

The Contherm BIOSYN Series Model 650 Plant Growth Chamber offers walk-in convenience for biotech and trans-genic research



Model 650 Plant Growth Chamber

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

With similar features to the BIOSYN 630 and 645 Chambers, the BIOSYN Model 650 Plant Growth Chamber offers walk-in convenience and greatly increased capacity for demanding research programmes, and is one of the the largest fully assembled growth chambers in the Biosyn series. 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 and monitoring. As with the BIOSYN Model 630 and 645, the BIOSYN Model 650 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 injection 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. Excellent access to the interior of the chamber is assured, due to walk-in convenience, and the doors to the chamber and the control panel are both key-lockable. 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. A viewing window with hinged cover to allow the monitoring of samples without disturbing the chamber environment is standard equipment. Optional features include CO₂ atmospheric capability. The Contherm BIOSYN Model 650 delivers maximum flexibility and top-end performance to the researcher, with even higher capacity, precision and convenience.



Control Panel and door

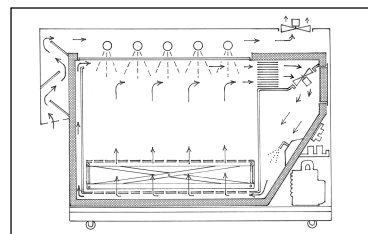
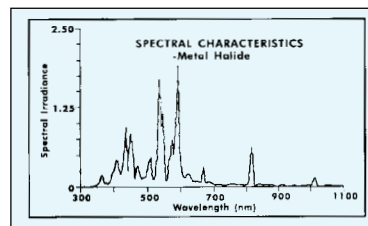
Electro-mechanical compartment

Specifications

Dimensions: (H x W x D)	External: 2500 x 3500 x 2000 Internal: 1900 x 2400 x 1700
Capacity	7500 litres
Temperature Range	0°C - 40°C
Lights off:	(650uE) 10°C - 40°C
Lights on:	
Max Operating Ambient	+ 35°C
Temperature Fluctuation	± 1.0°C
Temperature Uniformity	± 3.5°C
Setability	0.1°C
Reproducibility	± 0.5°C
Hi-limit	Automatic + 2°C above set point
RH Control (at 20°C)	55 - 90%
Lighting	24 x 400W Metal Halide lamps Max.output 650uE at 900mm from loft
Power Requirements	440V 50Hz 3-phase supply (at 25A per phase) Total load 17kW
Weight	500kg
Packed Weight	600kg
Optional Features	CO ₂ gassed-Option AC, Comms Program-Option Q, Tungsten Lighting, Some user configurations available



Some conditions apply*



Airflow Diagram

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