

The Contherm BIOSYN Series Model 630 Plant Growth Chamber creates a complete, artificial life-support environment for biotech research

BIOSYN
SERIES



Model 630 Plant Growth Chamber

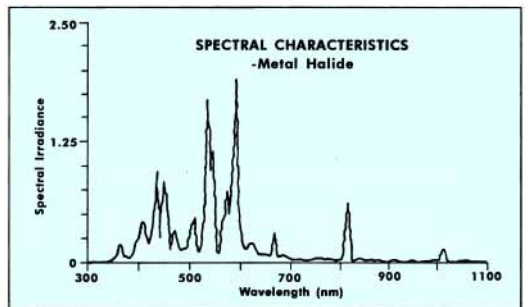
Offering accurate, reliable and repeatable control of temperature, humidity and lighting, the BIOSYN Model 630 delivers the performance for demanding research programmes. The unit is designed to standards NZS/AS3100, and provides Photosynthetically Active Radiation to high levels, consistent temperature control and an advanced humidity generation system. A corrosion-resistant finish on structural steel and steel exterior, and marine-grade aluminium with a UV-resistant finish on the interior surface, assures a long service life. A multi-fan driven air system assures uniform circulation and diffusion of conditioned air through specimens. The proven Contherm PLC55 microprocessor, EEROM backed control system with user-adjust-

able software and LED-based read-out allows programming of day/night temperature, humidity and light levels in real or elapsed time, and features self diagnostic alarm displays with automatic high/low limit protection. An RS232C port allows PC control, and nine user-configurable programs are available. Humidity control is achieved with a water injection system, a solid state sensor providing the PLC54 with control information. A sealed, energy-efficient CFC-free refrigeration system incorporates a unique hot-gas control allowing continuous operation and automatic defrosting, with all functions under microprocessor control. Photosynthetically Active Radiation is provided by 8 x 400 W metal halide lamps, in a separate air-cooled light loft which gives an even light distribution and reduced heat build-up. Light intensity is programmable in 8 steps up to the highest level, giving good dawn to dusk simulation. The Contherm BIOSYN Model 630 provides the user with maximum flexibility and performance, assuring consistent and repeatable results.

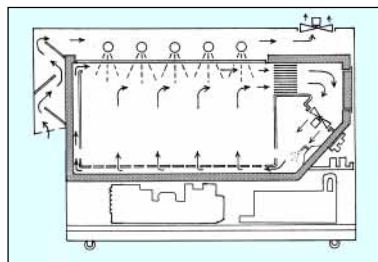


Electro-mechanical compartment

Control Panel and door



Some conditions apply*



Airflow Diagram

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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.

Specifications		
Dimensions: (H x W x D)	External:	2100 x 2000 x 1200
	Internal:	1050 x 1230 x 950
Capacity		1200 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		8 x 400W Metal Halide lamps Max.output 650uE at 900mm from loft
Power Requirements		240V 50Hz 35A grounded Single Phase Supply
Weight		300kg
Packed Weight		400kg

Performance figures quoted in an ambient of 20°C