

The Contherm BIOSYN Series Model 645 Plant Growth Chamber creates a secure, high-capacity culture environment for biotech and trans-genic research

BIOSYN
SERIES



Some conditions apply*



Model 645 Plant Growth Chamber

This information should be read in conjunction with the BIOSYN 630 Plant Growth Chamber information sheet.

With essentially all the features of the BIOSYN 630 Chamber, the BIOSYN Model 645 Plant Growth Chamber offers an even larger capacity for demanding research programmes. The proven Contherm PLC55 micro-processor, EEROM-backed control system with user-adjustable software allows programming of temperature, humidity and light levels in real or elapsed time, and features self-diagnostic alarm displays with automatic high/low limit protection, and an RS232c port allowing PC control. As with the BIOSYN Model 630, the BIOSYN Model 645 features a sealed, energy-efficient, CFC-free refrigeration system, with a similar interior and exterior construction and finish, consistent temperature

control and an advanced water vapour humidity generation system. A multi-fan driven air system assures uniform air circulation, and light intensity is programmable in 8 steps, giving good dawn to dusk simulation.

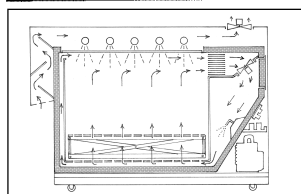
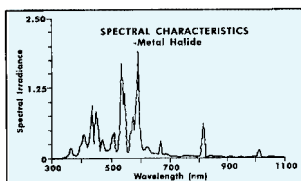
With independent double doors and removable central mullion, good access to the interior of the chamber is assured. Both access doors are key lockable, as is the access to the control panel. While the display is mounted on the exterior, parameter changes can be made by unlocking the control panel door; the door need not be opened. Optional features include CO₂ atmospheric capability, and a height-adjustable floor (see illustration).

The Contherm BIOSYN Model 645 delivers maximum flexibility and high performance to the researcher, with the added benefit of higher capacity.



BIOSYN Model 645 showing interior, with removable central mullion and optional adjustable floor height.

Specifications		
Dimensions:	External:	2200 x 2870 x 1150
(H x W x D)	Internal:	1500 x 1800 x 900
Capacity		2500 litres
Temperature Range	Lights off:	0°C - 40°C
	Lights on:	(650uE) 10°C - 40°C
Max Operating Ambient		+ 40°C
Temperature Fluctuation		± 1.0°C
Temperature Uniformity		± 2.5°C
Setability		0.1°C
Reproducibility		± 0.5°C
Hi-limit		Automatic + 2°C above set point
RH Control		40 - 90%
Lighting		10 x 400W Metal Halide lamps Max. output 650uE at 900mm from loft
Power Requirements		440V 50Hz 35A grounded 3-Phase Supply (quoted in an ambient of 20°C)
Weight		300kg
Packed Weight		400kg
Optional features		CO ₂ gassed-Option AC, Adjustable Floor



Airflow Diagram



Control Panel and door



Electro-mechanical compartment

More technical information is available from the Contherm Techspec Library. Refer to our website for current information. The words 'Contherm' and 'Biosyn' are the property of Contherm Scientific Ltd. *Warranty covers components and labour for 1 year. Lighting components are not included in warranty. 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.co.nz