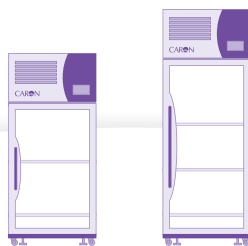


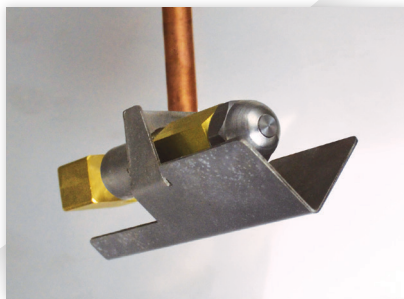
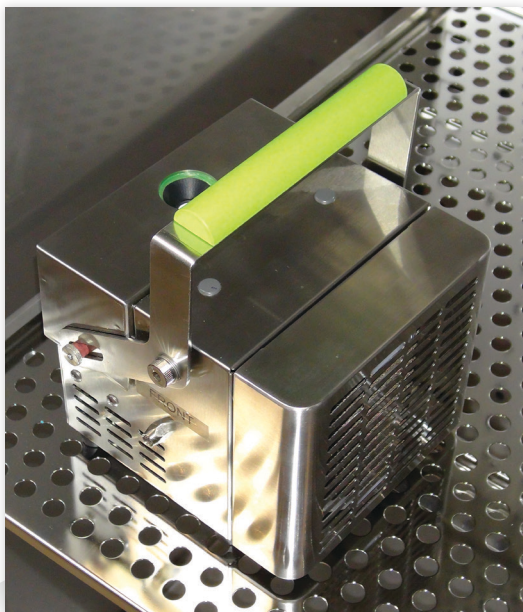


# REACH-IN / SHAKER-READY CO<sub>2</sub> INCUBATORS

CARON®



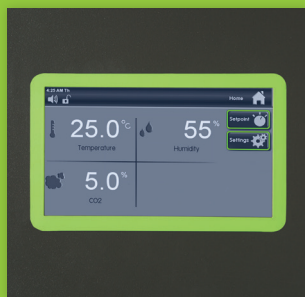
7401-25 / 7401-33



## CLEAN CONDITIONS

Your reach-in is a workhorse. We can help you keep it working clean.

- Available patented\* 2-hour dry H<sub>2</sub>O<sub>2</sub> cycle for fast validatable chamber sterilization, with no post-cycle reassembly or wipe-down.
- Tool-free interior disassembles in under three minutes, for fast and easy cleanup.
- Available "dry chamber" controlled RH system eliminates contamination-prone water pan.
- Use in the most demanding cleanroom environments, with available cleanroom-ready accessory kits.



## FACILITY-FRIENDLY

Built to work on your site. Whether or not your site was built for chambers.

- Standard plug-in electrical and low power usage reduce both setup and operating costs.
- Features you need, such as corrosion-resistant stainless steel interior, glass doors, electrical outlets, access ports, and casters and leveling feet, are standard on every chamber.
- Intuitive touchscreen controls are powerful, yet require minimum training to use.
- 25 ft<sup>3</sup> units roll in through standard door openings.

## PRODUCTION SCALE INCUBATION

Finally, large-scale culture incubators that provide the precise environment, cleanability, and capacity needed for the highest density suspended and adherent cell culture.



Your process can't tolerate downtime and is constantly growing. Why accept a conventional shaker or reach-in CO<sub>2</sub> incubator that's difficult to clean and decontaminate, and doesn't hold the max number of heavy flasks or vessels.

Caron's second generation 7401 Series Shaker-Ready Reach-In's are designed for the next generation of high-density bioproduction applications.

## CULTURE QUALITY

**Critical culture growth conditions. Now in a production-scale growth chamber.**

- Uniform back to front air flow and tightly sealed foam insulated cabinet for tight  $\pm 0.3^{\circ}\text{C}$  temperature uniformity, even when full.
- Latest-generation dual-beam IR CO<sub>2</sub> sensor is stable and constant, even when RH conditions vary.
- Optional one-handed positive door latch/ lock system prevents temperature and humidity loss due to incomplete door closure.
- Touchscreen controls with alerts keep you ahead of unit preventative maintenance situations.

# SPECIFICATIONS

Caron's reach-in, shaker-ready incubators are available in either 25 or 33 ft<sup>3</sup> capacities, and in 115V and 208/230V, 60Hz, and 230V 50Hz variants.

SPECIFICATIONS		
Model	7401-25	7401-33
Temperature Range	20 to 60°C (At 200W Max Heat Load At 20°C)	
Temperature Control	±0.1°C	
Temperature Uniformity	±0.3°C	
Temperature Sensor	RTD	
Humidity Range	Elevated Up to 95% at 37°C*	
Controlled Humidity Range	Ambient to 95% RH / ±3% RH*	
CO2 Range	0-20% CO <sub>2</sub>	
CO2 Control	±0.1% CO <sub>2</sub>	
CO2 Sensor	Infrared CO <sub>2</sub> Sensor	
Internal Outlets	3 / GFCI Protected	
Interior Dimensions	32" W x 27" D x 52.7" H (81.3cm x 68.6cm x 133.9cm)	32" W x 27" D x 65.7" H (81.3cm x 68.6cm x 166.9cm)
Exterior Dimensions	35.5" W x 33.3" D* x 77.1" H** (90.2cm x 84.6cm x 195.8cm)	35.5" W x 33.3" D* x 90.1" H** (90.2cm x 84.6cm x 228.9cm)
Interior Construction	2B Finish Solid Stainless Steel (Type 304)	
Exterior Construction	Powder Coated Cold Rolled Steel	
Work Space	25 ft <sup>3</sup> (708 liters)	33 ft <sup>3</sup> (934 liters)
Shelf Count	2 Standard***	3 Standard***
Shelf Construction	Reinforced Perforated Stainless Steel (Type 304)	
Shelf Capacity	150 lbs. Each (68kg.)	
Shelf Dimensions	29.25" W x 24.45" D (74.3cm x 62.1cm)	
Shipping Weight lbs.	725 lbs. (825 lbs.)****	775 lbs. (1,050 lbs.)****
Shipping Weight kg.	329 kg. (374 kg.)****	352 kg. (476 kg.)****

*Specifications based on 20C ambient and standard voltage. Specifications are subject to change without notice. \*Optional feature. \*\*Add 2.75" for handle. \*\*\*Additional reinforced or standard shelves may be added for conforming dynamic loads. \*\*\*\* 7401-25-3 and 7401-33-3; Includes Export Shipping Crate.*

ELECTRICAL			
Model	7401-25-1 7401-33-1	7401-25-2 7401-33-2	7401-25-3 7401-33-3
Voltage	115V	208-230V	230V
Frequency	60Hz	60Hz	50Hz
Current	16A	8A	8A



## MORE SIZES TO FIT YOUR FACILITY

Caron's 7401 Series shaker-ready reach-ins maximize your capacity within the available production space.\* Working volumes available in 25 or 33 ft<sup>3</sup>. \*\*



Model  
7401-33



Model  
7401-25

*\*Unit shown with VWR Advanced 3500 Orbital Shakers, sold separately.*

*\*\* Unit shown with cell roller, sold separately. Cell-Roller ready kits also required.*

## MORE OPTIONS TO FIT YOUR APPLICATION

Caron offers a wide range of reach-in accessories, to customize chambers to fit your lab's exact needs.



**INDEPENDENT INNER DOORS**



**DIGITAL & ANALOG OUTPUTS**

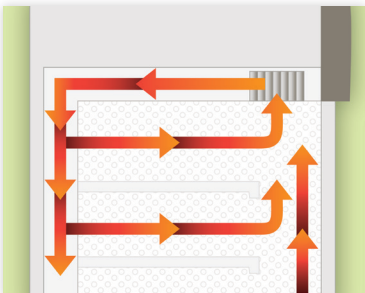
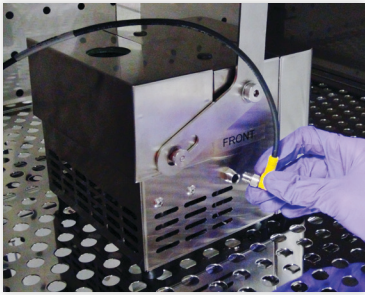


**CLEANROOM READY**



**WIRE / SOLID / ULTRA-LEVEL SHELVES**

# PRODUCTION SCALE INCUBATION



## Available Chamber Sterilization

- Unique patented 2 hour  $H_2O_2$  chamber sterilization\* \*\*
- Removable module can be moved from chamber to chamber
- Fast cycle setup and cleanup

## Equipment Ready

- Reinforced shelves handle vibration and weight for large shakers with full platforms up to 30" (76cm) wide \*\*\*
- Built-in refrigeration removes equipment heat, preventing over temperature events
- Standard GFI outlets for equipment plug and play within the chamber

## Heaviest Vessel Loads

- Reinforced shelving holds dense weight of multi-layer adherent culture vessels
- Adjustable without tools, for quick conversion between vessel heights and loads
- Fill up every shelf with a 500 lb maximum (226kg) static chamber load

## Uniform Directed Airflow

- Back to front air flow
- Positive pressure plenum design
- Uniform even when heavily loaded lock

\*US Patent number 10,738,271

\*\*  $H_2O_2$  cycle may not be compatible with shaker components. Consult manufacturer, or remove shakers from chamber prior to initiating cycle.

\*\*\*Maximum shaker speed 250 RPM with a .75" (1.9cm) or larger orbit.

\*\*\*\* Maximum shaker capacity listed with a 1" (25mm) orbit.

# CLEANROOM READY

Adapt Caron reach-in CO<sub>2</sub> chambers for use in cleanroom environments. Options include freestanding and recessed/in-wall setups, as well as modifications for both moderate and highly aggressive cleaning protocols.

## ACCESSORIES

### Factory Installation

Part No.	Description
CLEN301	Moderate Protocol Kit, Type 304 Stainless Exterior Hardware / 25ft <sup>3</sup> Units
CLEN302	Moderate Protocol Kit, Type 304 Stainless Exterior Hardware / 33ft <sup>3</sup> Units
CLEN303	Aggressive Protocol Kit, All Exterior Metal Parts 316 Stainless / 25ft <sup>3</sup> Units
CLEN304	Aggressive Protocol Kit, All Exterior Metal Parts 316 Stainless / 33ft <sup>3</sup> Units

### On-Site Installation\*\*

Part No.	Description
D00R321	Aggressive Protocol Door Cover, Type 316 Stainless / 25ft <sup>3</sup> Units
D00R322	Aggressive Protocol Door Cover, Type 316 Stainless / 33ft <sup>3</sup> Units
LTCH303	Aggressive Protocol Door Latch, Type 316 Stainless
LTCH304	Aggressive Protocol Door Latch/Lock, Type 316 Stainless
WALL301	In-Wall Trim Kit (Requires In-Wall Prep) / 25ft <sup>3</sup>
WALL302	In-Wall Trim Kit (Requires In-Wall Prep) / 33ft <sup>3</sup>
WALL304	Moderate Protocol In-Wall Chamber Prep
WALL306	Aggressive Protocol In-Wall Chamber Prep

\*See Caron's White Paper, "Controlled Environments in a Cleanroom Space" for kit components and usage details.  
 \*\*On-Site Installations are performed by a trained technician.

## ACCESSORIES

### Factory Installation

Part No.	Description
CELL301	Cell Roller Conversion / Up to 5 Tiers* / 25ft <sup>3</sup> Units
CELL302	Cell Roller Conversion / Up to 7 Tiers* / 33ft <sup>3</sup> Units
CELL303	Combined Shaker/Roller / 1 Shaker Shelf / Up to 3 Tiers* / 25ft <sup>3</sup> Units
CELL304	Combined Shaker/Roller / 1 Shaker Shelf / Up to 5 Tiers* / 33ft <sup>3</sup> Units
DLOG301	Data Logging to USB Port
GASG302	Built-In Gas Guard / Detects Low Gas Pressure and Automatically Switches from Primary to Secondary Tank
HUMD305	Elevated Humidity Via Water Pan System / Ambient to 95% Includes Display (Not available with Cell Roller systems)
HUMD306	Elevated Humidity Via Water Pan System/ Ambient to 95% Includes Display (7401 with CELL301/302/303/304 Cell Roller Systems Only)
HUMD307	Controlled gVapor Humidity / Ambient to 95% / Includes Display
HUMD315	Humidity Sensor & Readout / Does Not Add or Control Humidity
SHLF344	Perforated Shelf Kit (4) / Replaces Standard Reinforced Shelving (25ft <sup>3</sup> models)
SHLF345	Perforated Shelf Kit (5) / Replaces Standard Reinforced Shelving (33ft <sup>3</sup> models)
STER305	H <sub>2</sub> O <sub>2</sub> Sterilization Prep (Required for use of STER301 Sterilization Module)

\*Unit capacity with Wheaton Cell Roller apparatus, sold separately through VWR International.

# ACCESSORIES

Customer Installation	
Part No.	Description
CRSY102	Condensate Recirculating System / Provides a Pure Water Source for Chambers <i>(Requires HUMD307)</i>
REGL101	CO <sub>2</sub> Tank Regulator / 2-Stage, Range 0-2,000 PSI / Dual Pressure Gauges
SHLF300	1 Perforated Shelf and Shelf Tracks
SHLF301	1 Wire Rod Shelf and Shelf Tracks
SHLF302	1 Solid Shelf and Shelf Tracks
SHLF303	1 Heavy-Duty Shelf Kit
SHLF320	1 Ultra-Level Glass Shelf
STER301	H <sub>2</sub> O <sub>2</sub> Sterilization Module <i>(Requires STER305 or STER306 Prep)</i>
STER302	Single-Use 35ml H <sub>2</sub> O <sub>2</sub> Canister <i>(Use with STER301)</i>
STER303	Set of 5 35ml H <sub>2</sub> O <sub>2</sub> Canisters <i>(Use with STER301)</i>

On-Site Installation*	
Part No.	Description
ALRM302	Remote Alarm Contacts Provide NO & NC Dry Contacts
DOOR310	Light Tight Door Cover / 25 ft <sup>3</sup> Units
DOOR312	Light Tight Door Cover / 33 ft <sup>3</sup> Units
DOOR318	Independent Sealed Inner Door Kit / 3 Sections / 25 ft <sup>3</sup> Units
DOOR319	Independent Sealed Inner Door Kit / 4 Sections / 33 ft <sup>3</sup> Units
LGHT602	UV Germicidal Lamp for Incoming Water Line <i>(Requires HUMD304)</i>
LTCH301	One-Handed Outer Door Latch
LTCH302	One-Handed Outer Door Latch with Integral Key Lock
OUTP302	Universal Analog Output (0-5V, 4-20mA) / Provides 2 Connections for Monitoring Temperature and Humidity or CO <sub>2</sub>
OUTP303	Universal Analog Output (0-5V, 4-20mA) / Provides 3 Connections for Monitoring Temperature, Humidity and CO <sub>2</sub> <i>(Requires HUMD304)</i>
STER306	H <sub>2</sub> O <sub>2</sub> Sterilization Prep / Required for Use of STER301 STER306 Sterilization Module

\* On-Site Installations are performed by a trained technician.



**CARON PRODUCTS & SERVICES, INC.**

PO Box 715 / Marietta OH 45750 / PHONE 740 373 6809 / 800 648 3042 / FAX 740 374 3760

caronproducts.com