

Large Capacity Reach-In

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

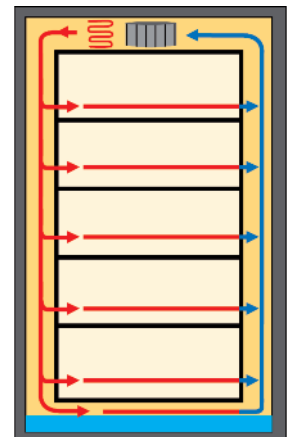
Incorporation of culture devices and shakers

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**

Easy to Configure and Operate

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

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

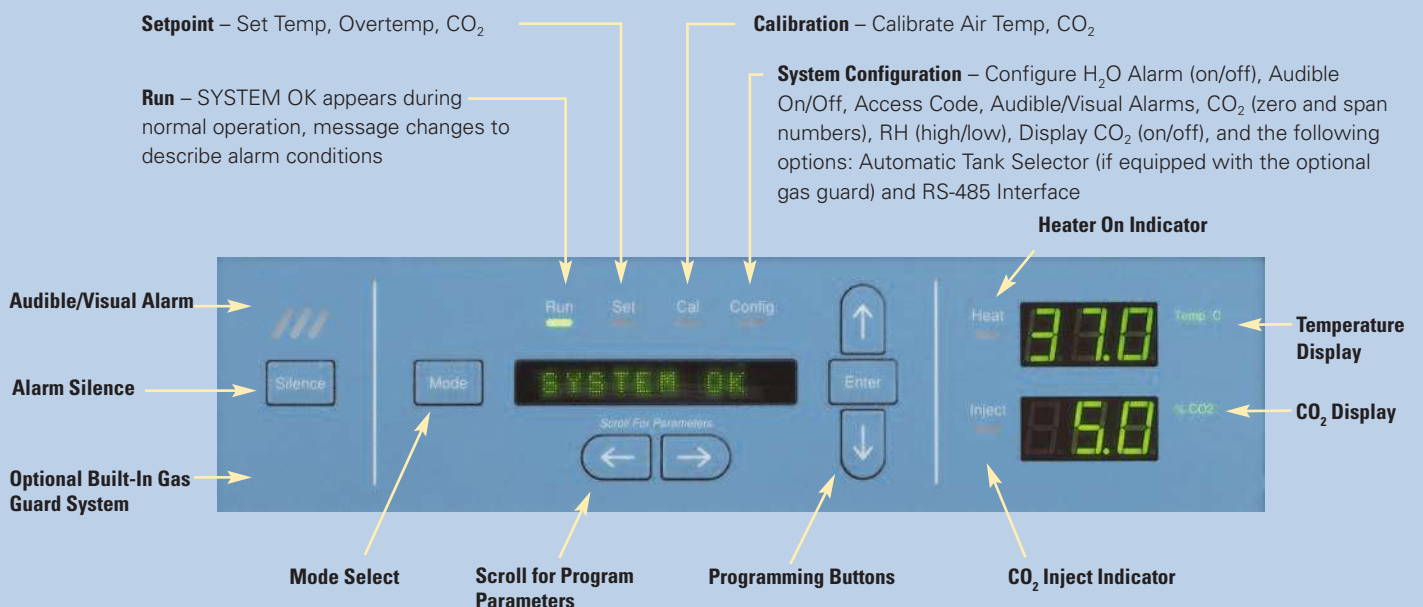
Two through-wall access ports – easily accommodates probes, sensors and power cords without altering the cabinet

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



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.



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.



Stock No.	Description
4862	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)
4868	Same as Model 4862 but 230V, 50/60 Hz
190049	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
190777	Reinforced Floor with Removable Ramp, ramp extends 23.0" (58.4cm), factory installed
500182	Same as No. 190777 but customer installed
228077	Rotation Alarm System, includes annunciator jack, factory installed
228078	Battery Back-Up, provides 24 hours of power if a power failure occurs, factory installed
475560	110mm x 285mm Glass Bottles (4 per case)

Accessories

Accessories are customer installed unless indicated otherwise.

Carboy Kit



Carboy Kit (No. 191596) 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.

Kit includes an autoclavable 2 gallon (7.8 liters) carboy, valve, adapter, hose, and mounting bracket.

Shelves and Reinforced Shelf Systems

Stock No.	Description
224139	Solid Stainless Steel Shelf with Channels
224155	Perforated Stainless Steel Shelf with Channels

Solid Stainless Steel Reinforced Shelf Systems

224161	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" (5.1 cm) centers, can be removed for cleaning
1900005	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

Data Outputs (select one), factory installed

Stock No.	Description
190523	RS-485 interface
190512	4-20 milliamp
190543	0-5V analog
190544	0-1V analog

Additional Accessories

190239	Lexan® Inner Door Kit, factory installed
190514	Door Lock, factory installed
190591	Door Glass Cover, factory installed 6", 7 Day Circular Chart Recorders
201155	Single Pen, 115V
201156	Single Pen, 220V
201159	Dual Pen, 115V, 1 probe, temp/RH
201160	Dual Pen, 220V, 1 probe, temp/RH
190164	Additional Thru-Wall Access Port, 2.4" (6.1cm) I.D., factory installed
1900000	Built-In CO ₂ Gas Guard, factory installed
6003950	IQ/OQ, MS Windows®-compatible document disk for process customization and detailed checklists to qualify unit setup and operation

Warranty

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

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North America: USA/Canada +1 866 984 3766 (866-9-THERMO)

Europe: Austria +43 1 801 40 0, Belgium +32 2 482 30 30, France +33 2 2803 2180, Germany national toll free 08001-536 376, Germany international +49 6184 90 6940, Italy +39 02 02 95059 434-254-375, Netherlands +31 76 571 4440, Nordic/Baltic countries +358 9 329 100, Russia/CIS +7 (812) 703 42 15, Spain/Portugal +34 93 223 09 18, Switzerland +41 44 454 12 12, UK/Ireland +44 870 609 9203

Asia: China +86 21 6865 4588 or +86 10 8419 3588, India toll free 1800 22 8374, India +91 22 6716 2200, Japan +81 45 453 9220, Other Asian countries +852 2885 4613 **Countries not listed:** +49 6184 90 6940 or +33 2 2803 2180

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