



GENEVA SCIENTIFIC

LAB EQUIPMENT SOLUTIONS

TISSUE CULTURE CHAMBER - CU-22L



Specifications shown are per compartment

Model	CU-22L
Exterior Dimensions (WxDxH)	33.5" x 36.6" x 77.9"
Temp. Range (w/ lights on)	10-44C +/- 0.5C
Interior Space	14.6 cu.ft.
Total Shelving Floor Area	21.6 sq.ft.
Maximum Growing Height	6.1"
Light Intensity (6" from lamps)	140 micromoles/m2/sec
Number of Tiers	2

Applications

- *Provides capability to have simultaneous experiments conducted with different photoperiods, temperature or other environmental parameters
- *Specifically designed for plant cell culture
- *Unique design of air diffuser with slow vertical airflow, fixed lampbank and slide-out shelves helps to eliminate condensation on Petri dish lids
- *Many other applications exist for this product

Percival's IntellusUltra Controller

*Percival Scientific has built a reputation of providing flexible, customized options for research scientists around the world. We have taken the philosophy to the next level with our improved IntellusUltra Controller. Now choose from the levels of functionality that meet your needs.

Lighting System

*Each tier of shelves per compartment is lighted by cool white fluorescent lamps properly spaced for uniform light intensity over entire shelf

Lighting System cont.

- *Intensity programmable up to 140 micromoles/m2/sec of light irradiance measured at 6" from lamps on 2 on/off light events
- *Programming and control of the lighting is done via IntellusUltra real time controller

Airflow/Circulation

- *Conditioned air circulates through a rear wall duct and is picked up by a specially designed fixed air diffuser located at the bottom of each tier (air is then delivered vertically upward at a slow speed through each shelf)
- *Air diffuser insulates shelf level experiments from heat generated by underlying light fixture (this design minimizes condensation on dish lids)

Cabinet Construction

- *Interior constructed of 22-gauge electro-zinc plated steel
- *Exterior constructed of 18-gauge exterior electro-zinc plated steel
- *Welded seams and joints on outer and inner shells
- *Inner shell supported by non-compressing/non-thermal conducting material locking inner liner in place without a metal-to-metal bond to outer case
- *Chamber is completely self-contained
- *Overall wall thickness is 2"

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Cabinet Construction cont.

- *One 1 1/4" diameter access port on R.H. wall
- *Chamber floor equipped with floor drain and hose assembly
- *Contains caster assembly and adjustable leveling legs to compensate for floor unevenness in the lab

Insulation

- *Woodless construction using CFC free insulation (overall wall thickness is 2", ample insulation for maintenance of stated temperature range)

Doors

- *Each door opening 29.2" x 27.8" providing full access to chamber interior (magnetic gasket provides a tight seal to door frame)

Interior Space

- *Total 29.1 cu.ft. with work area of 21.6 sq.ft. provided on two shelves per compartment

Shelving

- *Two tiers per compartment of white epoxy coated steel wire shelving (each shelf is 27"D x 28.8"W)
- *Shelves side in and out easily on stainless steel rail assemblies
- *Maximum growing height is 6"

Finish

- *Interior and exterior painted with high reflective, environmentally friendly, high temperature baked white powder coating

Temperature Range

- *10-44C (+/- 0.5C) with lights on and 2-44C (+/- 0.5C) with lights off

Refrigeration

- *Twin air-cooled condensing units, each with hot gas bypass system for continuous compressor operation, extended life and close temperature control (this continuous running condensing unit ensures precise temperature control by alternating cycling refrigerant and hot gas to coil; this also prolongs life of compressor, and eliminates risk of ice build up in coil)
- *Solenoid valves have extended stem for quiet and long life operation
- *Ceiling mounted evaporator coils incorporate dual air circulation fans in aluminum housing (heat rejection to ambient with standard chamber: 5000 BTU/hr)

Temperature Safety Limit Controls

- *Experiment Protection: Adjustable high and low temperature controls, audible alarms, and visual indicators provided
- *Controls shut down all power to chamber, activating alarms (when the temperature returns to the normal range the system will automatically reset)

Convenience Receptacles

- *One 115/1/60 convenience receptacle provided inside each compartment

Electrical Requirements

- *Consult Geneva Scientific for electrical requirements and amperage draw.

Options

- *Additive Humidity Control with Sensor
- *Dehumidifier with Sensor
- *IntellusUltra Connect
- *Android-Based Touch Screen
- *CO2 Enrichment Package
- *Self-Contained Water-Cooled Condensing Unit
- *Dry Alarm Contacts
- *Dimmable Lighting
- *LED Lighting in Lieu of Fluorescent Lamps



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