.com](http://www.co2incubators.com)

Celculture CO <sub>2</sub> Incubator Model CCL-170_ -	
<b>Temperature</b>	
Temp. Control Method	Direct heat & air jacket using Microprocessor PID
Temp. Range, °C	Amb. +3 to 60
Temp. Uniformity, °C	<± 0.2
Temp. Accuracy, °C	<± 0.1
Recovery Time Without Overshoot* (after 1 min. door opening)	6 mins
Ambient Temp. Range	18 to 34°C (64 to 93 °F)
<b>CO<sub>2</sub></b>	
CO <sub>2</sub> Control System	Microprocessor PID
CO <sub>2</sub> Range, % CO <sub>2</sub>	0-20.7
CO <sub>2</sub> Accuracy, % CO <sub>2</sub>	± 0.1
CO <sub>2</sub> Sensor	TC or IR sensor
CO <sub>2</sub> Recovery Time Without Overshoot** (after 1 min. door opening)	Standard Unit: 4 minutes
CO <sub>2</sub> Recovery Time Without Overshoot (after 30 seconds door opening)	with Suppressed O <sub>2</sub> : 5 minutes
<b>O<sub>2</sub> (For Suppressed O<sub>2</sub> Model)</b>	
O <sub>2</sub> Control System	Microprocessor PID
O <sub>2</sub> Range, % O <sub>2</sub>	1-20.7
O <sub>2</sub> Accuracy, % O <sub>2</sub>	± 0.2
O <sub>2</sub> Sensor	Galvanic Cell Type
O <sub>2</sub> Recovery Time (after 30 sec. door opening)	at 1.0 % O <sub>2</sub> by vol: 20 mins
	at 5.0 % O <sub>2</sub> by vol: 10 mins
<b>Humidity</b>	
Humidification Method	Humidity pan
Humidity Range, % RH	Up to 97%
Humidity Recovery Standard Model (- 5% from initial)	20 mins
Humidity Recovery with Suppressed O <sub>2</sub> Model (- 5% from initial)	45 mins
<b>Physical Construction</b>	
Interior Volume	170 l (5.7 cu.ft.)
External Dimensions (W x D x H)	660 x 660 x 900 mm (26.0" x 26.0" x 35.4" )
Internal Dimensions (W x D x H)	505 x 530 x 635 mm 19.9" x 20.9" x 25.0"
Shipping Weight	120 kg (264.6 lbs)
Shipping Dimensions (W x D x H)	850 x 820 x 1150 mm (33.5" x 32.3" x 45.3" )
Number of Shelves	4
Maximum No. of Shelves	7
Shelves Area (W x D)	470 x 470 mm (18.5" x 18.5" )
Max. Load per Shelf	11 kg/shelf (24.3 lbs/shelf)
Available Electrical Configuration	230 V, AC, 50/60 Hz, 1Φ, 3.4 A
	115 V, AC, 50/60 Hz, 1Φ, 7.0 A
Power Consumption	800 watts
Effective Watt at 37°C	80 watts
<b>Contamination Control</b>	
Interior Material	Stainless steel, type 304
Contamination Control Methods	1) Main body is electrogalvanized steel with ISOCIDE antimicrobial coating; 2) Moist 90°C OVERNIGHT decon. cycle (HPA validated); 3) 0.2 micron in-line filter for gas inputs; 4) ULPA filter



### Core Applications:

- Research involving mammalian cell culture, for example:
  - Tissue Engineering
  - Neuroscience
  - In-Vitro Fertilization
  - Cancer Research

### Other Features

- Interactive LCD screen
- Continuous data logging controller; quick change of alarm settings; diagnostic interface; password protection; error logging; on-screen quick help
- Air-tight seal door system
- Chamber with rounded corners for easy cleaning
- Pilaster shelving system
- 2 years warranty

### Accessories and Options

- Humidity display
- CO<sub>2</sub> analyzer
- CO<sub>2</sub> gas backup
- N<sub>2</sub> gas backup
- Extra shelf
- Analog output
- Reverse door swing
- Roller base
- Stacking kit
- 2-stage gas regulator
- IQ/OQ documentation

Units were factory tested under controlled environmental conditions per Esco method. Esco does not guarantee identical results in the field under differing conditions. Original report available upon request. Model used in the test is CCL-170B-8.

\* For temperature not exceeding 37.3°C

\*\* For CO<sub>2</sub> not exceeding 5.2%  
Recovery time with TC Sensor is longer

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