



GENEVA SCIENTIFIC
LAB EQUIPMENT SOLUTIONS

REACH IN PLANT GROWTH CHAMBER - E-75L1



Model	E-75L1
Exterior Dimensions (WxDxH)	76.9" x 37.1" x 78.5"
Temp. Range (w/ lights on)	10-44C +/- 0.5C
Interior Space	71.6 cu.ft.
Total Shelving Floor Area	10.8 sq.ft.
Maximum Growing Height	54"
Light Intensity (24" from lamps)	1100 micromoles/m2/sec
Number of Tiers	1

Applications

*Frequently used for research applications such as lighting for vascular plants to facilitate standard plant production, plant pathology research and seedling germination and development

*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

*Single tier plant growth bench lit by patented lamp bank specifically designed to optimize energy efficiency by managing the heat inside the lamp bank

*Design produces a constant light irradiance throughout a chamber's temperature range

Lighting System cont.

*Intensity programmable up to 1100 micromoles/m2/sec measured @ 6" from barrier, utilizing a balanced spectrum for plant growth using compact fluorescent lamps and extended life tungsten incandescent lamps on 3 on/off light events

*Two levels of programming of fluorescent lighting and one level of programming of incandescent lighting done via IntellusUltra real time controller

*Utilizing the patent pending high efficiency lamp bank results in cost savings of over \$1,799 annually (assuming lights are energized for 14 hours per day in region with electrical costs of 10 cents per KW/hr)

Airflow/Circulation

*Air circulation inside chamber is form 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)

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)

REACH IN PLANT GROWTH CHAMBER - E-75L1

Cabinet Construction

- *Chambers are built in panel sections each consisting of 2" thick urethane insulation
- *Metal interior and exterior surfaces
- *Cam-type fasteners and vinyl gaskets
- *Interior and exterior constructed of 22-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 caster assembly and adjustable leveling legs to compensate for floor unevenness in the lab

Doors

- *Two reach-in doors each with an opening of 22.8" x 57.8" providing full access to chamber interior (magnetic gasket provides a tight seal to door frame)

Interior Space

- *71.6 cu.ft. with work area of 10.8 sq.ft. provided on one tier

Finish

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

Refrigeration

- *Self-contained air-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
- *Ceiling mounted evaporator coil incorporates twin air circulation fans in aluminum housing (heat rejection to ambient for standard chamber = 9400 BTU/hr)

Shelving

- *One tier of white epoxy coated steel wire shelving. Shelf is 28.8"D x 27"W.
- *Shelf is supported by shelf clips allowing for 1/2" vertical adjustments
- *Maximum growing height is 54"

Temperature Range

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

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 115/1/60 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
- *Remote Air-Cooled Condensing Unit
- *Dry Alarm Contacts
- *Dimmable Lighting
- *LED Lighting in Lieu of Fluorescent Lamps



GENEVA SCIENTIFIC
LAB EQUIPMENT SOLUTIONS



Geneva Scientific LLC
P.O. Box 408
Fontana, WI 53125

1-877-436-3827
Fax: 262-245-6678
Sales@Geneva-Scientific.com

Specifications are subject to change without notice.
rev. 10/15