### BENCHTOP GELJACKET<sup>™</sup> CO<sub>2</sub> INCUBATOR 6014 & 6016 SERIES





# GelJacket<sup>TM</sup> Active INSULATION

THE WORLD'S MOST INNOVATIVE TECHNOLOGY FOR CELL CULTURE INCUBATORS IN DECADES



How is GelJacket<sup>™</sup> superior to water jacket? Water jacket incubators were the choice of researchers for years, primarily due to the thermal protection offered by the water following door openings and power outages. Caron's new GelJacket<sup>™</sup> incubator far exceeds water jacket thermal protection (see graph) by insulating the incubator with the heat retaining gel.

Water jackets also require frequent maintenance, such as adding algaecide, draining and filling. GelJacket's<sup>™</sup> sealed gel requires no maintenance, is lightweight to enhance mobility and has no risk of leaking. In fact, the incubator has rapid reaction to door openings because of the high thermal retention of the gel, making it the safest incubator on the market today.

#### GelJacket<sup>™</sup> takes creating an ultra-stable environment for cell growth to a whole new level!

What is GelJacket<sup>™</sup>? GelJacket<sup>™</sup> is the most innovative technological advancement for cell culture incubators in decades! Caron developed this patented\* design to create a premium CO<sub>2</sub> incubator geared toward advanced cell culture studies for the future. GelJacket incorporates proprietary gel active insulation, which surrounds the incubator on all sides, creating a top of the line unit with thermal advantages that far surpass any CO<sub>2</sub> incubator on the market today. This new technology includes all of the advantages of modern benchtop units without any of the disadvantages!



Water jacket incubators also require manual cleaning because they cannot withstand the pressure created when water is heated to high temperatures during a decon cycle. Caron's incubator is the first to offer thermal protection that surpasses water jacket with the user friendliness of an automatic built-in 90°C moist heat decontamination cycle.

**How is GelJacket**<sup>™</sup> **superior to air jacket**/direct heat? GelJacket<sup>™</sup> takes heating and insulating one step further by the gel's ability to enhance temperature stability and uniformity of the incubator. GelJacket<sup>™</sup> technology offers all of the user-friendly features scientists have come to prefer with air jacket/direct heat incubators while transcending the technology of water jacket incubators!

Feature	Water jacket	Direct heat/Air jacket	NEW GelJacket™
Heat retention	Good	Poor	Excellent
Temperature stability	Excellent	Good	Excellent
Ease of set-up	Poor	Excellent	Excellent
Ability to sustain power failure	Good	Poor	Excellent
Low maintenance	Poor	Excellent	Excellent
Decon cycle compatible	Poor	Excellent	Excellent
Overall grade	Good	Good	Excellent

### FEATURES & BENEFITS

AT A GLANCE STANDARD FEATURES

- The GelJacket<sup>™</sup> series is 10 cu. ft., compact and stackable, allowing you to attain the best use of the incubator's interior and your laboratory space.
- The Model 6014 has a temperature range of 10°C above ambient to 60°C. Temperature is controlled with a drift-resistant RTD temperature sensor, providing stable temperature control over long periods of time.
- The GelJacket<sup>™</sup> incubator has a thin layer of proprietary high-energy absorbing gel, which surrounds the entire incubator. The gel blankets the incubator with heat, and will retain the interior temperature even during power failures.
- Caron's earth-friendly gVapor<sup>™</sup> creates controlled humidity. It is unlike conventional steam generator humidification systems. gVapor<sup>™</sup> delivers controlled humidity vapor on an as-needed basis without wasting energy or generating heat, and eliminates the need for a water pan.
- An IR sensor is utilized to maintain a CO<sub>2</sub> range of 0 to 20%. Caron's IR sensor is a safe and time-tested technology that allows for quick recovery after door openings and an ultra-stable environment where your cell cultures will thrive.

- Caron's gentle horizontal airflow system generates evenly distributed airflow across all shelf locations. Maximum uniformity and rapid recovery are maintained.
- The interior consists of polished stainless steel, which is highly resistant to corrosion and allows for an easy and effective cabinet wipe-down when needed.
- The adjustable shelves are readily arranged to meet your application's needs and slide out, making samples at the back of the chamber easy to access.
- Our "tool-less" interior design allows you to remove the interior components effortlessly for routine cleaning or to set up multiple configurations for your cell research.
- The control panel is lockable to minimize the possibility of unauthorized access to the incubator's controls.
- A wide range of popular accessories are available, which allow you to customize the incubator for your application.
- The rapid Decontamination Cycle cleans the incubator overnight with the push of a button, minimizing downtime.

#### REFRIGERATED CO<sub>2</sub> INCUBATOR, MODEL 6016



Refrigerated Benchtop CO<sub>2</sub> Incubator, Model 6016, shown with a shaker and optional casters.

- The industry's only benchtop refrigerated CO<sub>2</sub> incubator is designed for more demanding applications with all of the features and innovations listed above.
- The Benchtop Refrigerated  $CO_2$  Incubator, Model 6016, has a temperature range of 5°C to 60°C and is controlled with a drift-resistant RTD temperature sensor, for applications where the heat generated by shakers or stirrers must be removed.
- The Model 6016 features **gROD**<sup>™</sup>, Refrigeration on Demand, to efficiently manage power consumption and save energy.

## CONTROLLED HUMIDITY

TOP OF THE LINE TECHNOLOGY FOR A SUPERIOR CO, INCUBATOR

- The GelJacket<sup>™</sup> series uses Caron's earth-friendly **gVapor**<sup>™</sup> humidity, which controls humidity to a user selectable setpoint.
- gVapor<sup>™</sup> eliminates the need for a water pan, therefore eliminating standing water and reducing the risk of contamination.
- Unlike conventional water pan incubators which rely solely on evaporation, gVapor<sup>™</sup> rapidly recovers humidity by injecting moisture as needed. Humidity recovery is up to 5X faster than typical water pan systems.
- By controlling humidity to a specific setpoint, gVapor<sup>™</sup> allows the CO<sub>2</sub> incubator to control humidity at elevated levels without creating condensation.
- An optional earth-friendly water recycling/ purification system is available to provide the ideal water source for the incubator. The system can utilize tap water and purify it for the use in the incubator.



Caron's earth-friendly, optional water purification system, Model CRSY102, eliminates the need for a floor drain. It purifies and recycles tap water for the incubator's **gVapor**<sup>™</sup> controlled humidity.



The 10 cu. ft. series incubators are shown stacked with optional stacking kit and casters. Stacking units doubles interior volume without additional floor space.



## **DECON CYCLE**

A LOOK AT CARON'S RAPID, OVERNIGHT DECONTAMINATION CYCLE

#### Safe cell and tissue cultures

Caron's design incorporates the latest technologies to prevent contamination and to keep your cell cultures safer than ever.

The entire interior of the incubator is constructed of high grade polished stainless steel. All of the interior metalwork components are easily removed without the use of tools. The unique "tool-less" removable interior allows for simplified routine incubator cleaning.

#### **Decontamination cycle**

While every precaution is taken to avoid susceptibility to contamination, an easy to use, maintenance free decontamination cycle is standard for added peace of mind.

The GelJacket incubators utilize a time-tested, effective method of decontamination. Caron's 90°C moist heat decon cycle is a scientifically proven method for safe and effective decontamination.

Unlike dry heat decontamination cycles, extreme temperatures are not required to decontaminate. Decontamination cycles requiring high temperatures to eliminate contaminants cause unnecessary strain on an incubator's interior components.

Caron's design further simplifies and accelerates conventional moist heat cycles by adding a drying phase, making it the fastest 90°C moist heat decontamination cycle on the market.

This new feature occurs at the end of the decon cycle and pumps HEPA filtered air into the incubator. The result is a clean, dry incubator with no additional clean up required! The drying cycle quickly cools the incubator as the last phase of the maintenance free, overnight decon cycle.



The decon cycle is activated by simply pressing the "Decon" switch on the control panel. The control panel is easy to use and lockable to minimize the possibility of unauthorized access.



CO<sub>2</sub> Incubator control panel.



Caron's new decon drying system pumps in HEPA filtered dry air. Messy cabinet wipe down is eliminated, allowing the decon cycle to begin with pressing the decon switch and safely decontaminates surfaces.

# SPECIFICATIONS & OPTIONAL ACCESSORIES

Model	6014-1	6014-2	6014-3	6016-1	6016-2	6016-3	
Temperature Range	10°C above ambient to 60°C				5°C to 60°C		
Temperature Control	±0.1°C						
Temperature Uniformity	±0.3°C						
Temperature Sensor	RTD						
Humidity Range	Ambient to 95%RH						
Humidity Control	±3% RH						
Humidity Sensor	Capacitive						
CO₂ Range	0-20% CO <sub>2</sub>						
CO <sub>2</sub> Control	±0.1% CO <sub>2</sub>						
CO <sub>2</sub> Sensor	Infrared CO <sub>2</sub> Sensor						
Interior Dimensions	23" W x 25.8" D x 29.8" H (58.4 cm x 65.5 cm x 75.7 cm)						
Interior Construction	Type 304, 2B Finish, Solid Stainless Steel						
Exterior Dimensions	44.5" W x 31.7" D* x 37" H (112.3 cm x 82.8 cm x 92.7 cm)						
Exterior Construction	Cold Rolled Steel, Powder Coated						
Work Space	10 cu. ft. (283 Liters)						
# of Shelves	3 Standard; 15 Maximum						
Shelf Construction	Type 304, Perforated Stainless Steel, Electropolished						
Shelf Dimensions	22.5" W x 25.4" D (57.2 cm x 64.5 cm)						
Electrical	115V, 60 Hz, 12A	208/230V, 60 Hz, 8A	230V, 50 Hz, 6A	115V, 60 Hz,12A	208/230V, 60 Hz, 8A	230V, 50 Hz, 6A	
Shipping Weight	450	450 lbs. 750 lbs.** 495 lbs.			lbs.	800 lbs.**	

Specifications are subject to change without notice. \*Add 2.75" for handle. \*\* Includes export shipping crate.



Shown with optional RCDR304, 10" temperature and humidity recorder and optional CSTR301 casters.

ALRM301	Remote Alarm Relay
BOTL301	Side Mounted Carboy
CRSY102	Condensate Recirculating System
CSTR301	4 Swivel casters replace leveling feet
DLUX303	Deluxe controller for three controller systems
GASG301	Built-in CO <sub>2</sub> Gas Guard; Allows two CO <sub>2</sub> tanks to connect to a unit
LGHT304	Interior viewing LED's with 24 hour on/off adjustable timer
OUTL301	One internal duplex outlet
PUMP301	Drain Water Pump
RCDR302	Built-in temperature and humidity recorder, 6"
RCDR304	Built-in temperature and humidity recorder, 10"
SHLF304	Additional standard perforated shelf kit
SHLF307	Heavy duty reinforced floor
STCK301	Stacking Kit

For additional accessories, visit www.caronproducts.com.



