



GENEVA SCIENTIFIC
LAB EQUIPMENT SOLUTIONS

REACH IN PLANT GROWTH CHAMBER - E-41L2



Model	E-41L2
Exterior Dimensions (WxDxH)	41" x 33.6" x 77.2"
Temp. Range (w/ lights on)	7-44±0.5
Interior Space	37.2 cu.ft.
Total Shelving Floor Area	13.6 sq.ft.
Maximum Growing Height	22.6"
Light Intensity (6" from lamps)	800 micromoles/m2/sec
Number of Tiers	2

Applications

- *This chamber is frequently used for soybean, rice, tomato, cotton or other short to medium height plants
- *Many other applications exist for this product

Percival's IntellusUltra Controller

- *The IntellusUltra control system was purpose-built for controlled environments and is standard on all Percival chambers.
- *Robust and reliable, industrial-grade integrated hardware design
- *Highly flexible architecture facilitates configuration, expansion and customization
- *Precise, simultaneous control of up to 7 environmental parameters
- *Industry-leading experiment protection and system diagnostics

IntellusUltra control graphical user interface

- *A touchscreen user interface is provided as standard on all Percival Scientific plant growth chambers and allows users to interact with their controlled

IntellusUltra control graphical user interface (cont.)

- environment in new and intuitive ways.
- 10.1" IPS, high resolution display with 10-point multi-touch sensitivity
- *Tabular and graphical presentation of chamber programs and parameters
- *Highly visible process values and alarm notifications
- *Enhanced user feedback menus

SciWhite LED Lighting System

- *Two tiers of lighted shelving lit by SciWhite LEDs
- *Intensity programmable up to 800 μmoles/m2/s of light irradiance measured @ 6" from LEDs
- *Programming and control of the lighting is done via IntellusUltra real time controller
- *Dimmable between 10-100% output

Airflow/Circulation

- *Air circulation inside chamber is from a specifically designed air diffuser (air travels along the entire back wall, over the shelves and returns to the ceiling fans through an opening between the light fixtures and the doors)

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Insulation

*Woodless construction using 2" thick foamed-in-place non-CFC Urethane insulation with 97% closed cell-structure density of 2.2 lbs/ft³

Cabinet Construction

*Interior constructed of 26-gauge galvanized steel
*Interior floor constructed of 24-gauge polished stainless steel
*Exterior constructed of 24-gauge Galvannealed extra-smooth steel
*NSF-compliant seam design
*Overall wall thickness is 2" (5.1 cm)
*Integrated floor drain
*Contains casters assembly and adjustable leveling legs
*One 1.25" access port with air-tight plug
*Highly durable and reflective coating

Door

*One door opening of 36.8" x 57.5" providing full access to chamber interior (magnetic gasket provides a tight seal to door frame)

Interior Space

*37.2 cu.ft. with work area of 13.6 sq.ft. provided on two tiers

Shelving

*Two tiers of white epoxy coated steel wire shelving (each shelf is 27"D x 36.3"W)
*Shelves are supported by shelf clips allowing 1/2" vertical adjustments
*Maximum clearance between shelves is 22.6"

Refrigeration

*Top mounted air-cooled condensing unit with hot gas bypass system for continuous compressor operation, extended life and tight temperature control. Continuous running condensing unit ensures precise temperature control by alternately cycling refrigerant and hot gas to coil; also prolongs compressor life, and eliminates risk of ice build up in coil.
*Extended stem solenoid valves for quiet and long life operation

Refrigeration (cont.)

*Ceiling mounted evaporator coil incorporates twin air circulation fans in aluminum housing (heat rejection to ambient [standard chamber] = 3,426 BTU/hr.)

Temperature Range

*7°-44°C (±0.5°C) lights on and 2°-44°C (±0.5°C) 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)

Electrical Requirements

*Consult Geneva Scientific for electrical requirements and amperage draw.

Options

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

Regulatory Standards

*Electrical Safety: UL-508A, certified and labelled by Percival Scientific under UL file number E340161
*Quality System: ISO 9001:2015, certified under DQS, Inc. under certification number 10017261



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Specifications are subject to change without notice.
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