



**GENEVA SCIENTIFIC**  
LAB EQUIPMENT SOLUTIONS

**LED PLANT GROWTH CHAMBER - LED-100HL2**



Model	LED-100HL2
Exterior Dimensions (WxDxH)	110.5" x 40.6" x 111.1"
Temp. Range (w/ lights on)	10-44C +/- 0.5C
Interior Space	147.9 cu.ft.
Total Shelving Floor Area	36.7 sq.ft.
Maximum Growing Height	29"
Light Intensity (6" from lamps)	950 micromoles/m2/sec
Number of Tiers	2

**Applications**

\*This chamber is specifically designed for plant growth light quality studies and other experiments requiring specific wavelengths of light

**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 research needs.

**Lighting System**

- \*Standard color choices include cool white, red, far red, and blue LEDs
- \*Non-standard color choices include UV, warm white, full spectrum white, and green
- \*Each color is independently dimmable between 10-100%
- \*Each tier is independently dimmable
- \*Programming and control of the lighting is done via IntellusUltra real time controller

**Airflow/Circulation**

- \*Uniform air circulation moves across each shelf through air diffusers on the rear wall
- \*Air travels along the entire back wall, over the shelves and returns to the ceiling fans through an opening between the light fixture and the door

**Cabinet Construction**

- \*Cam-type fasteners and vinyl gaskets
- \*Interior and exterior constructed of 24-gauge electro-zinc plated steel
- \*Stainless steel floor
- \*Chamber floor equipped with floor drain with attached 3/4" plastic tubing
- \*Chamber cabinet is attached to angle frame base containing heavy duty swivel casters

**Insulation**

- \*Woodless construction using foam-in-place 2" thick CFC free urethane insulation foam.
- \*This is an environmentally friendly foam with global warming potential [GWP] of 0.0 and ozone depletion potential [ODP] of 0.0.

## LED PLANT GROWTH CHAMBER - LED-100HL2

### Doors

\*Two reach-in doors with an opening of 29.3" x 57.3" (magnetic gasket provides a tight seal to door frame)

### Interior Space

\*147.9 cu.ft. with work area of 36.7 sq.ft. provided on two tiers

### Finish

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

### Refrigeration

\*Self-contained water-cooled condensing unit 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 alternately 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

\*Heat rejection to the ambient (standard refrigeration system) with water-cooled self-contained condensing unit = 6100 BTU/hr

\*Optional outdoor all weather air-cooled condensing unit available upon request

### Temperature Range

\*10-44C (+/- 0.5C) with lights on (full fresh air) within work area on horizontal plane and 2-44C (+/- 0.5C) with lights off

### 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

\*Two convenience receptacles provided inside chamber

### 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

\*Door with Observation Window with Cover

\*Door with Fresh Air Ports

\*Self-Contained Water-Cooled Condensing Unit

\*Dry Alarm Contacts

\*Extended Temperature Ranges

\*External Drip Pan Assembly



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