Cell culture

Reliable performance and excellent value

Forma Steri-Cycle
CO_2 Incubators

thermo scientific

Performance and value

For everyday culturing

Thermo Scientific™ Forma™ Steri-Cycle CO_2 Incubators offer ISO Class 5 HEPA filtration and 140° C on-demand high temperature sterilization.

Large capacity and easy maintenance

Large 184 L (6.5 cu. ft.) capacity is readily stackable to maximize capacity. Polished stainless steel chamber is designed with coved corners to simplify cleaning.

Proven direct heat technology

Culture with confidence from the combination of high performance heating elements and advanced insulation surrounding the chamber. Samples benefit from excellent temperature uniformity and recovery performance.

HEPA filter airflow system

HEPA filter airflow constantly manages air quality within the chamber to help protect cultures against airborne contaminants. It continuously filters the entire chamber volume every 60 seconds and provides ISO Class 5 (Class 100) air quality conditions within 5 minutes of door opening.

On-demand sterilization cycle

On-demand 140°C high temperature sterilization cycle (approximate cycle length 14 hours), reliably reduces contamination from internal surfaces, simplifying cleaning procedures. The incubator returns to your regular operating conditions at the end of the cycle.

Forma Steri-Cycle Incubators are readily stackable to preserve floor space (hardware included).

Sturdy stainless steel shelves and supports can be removed without tools for easy cleaning or adjustment.
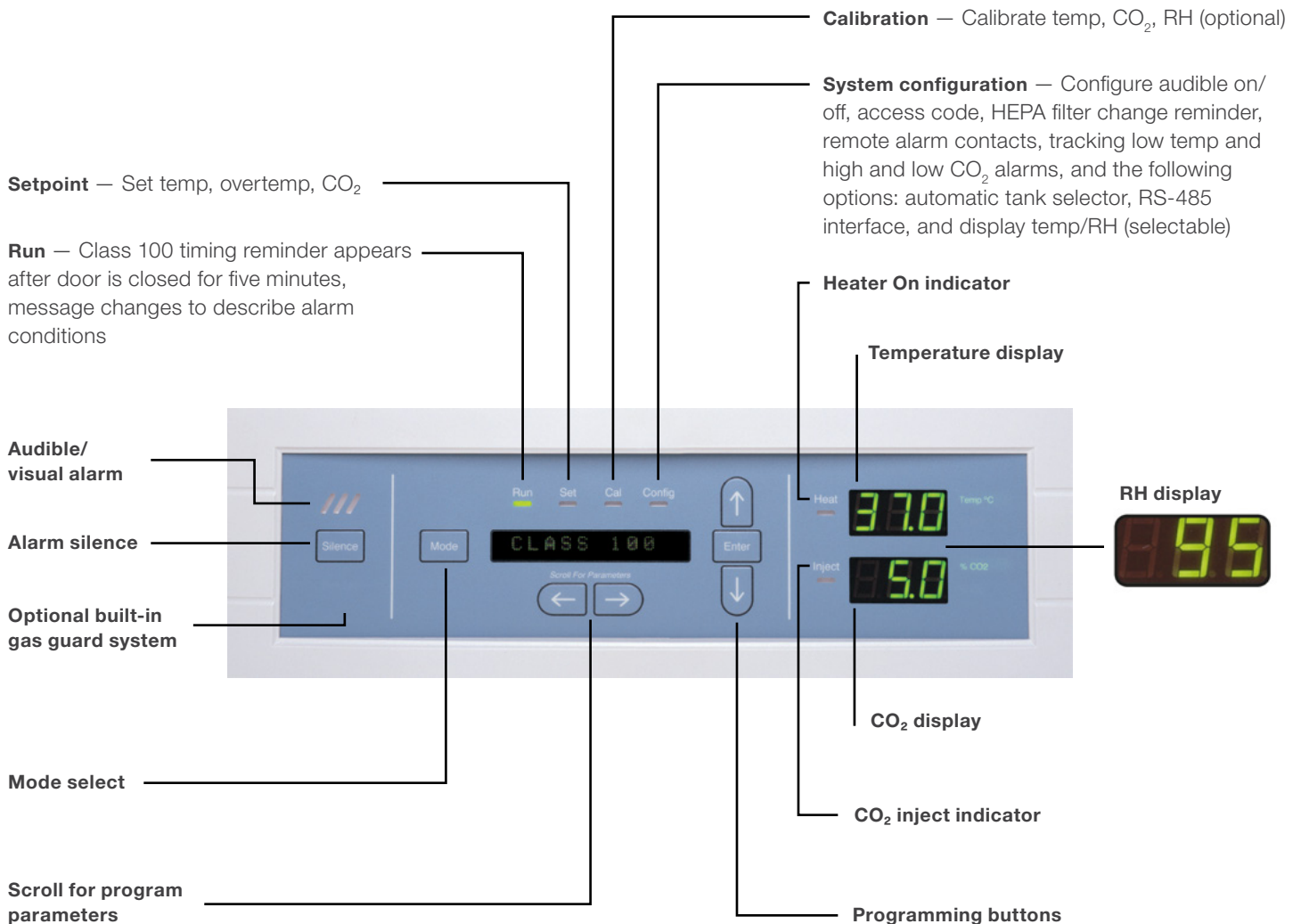
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Easy-to-use control panel
Touchbutton simplicity

Easy configuration and use

Slide-out front drawer helps provide convenient access to electronic components for maintenance.

- Standard remote alarm contacts (NO, NC, COM) and optional RS-485, and 4-20 milliamp data outputs permit connection to an alarm/monitoring system to meet internal and regulatory requirements.

- Flexible, intuitive controls enabling ease of use.

Calibration — Calibrate temp, CO_2, RH (optional)

System configuration — Configure audible on/off, access code, HEPA filter change reminder, remote alarm contacts, tracking low temp and high and low CO_2 alarms, and the following options: automatic tank selector, RS-485 interface, and display temp/RH (selectable)

Setpoint — Set temp, overtemp, CO_2

Run — Class 100 timing reminder appears after door is closed for five minutes, message changes to describe alarm conditions

Heater On indicator

Temperature display

Audible/ visual alarm

Alarm silence

Optional built-in gas guard system

Mode select

Scroll for program parameters

RH display

CO₂ display

CO₂ inject indicator

Programming buttons

Specifications

Details			
Temperature			
Control	±0.1°C	Uniformity	±0.3°C @ 37°C (98.6F)
Range	5°C above ambient to 50°C (122F)	Tracking alarm	User-programmable low
Overtemperature			
Sensor	Precision thermistor	Setability	0.1°C
Temperature Safety			
Sensor	Independent thermostat	Controller	Independent analog electronic
CO_2 (choice of T/C or IR sensor)			
Control	Better than ±0.1%	Range	0-20%
Inlet pressure	15 PSIG (1.0 bar)	Readability and setability	0.1%
Tracking alarm	User-programmable high/low		
Humidity (opt. display available)			
RH	Ambient to 95% @ 37°C (98.6F)	Humidity pan	3.2 qt. (3.0 liters) standard
Perforated, stainless steel shelves			
Dimensions	18.5"x 18.5" (47.0 cm x 47.0 cm)	Surface area, max. per chamber	2.4 sq. ft. (0.22 sq. m) per shelf, 38.4 sq. ft. (3.6 sq. m) max.
No. standard	3	No. maximum	16
Shelf load limit	35 lbs. (16 kg) sliding in and out, 50 lbs. (23 kg) stationary		
Construction			
Interior volume	6.5 cu. ft. (184.1 liters)	Interior	Type 304, shiny, stainless steel
Exterior	18 gauge, cold-rolled steel		
Outer door gasket	Four-sided, molded, magnetic vinyl	Inner door gasket	Feather-edged, silicone
Electrical			
Models 370/380	115V, 50/60 Hz, 9.6 FLA (operating range 90-125V) NEMA 5-15P plug		
Models 371/381	230V, 50/60 Hz, 4.4 FLA (operating range 180-250V) CEE 7/7 plug		
Circuit breaker, power switch	12 Amps, 2 Pole		
Convenience receptacle	75 Watts max. (matches cabinet voltage)		
Alarm contacts	Deviation of temp, CO_2, RH; power failure; customer connections through jack on back of unit		
Access port, CO_2 inlet	1.3" (3.3cm) with removable silicone plug, 1/4" barbed hose		
Unit heat load	341 BTUH (100 Watts), 85 kcal per hour		
Dimensions			
Exterior	26.1"W x 39.5"H x 25"D	Interior	21.3"W x 26.8"H x 20.0"D
	(66.3 cm x 100.3 cm x 63.5 cm)		(54.1 cm x 68.1 cm x 50.8 cm)
Weight			
Net	260 lbs. (118 kg)	Shipping (motor)	315 lbs. (143 kg)

Order information

Product	Chamber	CO$_2$	Voltage	Catalog No.
Forma Steri-Cycle CO$_2$ Incubator	Stainless Steel	T/C	115V 50/60 Hz	370
	Stainless Steel	IR	115V 50/60 Hz	380
	Stainless Steel	T/C	230V 50/60 Hz	371
	Stainless Steel	IR	230V 50/60 Hz	381

All units are UL listed to United States and Canadian requirements and bear the CE Mark.

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Remote monitoring

4-20mA signal output is included for interfacing with external data collection systems such as the Thermo Scientific™ Smart-Vue™ Pro Remote Monitoring System which provides external sensors and CFR-21 compliant software packages suitable for GMP environments. The Smart-Vue Pro system offers a customizable and scalable architecture that is compatible across multiple brands and equipment types, offering self-installation and long range capabilities.

Learn more at **thermofisher.com/smart-vuepro**

Accessories and options

Description		Cat. No
RH display		
Humidity (RH) display[1], readable in 1% increments, includes low RH programmable alarm (alerts you of the need to add water to humidity pan), factory installed		190643
Chamber and shelf components		
Independent inner glass door kit (eight doors with latches), mounts inside heated inner glass door, is removable and can be autoclaved **(Fig. 01)**		190650
Stainless steel components	Stainless steel shelf kit	190884
	Stainless steel humidity pan	237016
	Stainless steel ductwork; includes side ducts and shelf channels	190670
Filtration[2] and decontamination kits		
HEPA filter airflow system[1]; factory installed		190858
Replacement HEPA filter **(Fig. 02)**		760175
HEPA value pack (four filters)		760209
HEPA filter replacement kit; includes HEPA; in-line, and access port filters		1900067
HEPA[2] VOC filter replacement kit; includes HEPA[2] in-line and access port filters		1900094
HEPA[2] VOC filtration system kit; converts HEPA filter airflow system to HEPA[2] filtration system; includes HEPA[2] filter and two plugs		760199
Decontamination kit for HEPA filtered units		190868
Decontamination kit for standard units		190869
CO$_2$ accessories		
CO$_2$ Fyrite® analyzer kit, 0-20%		155021
Built-in CO$_2$ gas guard[1] to monitor CO$_2$ supply, automatically switches from one cylinder to the other when the supply is exhausted, factory installed		190640
Two-stage CO$_2$ gas regulator with barbed connection and shut-off valve **(Fig. 03)**		965010
Wall clamp for a CO$_2$ bottle; includes cylinder holder with web strap		950316
Roller base		
Roller base (heavy-duty, powder coated steel base) with dual-wheel, swivel locking casters and leveling feet; supports one or two (stacked) incubators; raises unit 3.0" (7.6cm) off the floor **(Fig. 04)**		1900063

[1] Factory installed

[2] HEPA and HEPA[2] filters are rated a minimum 99.97% efficient at 0.3 microns. Filters are easily replaced without tools.

Accessories and options

Description	Cat. No.
Thermo Scientific™ Sensaphone™ Telephone Dialing Systems	
Interface with standard touch-tone phone system for up to four input channels	400047
Interface with standard touch-tone phone system for up to eight input channels	400134
Data outputs[1] (select one)	
RS-485 interface	190523
4-20 milliamp	190512
Miscellaneous accessories	
Sealed modular incubator chamber, purge with any gas mixture to create a "mini-incubator" inside your incubator for unusual gas and temperature controlled experiments, dimensions: 12.0" (30.5cm) circular chamber, 4.7" (11.9 cm) high **(Fig. 05)**	190043

[1] Factory installed

Fig. 01 | Inner glass door kit

Fig. 02 | HEPA air-filter (VOC)

Fig. 03 | Two-stage CO_2 gas regulator

Fig. 04 | Roller base and stand

Fig. 05 | Sealed modular incubator chamber