

thermo scientific



Thermo Scientific Large Capacity Reach-In CO₂ Incubator

Uniquely designed for your growing needs

ThermoFisher
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Thermo Scientific Large Capacity Reach-In CO₂ Incubator

The Thermo Scientific Large Capacity Reach-In CO₂ incubator is built to accommodate your future growing needs – right from the start. Providing 29 cubic feet of capacity in a convenient upright configuration, it lets you efficiently:

- culture and store large volumes of patient or clinical samples
- perform short-term growth studies
- grow large-volume products requiring precise incubation

Our Large Capacity Reach-In CO₂ incubators also provide elevated relative humidity levels to prevent product desiccation in medium-term cultures, and maintain temperature uniformity even when cell rollers, shakers and other equipment are installed in the chamber.

Applications include:

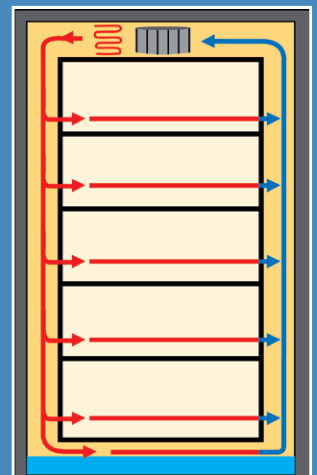
- Bio production
- Clinical sample storage
- Incorporation of culture devices and shakers
- High throughput cell culturing

Tight Temperature Uniformity for Superior Results – by Design

Temperature uniformity is absolutely critical for optimal culturing. Our Large Capacity Reach-In incubators deliver consistent temperature uniformity and recovery even with large product loads and low output, heat-generating equipment in the chamber.

Our unique directed horizontal laminar airflow system uses positive and negative pressures to direct air across the entire shelf surfaces, assuring a consistent flow of conditioned air for maximum temperature uniformity. Unlike competitive units, the air feed plenum cannot be accidentally blocked by the chamber contents, leading to temperature variations that can damage the chamber's contents.

Our unique directed airflow design minimizes the risk of sample damage when the chamber is fully loaded.



The large-capacity, high performance leader offering operator convenience

- Easy access to large-volume samples for real productivity
- Unmatched temperature uniformity for optimal culturing –even when the chamber is full
- Simple to configure and operate

Large Capacity Reach-In Model 3950 (3951)

- Spacious 29.0 cu. ft. interior volume
- Five adjustable shelves included
- All stainless steel interior for durability
- Access ports and interior outlet for added convenience
- Swivel, locking casters for easy mobility



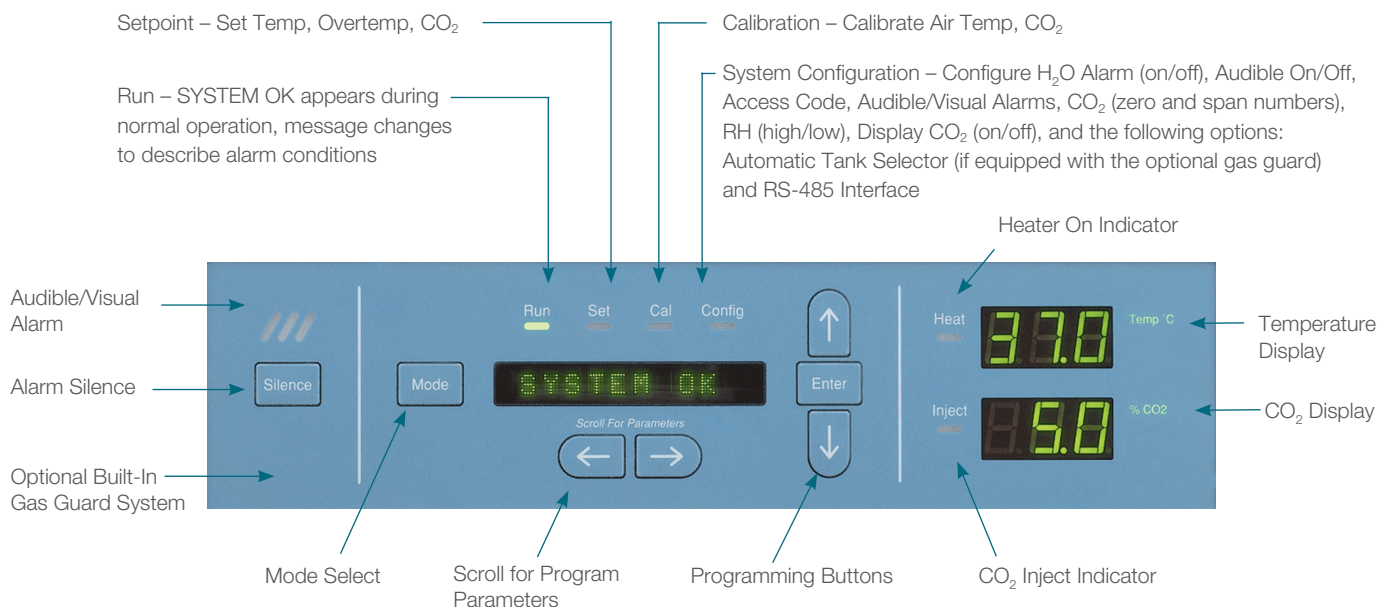
Quality Built, for Flexibility and Future Growth

Thermo Scientific Large Capacity Reach-In CO₂ incubators offer industry-leading features that typically are available only as options on competitive units:

- Standard remote alarm contacts – facilitates monitoring/ alarm system to track chamber conditions for meeting regulatory requirements
- Two through-wall access ports – easily accommodates probes, sensors and power cords without altering the cabinet
- Heavy-duty solid stainless steel shelves – easy-to-clean, corrosion-resistant, and adjustable on 2.0 in (5.1 cm) centers for convenience
- Interior and exterior accessory receptacles – provide power sources for in-chamber equipment including shakers and cell rollers, as well as external devices such as optical recorders
- Heated triple-panel glass door – minimizes condensation and permits a clear view of your cultures
- Swivel, locking casters – allow effortless mobility for easy unit installation and cleaning

Easy to Configure and Operate

Our Large Capacity Reach-In CO₂ incubators are exceptionally simple to operate, thanks to the built-in Enviro-Scan™ microprocessor message center. You have the freedom to control all critical parameters without a lot of complex programming.



Specifications and Ordering Information

Temperature	Control	±0.1°C
	Range	5°C above ambient to 60°C (140°F)
	Uniformity	±0.3°C @ 37°C (98.6°F)
	Tracking Alarm	User-programmable low
Overtemperature	Sensor	Precision thermistor
	Setability	0.1°C
	Function	User-programmable, action (shuts off heat), and indicator
	Controller	Independent analog electronic
Temperature Safety	Sensor	Independent thermostat
	Controller	Independent analog electronic
CO ₂	Control	Better than ±0.1%
	Range	0-20%
	Inlet Pressure	15 PSIG (1.0 bar)
	Sensor	T/C (thermal conductivity)
	Readability & Setability	0.1%
	Tracking Alarm	User-programmable high/low
Humidity	Input Water Quality	50K to 1Meg Ohm resistance
	Selectable Ranges	Off, Medium >80%, High >90%
	Humidity Reservoir	4 gallons (15.1 liters)
	Water Level Alarm	User-programmable on/off
Fittings	Access Port	2.4" (6.1cm) I.D., one on each side, with stopper
	CO ₂ Inlet	1/4" hose (barbed)
	Water Inlet	1/4" MPT
	Condensate Drain	3/8" FPT
	Overflow Drain	3/8" MPT
Unit Heat Load	115V/230V	510 BTUH (150 Watts), 129 kcal per hour
Shelves	Dimensions	30.6" x 25.8" (77.7cm x 65.5cm)
	Construction	Type 304, 2B finish, solid stainless steel
	Surface Area	5.4 sq. ft. (0.5 sq. m)
	Max. per Chamber	145.8 sq. ft. (13.5 sq. m)
	Standard, Maximum	5, 27
Construction	Interior Volume	29.0 cu. ft. (821.2 liters)
	Interior	Type 304, 2B finish, stainless steel
	Exterior	Cold-rolled steel, powder coated
	Insulation	2.0" (5.1cm) fiberglass
	Exterior Door	Heated, triple pane, tempered glass
	Outer Door Gasket	Molded vinyl
Electrical	3950	115V, 50/60 Hz, 10.0 FLA (Operating range 90-125V includes voltage fluctuations)
	3951	230V, 50/60 Hz, 6.0 FLA (Operating range 180-250V includes voltage fluctuations)
	Circuit Breaker/Power Switch	3950: 15 Amps/2 Pole, 3951: 8 Amps/2 Pole
	Exterior Convenience Receptacle	75 Watts maximum (matches cabinet voltage)
	Interior Convenience Receptacle	230 Watts maximum (matches cabinet voltage)
	Plug	115V: NEMA 5-15P Plug 230V: CEE 7/7 Plug
	Alarm Contacts	Power interruption, deviation of temp and CO ₂ , customer connections through jack on back of unit
	Data Outputs (opt.)	RS-485, 0-1V, 0-5V, 4-20 milliamp (select one)
Dimensions	Exterior	38.0"W x 80.0"H x 33.0"F-B (96.5cm x 203.2cm x 83.8cm)
	Interior	31.0"W x 60.0"H x 27.0"F-B (78.7cm x 152.4cm x 68.6cm)
Weight	Net	500 lbs. (226.8 kg)
	Shipping (Motor)	660 lbs. (299.4 kg)

Specifications are based on nominal voltages of 115V or 230V in ambients of 22°C to 25°C (71.6F to 77F).

Both units are UL Listed to United States and Canadian requirements and bear the CE Mark.



Options, Accessories and Warranty

Cell Roll System


The optional cell roll system allows extensive production of monolayer cell cultures in standard roller culture vessels. Culture yields are enhanced by the system's continuous gentle rotation and the uniform temperature control of the incubator.

Our Large Capacity Reach-In CO₂ incubators accommodate a cell roller up to 7 decks high with 5 positions per deck, for a maximum total of 35 bottle positions.



Description	Stock No.
Three Tier Cell Roller Base (15 positions), 120V, 50/60 Hz, 29.8"W x 27.8"H x 24.4"F-B (75.7cm x 70.6cm x 62.0cm)	4862
Same as Model 4862 but 230V, 50/60 Hz	4868
Add-On Tier (5 positions), 29.8"W x 7.1"H x 24.4"F-B (75.7cm x 18.0cm x 62.0cm), customer installed	186001
Reinforced Floor with Removable Ramp, ramp extends 23.0" (58.4cm), factory installed	190777
Same as No. 190777 but customer installed	500182
Rotation Alarm System, includes annunciator jack, customer installed	228082
Battery Back-Up, provides 24 hours of power if a power failure occurs, customer installed	228083
110mm x 285mm Glass Bottles (4 per case)	475560

Accessories

Description	Stock No.
<p>Carboy Kit</p>  <p>Carboy Kit makes it easy to semi-automatically fill the reach-in. The carboy, which can be mounted on either side of the reach-in, can be carried to the water source or filled while mounted.</p> <p>Kit includes an autoclavable 2 gallon (7.8 liters) carboy, valve, adapter, hose, and mounting bracket.</p>	191596
Shelves and Reinforced Shelf Systems	
Solid Stainless Steel Shelf with Channels	224139
Perforated Stainless Steel Shelf with Channels	224155
Solid Stainless Steel Reinforced Shelf Systems	
Adjustable Reinforced Shelf with Channels, increases shelf load to 150 lbs. (68.0 kg) maximum with shelf fully inserted and stationary (maximum 2 per unit, not for shakers), adjustable on 2.0" (5.1cm) centers, can be removed for cleaning	224161
Two Fixed Reinforced Shelves, provide extra support for lab equipment (e.g., 2 Thermo Scientific Forma Orbital Shakers, 250 RPM maximum each), factory installed 1.0" and 30.0" (2.5cm and 76.2cm) above the floor, rubber isolators instead of casters are installed on the reach-in for added stability	1900005

Description	Stock No.
Data Outputs (select one), factory installed	
RS-485 interface	190523
4-20 milliamp	190512
0-5V analog	190543
0-1V analog	190544
Additional Accessories	
Lexan® Inner Door Kit, factory installed	190239
Door Lock, factory installed	190514
Door Glass Cover, factory installed 6", 7 Day Circular Chart Recorders	190591
Single Pen, 115V	201155
Single Pen, 220V	201156
Dual Pen, 115V, 1 probe, temp/RH	201159
Dual Pen, 220V, 1 probe, temp/RH	201160
Additional Thru-Wall Access Port, 2.4" (6.1cm) I.D., factory installed	190164
Built-In CO ₂ Gas Guard, factory installed	1900000
MS Windows®-compatible document disk for process customization and detailed checklists to qualify unit setup and operation	6003950

Warranty

We confidently back our Large Capacity Reach-In CO₂ Incubator with a full one year parts and labor warranty.

Find out more at thermofisher.com/co2

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