intuitive
intelligent
interactive

New! Thermo Scientific Heracell 150i and 240i CO_2 Incubators

Part of Thermo Fisher Scientific

Thermo SCIENTIFIC

Thermo Scientific Heracell 150i and 240i

>> *Surround your valuable cultures with an environment you can trust.*

The Heracell® i is available in two convenient sizes: 150L (5.3 cu ft) and 240L (8.5 cu ft)

You can choose between stainless steel and 100% pure copper interior.

2 year warranty

Thermo Scientific Heracell i CO_2 incubators provide the ideal *in vitro* environment: clean, reliable and easy to use, protecting your valuable samples while optimizing cell growth.

NEW: iCAN™ (Interactive Control Access Navigator) Touchscreen

Exclusive iCAN simplifies operation and enables rapid access of important information for each critical parameter in the incubator. iCAN provides trend analysis for convenient evaluation of your unit's performance.

With our Heracell i , your valuable samples will be:

- **Secured:** Our innovative ContraCon moist heat decontamination technology is proven for simple and worry-free cleaning and operation.
- **Protected:** Proven contamination control is offered with our unique 100% pure solid copper interiors – antimicrobial protection on contact, naturally.
- **Thriving:** Designed to provide optimal growth conditions, delivering superior parameter recovery rates that enhance cell growth.

Intelligent design, promoting superior cell growth

>> Our Heracell i offers a range of features that maximize safe, dependable cell growth

Our Heracell incubators are renown for their accuracy, uniformity and quick recovery rates – attributes that contribute to optimal culturing conditions.

- High quality sensors are mounted directly within the chamber for precise environmental measurements.
- Highly efficient fan-assisted distribution of critical temperature, CO_2 and humidity insures uniformity for all samples – no matter their location within the incubator.

Gas sensors

For precise and dependable automatic CO_2 control, you can choose between thermal conductivity (TC) or our patented Dual Beam infrared (IR) sensor technology based upon your preferences and experimental need.

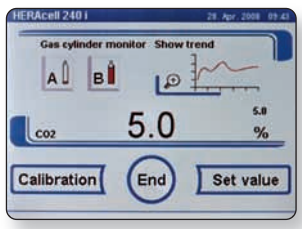
TC sensors provide accurate CO_2 control in applications where temperature and humidity values are consistent. IR sensors are recommended where temperature and humidity values fluctuate frequently. Both sensors are thermostable, do not require removal for cleaning, and may remain in place during our exclusive ContraCon decontamination routine.

Optional O_2 control

For those seeking to establish hypoxic or hyperoxic culturing conditions, the Heracell i offers two optional O_2 control ranges. Choose between 1 to 21% O_2, or a wide-range setting from 5 to 90% O_2. The advanced maintanence free sensor technology is calibrated automatically (auto-cal) and can remain in place during our high temperature ContraCon decontamination.

Integrated gas guard

An optional, integrated gas tank switcher for CO_2 and O_2/N_2 allows the connection of two gas supplies. When the first supply is empty, the controller switches automatically to the second supply.

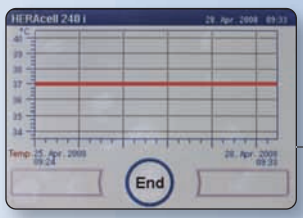


A visual alert will appear on the touchscreen display when the gas supply is low and needs changing.

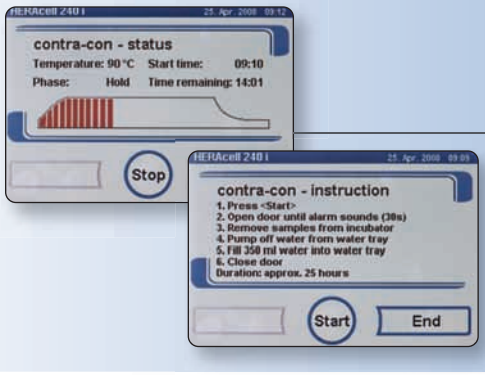
Patented humidity system for faster recovery rates

Our Heracell i incorporates a unique integral humidity water reservoir that provides a high relative humidity (rH) and allows rapid recovery of optimal humidity level after door openings. A water level sensor indicates when a refill is needed – via a convenient prompt on the touchscreen display – to avoid the desiccation of important cultures. This pan-less system reduces handling and provides recovery rates up to five times faster than ordinary tray humidified incubators, due to:

- A surface area larger than ordinary humidity water pans (provided by a water reservoir with inclined and rounded corners)
- A patented floor heating system that operates after door opening
- Direct heat-transfer from heated floor to humidity reservoir



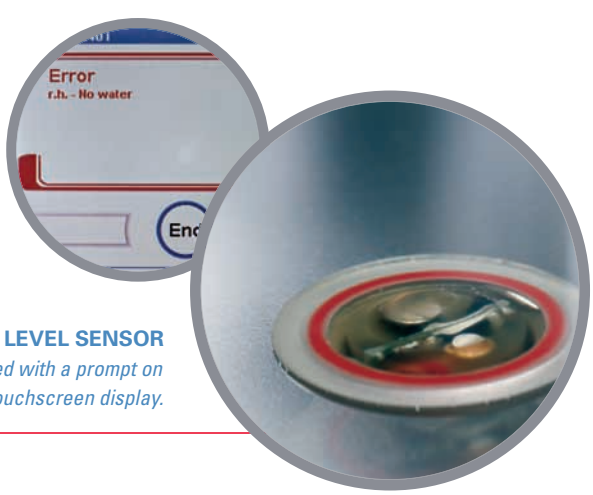
Review performance trends etc...to better manage your culturing process.



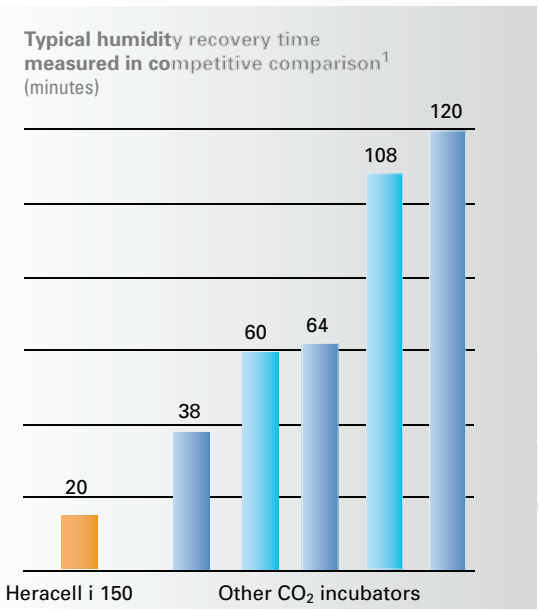
View instructions and monitor progress of ContraCon decontamination routine, directly on the iCAN display.

>> *Constant humidity for cell protection and optimal growth*

Short humidity recovery times are critical to cell growth – especially when the incubator door is opened frequently or when low volumes of media are used.

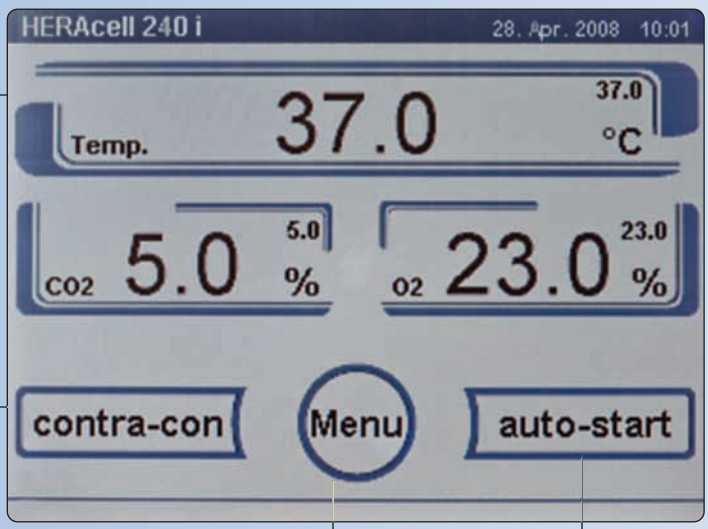


WATER LEVEL SENSOR
Supported with a prompt on the touchscreen display.



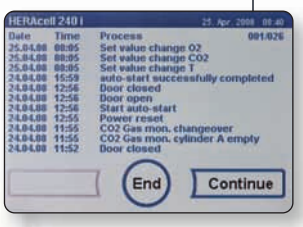
[1] *Based upon a 30 second door opening.*

Thermo Scientific iCAN touchscreen – places total control and complete information at your fingertips



iCAN touchscreen improves your visibility and control of important incubator information helping you to achieve your culturing goals

- Door mounted for easy accessibility and viewing
- Easy to use: convenient on-screen user prompts
- Select from a variety of languages
- Visibility to changes in culture environment: on screen logs and usage recording
- Monitor alarm alerts visually on the display



Keeps a running log of all user interactions with the incubator, which can be accessed as needed.

Automatically calibrating all electronic measurement and control functions for you.

> *interactive*
Complete information at your fingertips.

> *intuitive*
Easy to use with simple icons and menu prompts to guide you, reducing the potential for costly errors.

> *intelligent*
Graph performance trends over established timeframes and run event history logs– protected with user passcodes and control lockouts.

Worry free 24/7 protection against contamination

>> *Thermo Scientific Heracell i incubators offer unmatched contamination prevention*

ContraCon – 90°C moist heat decontamination

Exclusive to all Heracell i incubators is the high-temperature, ContraCon 90°C moist heat decontamination process. It's an automatic, on-demand routine that is proven effective in eliminating bacteria, molds, fungal spores and mycoplasma. ContraCon simplifies cleaning and eliminates variability in disinfection. Also, the cleaning process does not require the disassembly and removal of sensors, hardware or other components for separate autoclaving.

ContraCon has been independently proven to be effective against an assortment of commonly encountered contaminants, including:

- Bacillus subtilis
- Bacillus stearothermophilus (USP 23)
- Enterococcus faecalis
- Escherichia coli
- Pseudomonas aeruginosa
- Staphylococcus epidermidis
- Corynebacterium xerosis
- Aspergillus niger

Unique gas-tight segmented door option

For additional contamination protection, all Heracell incubators now offer an optional three door (Heracell 150i) or six door (Heracell 240i) inner glass door assembly, which allows access to defined sections of the incubator without disturbing the entire inner atmosphere. This minimizes recovery times, gas usage and the risk of contamination.

Less means more when it comes to cleaning and maintenance

Heracell i incubators have a completely smooth inner casing with rounded corners, reducing unnecessary internal surfaces where contamnation can hide.

- Faster, more effective cleaning and disinfection
- Surfaces that can be easily contaminated, such as ceiling panels, air ducts and screws are avoided
- High quality electropolished stainless steel finish

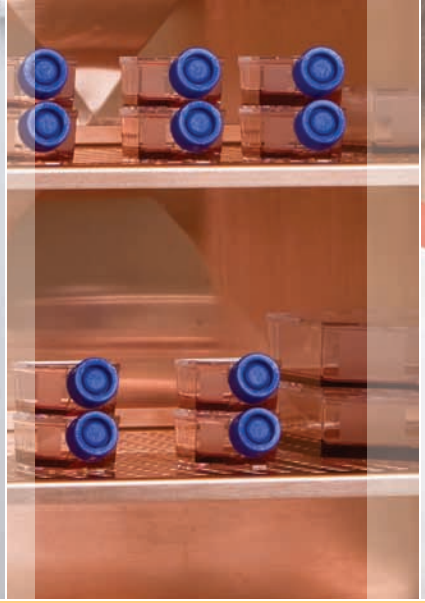
100% pure copper antimicrobial interior available

The Heracell i offers antimicrobial copper interiors that provide maximum protection against contaminants potentially introduced through door openings or sample handling. Ideal for shared-use environments, copper delivers non-stop bactericidal and fungicidal properties on contact.

- Chamber, fan and shelving system are constructed of 100% pure antimicrobial copper
- No ineffective copper alloys or plating finishes

COMPLETELY VISIBLE AND ACCESSIBLE THROUGHOUT
Minimal assembly and 50% less contamination prone surfaces.

Minimize cleaning time and maximize contamination protection.

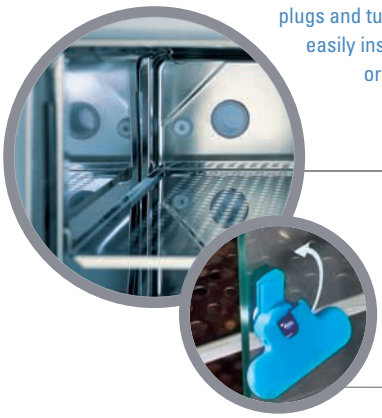


SECURED:
Our ContraCon moist heat decontamination cycle is proven to eliminate contaminants, for simple and reliable cleaning.

PROTECTED:
100% pure copper interior eliminates microbial growth on contact.

THRIVING:
Patented rapid-response humidity system provides superior recovery time upon door openings.

ACCESS PORT
Heracell i incubators are supplied with a 42 mm (1.6 in) access port as standard. This allows cables, plugs and tubing to be easily inserted into or out of the chamber.



GLASS DOORS HAVE A RELIABLE DOOR LATCH
preventing the inner door from accidentally not being closed and compromising culture conditions.

HERATRAYS ENABLE CONVENIENT TRANSPORT
of samples; fit readily on shelves.

FLEXIBLE SET UP
Doors can be set up for left- or right-handed use to optimize the work space in your laboratory. All door gaskets can be removed by hand and have smooth surfaces for easy cleaning.

OPTIONS AND ACCESSORIES

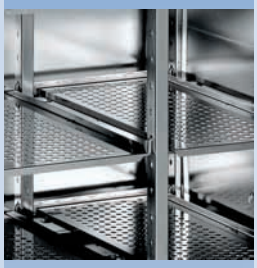
Thermo Scientific Heratrays
Heratrays are shelves for the convenient transportation of your cultures and can be used to divide incubator shelves up to four sections. They work well with a three or six inner glass door configuration. Heratrays are available in stainless steel or copper.

Support frames
The carts provide protection against floor contamination. Choose between a height of 200 mm (8 in) or 780 mm (31 in). The support frames can also be castor-mounted for easy maneuverability.

Unique new roller bottle system
The Heracell 240i can be equipped with up to four rows of bottle-turning devices for roller bottles between 58 to 186 mm in diameter, each with independent speed control.

Thermo Scientific IR-CO_2 gas tester
The handheld IR-CO_2 gas tester is equipped with a maintenance-free infrared cell to monitor CO_2 concentration inside the chamber. Data download and calibration functions are possible by using optional PM-COM software. The IR-CO_2 gas tester performs to GMP/GLP standards.

Gas-tight inner glass doors
All Heracell i incubators now offer an optional three door (Heracell 150i) or six door (Heracell 240i) inner glass door, which allow access to defined sections of the incubator without disturbing the inner atmosphere. This minimizes recovery times and the risk of contamination.



Half-width shelves
These can be used to subdivide the Heracell 240i's interior to reduce the possibility of mixing up samples, especially when there are multiple users.

Thermo Scientific AquaTec™ water preservation cell
Simply place the 3-inch cell into the water reservoir of your CO_2 incubator. AquaTec prevents infection from most common contaminants for up to six months without harsh germicidal chemcials.

Each unit is lightweight and readily stackable without hardware or tools.

Type	Unit	Heracell 150i	Heracell 240i
Dimensions			
Internal Volume:	l	150 (5.3 cu.ft.)	240 (8.4 cu.ft.)
External (w x h x d)	mm	637 x 867 x 782	780 x 934 x 834
	inch	25.1 x 34.1 x 30.8	30.7 x 36.8 x 32.8
Internal (w x h x d)	mm	470 x 607 x 530	607 x 670 x 583
	inch	18.5 x 23.9 x 20.9	23.9 x 26.4 x 23.0
Weight (excl. accessories)	kg	70	81
	lbs.	154	178
Shelves			
Shelves full width (w x d)	mm	423 x 465	560 x 500
	inch	16.7 x 18.3	22.0 x 19.7
No. of shelves standard/maximum	no.	3/10	3/12
Max. load per shelf/total load	kg	10/30	10/30
	lbs.	22/66	22/66
Shelves half width (w x d)	mm	–	260 x 500
	inch	–	10.2 x 19.7
No. of shelves standard/maximum	no.	–	6/16
Max. load per shelf/total load	kg	–	5/30
	lbs.	–	11/66
Material			
Interior chamber		stainless steel/solid copper	stainless steel/solid copper
Shelves, fan impeller		stainless steel/solid copper	stainless steel/solid copper
ContraCon decontamination routine		verified by accredited laboratories	verified by accredited laboratories
Decontamination phase, on all surfaces	°C/hrs	90/9	90/9
Period (ambient temperature 20°C)	hrs	25	25
Efficiency spectrum		bacteria, fungi, spores (USP 23), mycoplasma	bacteria, fungi, spores (USP 23), mycoplasma
Temperature		air jacket temperature control	air jacket temperature control
Temperature control range	°C	T_A[1] +3 … 55	T_A[1] +3 … 55
Temperature deviation, time[2]/spatial[2]	K	± 0.1/± 0.5	± 0.1/± 0.5
Ambient temperature range	°C	+18 … 33	+18 … 33
Humidity			
Constant humidity[3]	%rH	95 ± 3	95 ± 3
Fill amount/water quality	l	max. 3 distilled/autoclaved and demineralized	max. 4.5 distilled/autoclaved and demineralized
CO_2			
Measure and control range	Vol – %	0 … 20	0 … 20
Control accuracy	Vol – %	± 0.1	± 0.1
Inlet pressure	bar	0.8 … max. 1	0.8 … max. 1
Gas purity	%	99.5, medical quality min.	99.5, medical quality min.
O_2			
Measure and control range	Vol – %	1..21 / 5..90	1..21 / 5..90
Control accuracy	Vol – %	± 0.2	± 0.2
Inlet pressure	bar	0.8… max. 1	0.8… max. 1
Gas purity	%	99.5; medical quality min.	99.5; medical quality min.
Electrical Data			
Rated voltage	V	1/N/PE AC; 230 (120)	1/N/PE AC; 230 (120)
Rated output	kW	0.58 (0.62)	0.64 (0.65)
Rated frequency	Hz	50/60	50/60
Heat emission to environment			
at 37°C	kWh/h	0.06	0.07
with ContraCon	kWh/h	0.11	0.25

[1] Ambient temperature

[2] Determined according to DIN 12880 for the standard configuration. For details refer to calibration instructions.

[3] The relative humidity inside the incubator may increase during incubation of open culture vessels

ORDERING INFORMATION

Standard equipment[1]	Description	Cat. No. Heracell 150i	Cat. No. Heracell 240i
Heracell	stainless steel inner chamber, 230 V, 50/60 Hz	51026280	51026333
Heracell	stainless steel inner chamber, 120 V, 50/60 Hz	51026282	51026331
Heracell	solid copper inner chamber, 230 V, 50/60 Hz	51026281	51026334
Heracell	solid copper inner chamber, 120 V, 50/60 Hz	51026283	51026332
Heracell	dual incubator units, stainless steel inner chamber, 230 V, 50/60 Hz, complete with support frame	50116047	–
Heracell	dual incubator units, stainless steel inner chamber, 120 V, 50/60 Hz, complete with support frame	50116048	–
Heracell	dual incubator units, solid copper inner chamber, 230 V, 50/60 Hz, complete with support frame	50116049	–
Heracell	dual incubator units, solid copper inner chamber, 120 V, 50/60 Hz, complete with support frame	50116050	–
Options (factory installed - order with standard equipment)			
Door hinged	left	51900293	51900293
IR-CO_2 Sensor		51900733	51900733
O_2 control	Vol-% 1..21 incl. three gas tight inner doors	51900739	–
O_2 control	Vol-% 5..90 incl. three gas tight inner doors	51900740	–
O_2 control	Vol-% 1..21 incl. six gas tight inner doors and half-width shelves	–	51900702
O_2 control	Vol-% 5..90 incl. six gas tight inner doors and half-width shelves	–	51900703
3 gas tight inner doors[2]	three inner doors for segmented access	51900734	–
6 gas tight inner doors[2]	six inner doors for segmented access	–	51900387
Half-width shelves, stainless steel	instead of full-width shelves	–	51900358
Half-width shelves, solid copper	instead of full-width shelves	–	51900357
Full-width shelves, stainless steel	reinforced for increased mechanical demands	–	51900753
Full-width shelves, solid copper	reinforced for increased mechanical demands	–	51900754
Gas guard CO_2		51900735	51900735
Gas guard O_2/N_2		51900736	51900736
Roller bottle system	One level (replacing one shelf)	–	51900572
	Two levels (replacing two shelves)	–	51900573
	Three levels (replacing three shelves)	–	51900574
	Four levels (replacing three shelves)	–	51900614
	Factory installed outlet option for field retrofit of up to 4 levels (comes with 3 shelves)	–	51900732
USB interface	For data documentation	51900930	51900930
Upgrade kit (field installed)			
3 gas tight inner doors[2, 3]	for segmented access for stainless steel/copper incubator	50115496	–
6 gas tight inner doors[2, 3]	for segmented access for stainless steel/copper incubator	–	50115495
Shelves, half-width, stainless steel	instead of full-width shelves	–	50067226
Shelves, half-width, copper[3]	instead of full-width shelves	–	50067227
Retrofit kit IR sensor[3]		50054735	50054735
Change door hinge[3]		50116852	50116852
USB interface[3]		50116853	50116853
Retrofit kit door lock		50072430	50072430
Accessories			
Security door lock		50072430	50072430
Support frame	200 mm / 7.9 in (without castors)	50051376	50065754
Support frame	185 mm / 7.3 in (with castors, height incl. castors)	50057161	50067224
Support frame	780 mm / 30.7 in (without castors)	50051436	50065753
Support cart with drawers/castors	780 mm / 30.7 in, three drawers, with four castors	50056459	50081774
Castor set	100 mm / 3.9 in, four castors for support frames no. 50051376, 50051436, 50065753 and 50065754	50052528	50052528
Stack adapter	for 150i unit: to stack up with BB16	50051938	–
	for 240i unit: to stack up with BB 6220 or B 5060/B 5061	–	50066094
	for 240i unit: for stacking two Heracell 240	–	50068677
Heratray, stainless steel	shelf tray 1/2 width; two pieces	50058672	–
Heratray, stainless steel	shelf tray 1/3 width; three pieces	50051913	50065805
Heratray, stainless steel	shelf tray 1/4 width, four pieces	–	50065807
Heratray, stainless steel	shelf tray 1/2 width for half-width shelf, four pieces	–	50065809
Heratray, all copper	shelf tray 1/2; two pieces	50061050	–
Heratray, all copper	shelf tray 1/3 width; three pieces	50051914	50065806
Heratray, all copper	shelf tray 1/4 width, four pieces	–	50065808
Heratray, all copper	shelf tray 1/2 width for half-width shelf, four pieces	–	50065810
Additional shelf, full-width	stainless steel, incl. two support bars	50051909	50065793
Additional shelf, full-width	stainless steel, reinforced, incl. two support bars	–	50077367
Additional shelf, half-width	stainless steel, incl. two support bars	–	50065795
Additional shelf, full-width	copper, incl. two support bars	50051910	50065794
Additional shelf, full-width	copper, reinforced, incl. two support bars	–	50077365
Additional shelf, half-width	copper, incl. two support bars	–	50065796
IR-CO_2 gas tester	100 - 240 VAC	50060283	50060283
	five spare inlet port filters	50060287	50060287
	IrDa computer interface and cable (incl. PM-COM Software)	50060289	50060289

[1] Standard equipment includes air-jacket heating, ContraCon decontamination routine, right hinged door.

[2] Without inner glass door. Our recommendation: apply 6 gas tight inner doors only in combination with half-width shelves or Heratrays. [3] Fitted by service engineers.

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Asia: China +86 21 6865 4588 or +86 10 8419 3588, 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 2000

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