



GENEVA SCIENTIFIC
LAB EQUIPMENT SOLUTIONS

REACH IN PLANT GROWTH CHAMBER - E-41HO



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|---------------------------------|-------------------------------------|
| Model | E-41HO |
| 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 | 6.8 sq.ft. |
| Maximum Growing Height | 48.6" |
| Light Intensity (6" from lamps) | 1600 micromoles/m ² /sec |
| Number of Tiers | 1 |

Applications

- *This chamber is frequently used for cereals, citrus, grapes and other plants that require high light intensity
- *Many other applications exist for this product

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

- *One tier of lighted shelving lit by SciWhite LEDs
- *Intensity programmable up to 1,600 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 CFC free insulation (overall wall thickness is 2", ample insulation for maintenance of stated temperature range)

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)

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

Interior Space

*37.2 cu.ft. with work area of 6.8 sq.ft. provided on one tier

Shelving

*One tier of white epoxy coated steel wire shelving (shelf is 36.3"D x 27"W)
*Shelf is supported by shelf clips allowing 1/2" vertical adjustments
*Maximum growing height is 48.6"

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
*Ceiling mounted evaporator coil incorporates twin air circulation fans in aluminum housing (heat rejection to ambient [standard chamber] = 3,543 BTU/hr.)

Temperature Range

*7°-44°C ($\pm 0.5^\circ\text{C}$) lights on and 2°-44°C ($\pm 0.5^\circ\text{C}$) 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



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