



# GENEVA SCIENTIFIC

LAB EQUIPMENT SOLUTIONS

## REACH IN PLANT GROWTH CHAMBER - E-22L



Model	E-22L
Exterior Dimensions (WxDxH)	33.5" x 36.6" x 77.9"
Temp. Range (w/ lights on)	7-44±0.5
Interior Space	14.6 cu.ft.
Total Shelving Floor Area	5.4 sq.ft.
Maximum Growing Height	20.2"
Light Intensity (6" from lamps)	680 micromoles/m2/sec
Number of Tiers	1
**Specifications for the 22 series are per compartment unless otherwise noted. All of the 22 series units are designed to have two different environments per chamber. (i.e. 22 with AR on top and E on the bottom)**	

### Applications

- \*This chamber is frequently used for Alfalfa/forages, peanut, potato, bluegrass, short term plant growth and/or short plants
- \*Many other applications exist for this product

### IntellusUltra controller

- The IntellusUltra control system (C8) 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

- \*One tier of lighted shelving, lit by SciWhite LEDs
- \*Intensity programmable up to 680  $\mu$ moles/m<sup>2</sup> /s of light irradiance measured @ 6" from LEDs on 3 on/off light events
- \*Programming and control of the lighting is done via IntellusUltra real time controller
- \*Dimmable between 10-100% output

### Airflow / Circulation

- \*Conditioned air circulates through a rear wall plenum and travels horizontally across each shelf (air then flows vertically upward through the space between the door and shelves back to the unit cooler)

## REACH IN PLANT GROWTH CHAMBER - E-22L

### Insulation

\*Woodless construction using 2" thick foamed-in-place non-CFC Urethane insulation with 97% closed cell-structure density of 2.2 lbs/ft<sup>3</sup>

### Cabinet Construction

- \*Interior constructed of 22-gauge galvanized steel
- \*Interior floor constructed of 22-gauge polished stainless steel
- \*Exterior constructed of 18-gauge Galvannealed extra-smooth steel
- \*NSF-compliant seam design
- \*Overall wall thickness is 2" (5.1 cm)
- \*Integrated floor drain in each compartment
- \*Contains casters assembly and adjustable leveling legs
- \*One 1.25" access port with air-tight plug per compartment
- \*Highly durable and reflective coating

### Door

\*Two doors each with an opening of 29.3" x 27.8" (74.3 cm x 70.5 cm) providing full access to chamber interior (magnetic gasket provides a tight seal to door frame)

### Interior Space

\*14.6 cu.ft. with work area of 5.4 sq.ft. provided on one shelf per compartment

### Finish

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

### Refrigeration

- \*Twin condensing unit (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)
- \*Extended stem solenoid valves for quiet and long life operation
- \*Heat rejection to the ambient (standard refrigeration system) = 2,460 BTU/hr.

### Shelving

- \*One tier per compartment of white epoxy coated steel wire shelving (each shelf is 28.8"W x 27"D [73 cm x 68.6 cm])
- \*Shelves are supported by shelf clips allowing 1/2" vertical adjustments
- \*Maximum growing height is 20.2" (51.3 cm)

### 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
- \*Android-Based Touch Screen
- \*CO<sub>2</sub> Enrichment Package
- \*Self-Contained Water-Cooled Condensing Unit
- \*Dry Alarm Contacts
- \*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: 262-607-6497  
Sales@Geneva-Scientific.com

Specifications are subject to change without notice.  
rev. 01/22