

# AIR JACKET CO<sub>2</sub> INCUBATORS

(AMBIENT +8°C TO +50°C)

Image: 5215-2



## **Shel Lab Air Jacketed CO<sub>2</sub> Incubators**

- Slim, lightweight and can be easily repositioned with minimal downtime
- Patented copper housed HEPA filtration
- Precise temperature control
- Advanced anti-contamination features
- Quick clean shelf system with allows users to disassemble shelves without tools
- Digital keypad with large bright LEDs
- Audible and visual alarms on unit malfunction

**Head Office Phone** (02) 9604 3911  
**Head Office Fax** (02) 9725 1706

**Email** [info@thermoline.com.au](mailto:info@thermoline.com.au)  
**Web** [www.thermoline.com.au](http://www.thermoline.com.au)

 **Thermoline**  
S C I E N T I F I C  
H I G H E R S T A N D A R D S I N S C I E N C E

# PRODUCT DETAILS

Model 5215 was designed to minimize contamination and be operational within hours of installation. This slim, lightweight incubator is easily repositioned with minimal downtime and is well-suited for multiple users.

Three temperature control settings (main chamber, external door, and front liner) minimize condensation and yield precise temperature uniformity with no unwelcome temperature gradients. The patented copper housing around the filter is designed to destroy microbes entrapped in the filter. Additional anti-contamination features include a stainless steel chamber with easy-to-clean coved corners, Quick Clean Shelf System which disassembles without tools in less than a minute, and the Non-Tip Shelf System to reduce spills.

A separate digital keypad with large, bright LEDs (for CO<sub>2</sub> and temperature) is highly visible on the front panel. The audible alarms can be muted easily, and the redundant safety system for temperature protects samples from overheating. In addition, the CO<sub>2</sub> gas supply is protected by a PID with an infrared sensor that is extremely quick to recover, a door switch that automatically turns off the gas when the door is opened, and a sample port on the side to help minimize waste during CO<sub>2</sub> calibration.

## Fast and Easy Set-up

This slim, lightweight incubator can be easily repositioned to reduce downtime and is well-suited for multiple users.

## Effective Contamination Fighters

Three temperature control settings (main chamber, external door, and front liner) minimise condensation and facilitate superior temperature uniformity. This fine tuning capability allows you to accurately select temperature settings, providing stable and optimal culturing conditions. As well, the heated CO<sub>2</sub> inlet port reduces potential for condensation which could promote contamination within or around the inlet port. The unique HEPA filtration system removes 99.97% of all airborne microbes and isolated particulates 0.3 microns or larger.

## The Benefits of IR Sensors

Infrared Sensors are ideal for applications with frequent door openings because recovery is unaffected by changes in temperature or humidity. Continuously sampling chamber atmosphere through a spectrophotometer flow cell, the IR sensor checks wavelength and rectifies an out-of-control condition. CO<sub>2</sub> recovery is rapid and changes in CO<sub>2</sub> concentration are made within seconds.

# SPECIFICATIONS

Model	5215-2
Internal Dimensions (WxDxH mm)	490x500x650
External Dimensions (WxDxH mm)	690x690x960
Capacity (litres)	160
Temperature Range	Ambient +8°C to 60°C
Temperature Uniformity	±0.35°C at 37°C
Electrical (W)	1600
CO <sub>2</sub> Range	0 to 20%
CO <sub>2</sub> Uniformity	±0.1% at 5%
CO <sub>2</sub> Sensor	Infrared ±0.1%
CO <sub>2</sub> Recovery Rate	5 minutes recovery to 5%
CO <sub>2</sub> Alarm	±1%
Shelving	3 supplied (16 maximum)
Weight (kg)	90

**Head Office Phone** (02) 9604 3911

**Head Office Fax** (02) 9725 1706

**Email** [info@thermoline.com.au](mailto:info@thermoline.com.au)

**Web** [www.thermoline.com.au](http://www.thermoline.com.au)

# WATER JACKET CO<sub>2</sub> INCUBATORS

(AMBIENT +8°C TO +50°C)

Image: 3503-2



## Shel Lab WaterJacketted CO<sub>2</sub> Incubators

- Convenient front-mounted connections
- Patented copper housed HEPA filtration
- Pre-heated CO<sub>2</sub> inlet
- Convenient keyhole design
- Fully adjustable shelf slides
- Coved corners for easy cleaning
- Unique design keeps the shelf from tipping

**Head Office Phone** (02) 9604 3911  
**Head Office Fax** (02) 9725 1706

**Email** [info@thermoline.com.au](mailto:info@thermoline.com.au)  
**Web** [www.thermoline.com.au](http://www.thermoline.com.au)

 **Thermoline**  
S C I E N T I F I C  
H I G H E R S T A N D A R D S I N S C I E N C E

# PRODUCT DETAILS

These Basic Water Jacket Incubators are designed and manufactured to accommodate light budgets without compromising fundamental needs in quality and precision. Combine this with the microprocessor controllers, heated outer door, and tempered glass inner door and these units provide temperature uniformity, while minimizing cold spots that lead to condensation contamination. The humidity level inside the chamber is maintained at approximately 95%.

## 3503 Personal Water Jacket

The 3503 compact, 22 litre water jacket, features an intelligent microprocessor providing superb uniformity for even the most demanding in-vitro incubations. The 3503 also offers dependable Infrared (IR) CO<sub>2</sub> Sensor control, ideal for QA / QC applications.

## Anti-corrosion Anode

The anti-corrosion anode permits the use of distilled or tap water (de-ionized water should not be used). The inclusion of this anode eliminates potential rusting within the water jacket chamber. The anti-contamination features make cleaning a breeze and the CO<sub>2</sub> sample port has been moved to the front control panel for quick and easy access.

## The Benefits of IR Sensors

Infrared Sensors are ideal for applications with frequent door openings because recovery is unaffected by changes in temperature or humidity. Continuously sampling chamber atmosphere through a spectrophotometer flow cell, the IR sensor checks wavelength and rectifies an out-of-control condition. CO<sub>2</sub> recovery is rapid and changes in CO<sub>2</sub> concentration are made within seconds.

## Contamination Control

Contamination control is a direct result of the cabinet design. Beginning with the first successful in-vitro fertilization in the USA in 1970, the cabinets have been designed with contamination control features. The chamber atmosphere is purified with Sheldon Manufacturing's High Efficiency Particulate Air (HEPA) Filtration System. This patented HEPA filter is housed in copper to prevent trapped particulates from reproducing. Even chamber cleanup is a breeze with the Quick Clean Shelf System, the removable gasket and the coved corner chamber.

# SPECIFICATIONS

Model	3503-2	3517-2	2406-2
Internal Dimensions (WxDxH mm)	400x400x320	520x505x655	520x510x720
External Dimensions (WxDxH mm)	530x570x670	660x650x1020	670x670x1010
Capacity (litres)	50	170	190
Temperature Range	Ambient +8°C to 60°C		
Temperature Uniformity	±0.35°C at 37°C		
Electrical (Amps)	3		
CO <sub>2</sub> Range	0 to 20%		
CO <sub>2</sub> Uniformity	±0.1% at 5%		
CO <sub>2</sub> Sensor	Infrared ±0.1%		
CO <sub>2</sub> Recovery Rate	5 minutes recovery to 5%		
CO <sub>2</sub> Alarm	±1%		
Shelving	3 supplied (8 maximum)	3 supplied (16 maximum)	
Weight (kg)	90	111	

**Head Office Phone** (02) 9604 3911  
**Head Office Fax** (02) 9725 1706

**Email** [info@thermoline.com.au](mailto:info@thermoline.com.au)  
**Web** [www.thermoline.com.au](http://www.thermoline.com.au)

# AIR JACKET CO<sub>2</sub> INCUBATOR

(AMBIENT +8°C TO +50°C)

Image: LCO-265AI



## Labtech Air Jacketed CO<sub>2</sub> Incubators

- Convenient front-mounted controller
- Infra-Red CO<sub>2</sub> Sensor by digital signal processing
- Precise digital controller
- Reliable and accurate temperature control
- Stainless steel humidity tray
- Rounded chamber corners
- Removable shelves and shelf frame for easy cleaning
- Inner glass door
- Extraction gas fitting on the rear of the cabinet to allow for gas sampling / calibration

**Head Office Phone** (02) 9604 3911  
**Head Office Fax** (02) 9725 1706

**Email** [info@thermoline.com.au](mailto:info@thermoline.com.au)  
**Web** [www.thermoline.com.au](http://www.thermoline.com.au)

 **Thermoline**  
S C I E N T I F I C  
H I G H E R   S T A N D A R D S   I N   S C I E N C E

# PRODUCT DETAILS

This light weight, air jacketed CO<sub>2</sub> incubator is suitable for floor or bench mounting. It features a PID microprocessor controller which provides precise temperature control from ambient up to +60 degrees. This controller has timer, temperature compensation, auto zero calibration and auto tuning functions.

The CO<sub>2</sub> is also controlled via a PID microprocessor, with an infra-red type CO<sub>2</sub> sensor to ensure the CO<sub>2</sub> range is accurately measured and controlled.

The inner liner of the chamber is welded and polished stainless steel with rounded corners for easy cleaning. Two adjustable perforated shelves are supplied standard. These shelves sit on a rack which can be completely removed to allow for sterilizing. A stainless steel water tray is also provided for humidification. An inner glass doors helps to prevent the loss of the conditions inside the chamber while the contents are being viewed.

This model features over temperature and over current protection devices to ensure user safety.

Optional Accessories
Double reduction CO <sub>2</sub> gas regulator
CO <sub>2</sub> analyzer
Additional stainless steel perforated shelves

## SPECIFICATIONS

Model	LCO-265AI
Internal Dimensions (WxDxH mm)	495x515x600
External Dimensions (WxDxH mm)	660x645x1010
Capacity (litres)	150
Temperature Range	Ambient +8°C to 60°C
Temperature Uniformity	±0.35°C at 37°C
Material	Stainless steel interior with powder coated steel exterior
CO <sub>2</sub> Range	0 to 20%
CO <sub>2</sub> Uniformity	±0.1% at 5%
CO <sub>2</sub> Sensor	Digital signal NDIR sensor
CO <sub>2</sub> Recovery Rate	5 minutes recovery to 5%
Air Circulation	Natural convection
Shelving	3
Weight (kg)	90

Thermoline Scientific have been manufacturing and distributing high quality laboratory and scientific testing equipment since 1970. Over this time, Thermoline has grown to be a leading brand in the science industry, with our equipment being used in small and large Hospitals, Universities and Research Laboratories across Australia and the Asia Pacific region.

We're proud to say that we are 100% Australian owned and operated.

**Head Office Phone** (02) 9604 3911

**Head Office Fax** (02) 9725 1706

**Email** [info@thermoline.com.au](mailto:info@thermoline.com.au)

**Web** [www.thermoline.com.au](http://www.thermoline.com.au)