

MITRE
SERIES

*Creating the ideal
biotechnical
environment for
cell culture.*

CO₂ Cell Culture Incubators



**NOW WITH
INFRA-RED SENSOR**
FOR MORE INFORMATION
TALK TO CONTHERM

Contherm has achieved wide recognition as a manufacturer of high-precision environmental chambers for the laboratory professional. The Mitre Series CO₂ chambers offer even higher precision and greater flexibility of control for the new generation of scientific researchers. Using proven technology with enhanced user-friendly firmware techniques, a precise environment is created for tissue and cell propagation. The Mitre Series feature an anticipative logic system offering stable temperature, CO₂ and humidity control which is achieved through a combination of temperature/gas sensors and inject/recovery functions managed by the microprocessor system.

The Contherm Infra-Red CO₂ sensor is a modulated pyro-electric system developed for use in the humidified incubator environment. The sensor monitors CO₂ levels over a range of 0-20% with control of $\pm 0.15\%$. Humidity levels higher than 80% RH at 37° C can be achieved using a more effective vaporisation technique. Dedicated LED displays monitor these functions. The Contherm microprocessor-based control system is e²rom-backed to save set-points during power failures, with all models featuring alarm displays and automatic high/low limit protection, to maintain existing parameters in the event of sensor failure.



**MITRE SERIES
CO₂ Incubators**

The Contherm Mitre Series offers the user precise performance, user-friendly operation, and long-term dependability. Modern, attractive exteriors and crevice-free interiors make these chambers the choice of the research professional.



4200 and 4400 Models

A fan-driven system circulates air over a stainless steel sheathed tubular heater. Adjustable non-tilt shelves are easily removed for cleaning and sterilisation, as are all the interior fixtures. Attractive corrosion-resistant exteriors and polished Type 304 stainless interiors assure a long service life. Contherm incubators are equipment-friendly, and comply with AS/NZS 2064 EMC Standards. Featuring unique catch and hinge componentry, the fully-sealed toughened NZS1223 glass inner door incorporates an integral heater to prevent condensation, and enhance the humidity and temperature envelopes.



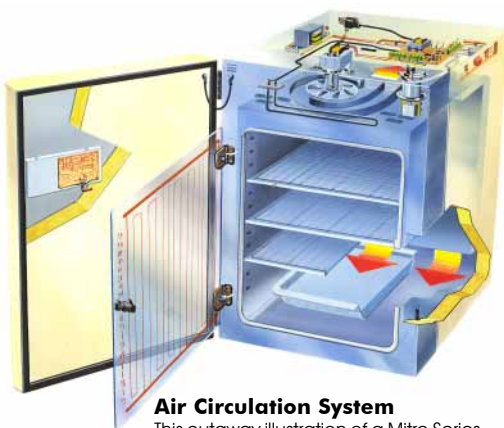
Control Panel

The easy-view control panel fitted in the door allows convenient access and features separate display and controls for each controlled parameter. Functional operations are displayed.

More technical information is available from the Contherm Techspec Library. Refer to our website for current information. The word 'Contherm' is the property of Contherm Scientific Ltd. Warranty covers components and labour for 1 year. Full warranty applies only with regard to published pricelist. The information contained in this brochure is correct at time of printing but is subject to change without notice.

Manufactured by **CONTHERM SCIENTIFIC LTD**, 27 Cornish St, Petone, New Zealand. Tel: +64-4-568 8034 Fax: +64-4-568 8095. Email: contherm@xtra.co.nz Website: www.contherm.com

NEW!
All Mitre Series CO₂ incubators feature an infra-red CO₂ sensor.



Air Circulation System

This cutaway illustration of a Mitre Series CO₂ Incubator shows the efficient one-pass fan circulation system (assuring a low contamination risk) with easy-flow fan scroll with low kinetic-energy output.

Specifications

Model	4150	4200	4400
Exterior Dimensions (W x H x D)	630 x 920 x 680mm	790 x 960 x 730mm	790 x 1560 x 730mm
Interior Dimensions (W x H x D)	470 x 640 x 480mm	630 x 665 x 510mm	630 x 1240 x 510mm
Effective Capacity	155 litres	200 litres	400 litres
Net Weight	85kg	98kg	115kg
Packed weight	91kg	112kg	132kg
Shelves: Stainless Steel Perforated	3	3	6
Temperature Range	Ambient +4°C to 50°C)		
Temperature Accuracy:	Temporal Accuracy ±0.2°C Spatial Accuracy ±0.4°C		Tested Empty at: 37°C 20°C Ambient
Humidifying Method	Natural Vaporisation with Humidity Pan, more than 80% RH at 37°C.		
CO ₂ Control	Microprocessor Control, Accuracy at 37°C 5% CO ₂ +0.15%. Dedicated LED Display		
CO ₂ Range	0.3 - 19.9%		
Inlet CO ₂ Supply Pressure	0.3kg/cm ²		
Alarm System Output	Audible and Visual Alarm Temperature, CO ₂ , Door Ajar, Independent Overtemperature Protection, Connection for External Alarm Activation		
Power Supply	300W at 230 Volt, 50hz Supply		500W /230 V, 50Hz
Options (full list available)	HEPA Filter-Option HF; CO ₂ cylinder Autochangeover-Option A; Cable Port-Option Z		

Specifications subject to change without notice.

