



GENEVA SCIENTIFIC
LAB EQUIPMENT SOLUTIONS

REACH IN PLANT GROWTH CHAMBER - PGC-40L2



Model	PGC-40L2
Exterior Dimensions (WxDxH)	100.5" x 40.6" x 111.1"
Temp. Range (w/ lights on)	7-44±0.5
Interior Space	147.9 cu.ft.
Total Shelving Floor Area	36.7 sq.ft.
Maximum Growing Height	32.7"
Light Intensity (6" from lamps)	1200 micromoles/m ² /sec
Number of Tiers	2

Applications

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

Percival's 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

- *Two tiers of lighted shelving lit by SciWhite LEDs
- *Intensity programmable up to 1,200 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

- *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

REACH IN PLANT GROWTH CHAMBER - PGC-40L2

Cabinet Construction

- *Interior constructed of 24-gauge galvanized steel
- *Interior floor constructed of 22-gauge polished stainless steel
- *Exterior constructed of 24-gauge Galvannealed extra-smooth steel
- *Overall wall thickness is 2" (5.1 cm)
- *Integrated floor drain
- *Contains casters assembly and adjustable leveling legs
- *Two 1.25" access ports with air-tight plugs
- *Highly durable and reflective coating

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)

Doors

- *Two reach-in doors each with an opening of 29" 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 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
- *Heat rejection to the ambient (standard refrigeration system) = 1,791 BTU/hr.

Temperature Range

- *2°-44°C ($\pm 0.5^{\circ}\text{C}$) lights off and 7°-44°C ($\pm 0.5^{\circ}\text{C}$) lights on (full fresh air) within work area on horizontal plane with lights on

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
- *CO2 Enrichment Package
- *IntellusUltra Connect
- *Android-Based Touch Screen
- *Dry Alarm Contacts
- *Security Package
- *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



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