![Darwin Chambers logo]

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PG068 PLANT GROWTH CHAMBER

PG Series Overview

The PG Series is Darwin's stock plant growth chamber design. It is quiet, easy to clean, highly reliable and ideal for plant growth use, It offers hot gas bypass control of refrigeration and resistive heat to facilitate reliable, temperature and optional humidity control.

PG09

The PG09 is a bench top plant growth chamber designed to fit on 24" benchtops; stacked with optional racking.

PG034

The PG034 is a single-door plant growth chamber providing extra cubic feet designed for maximum capacity while still allowing passage through most commercial doorways.

PG068

The PG068 is a wide double door plant growth chamber. This chamber gives researchers additional growing room for their plants.

Featured photo is the PG068 plant growth chamber, open door view to show adjustable racks.

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PG SERIES: PLANT GROWTH CHAMBERS

The Most Universally Applicable Plant Growth Chamber You Can Find

Design and Purpose

The PG068-1,-2,-3 is a 1,2 or 3 tier plant growth chamber. The construction materials are well insulated with optimal coatings, come standard with remote interface (programming, data retrieval etc.), and utilize a drop-in refrigeration system for ease of repair. This unit is designed to outlast, outperform, and be easier to maintain.

Lighting

The lighting that is included in the PG068-1,-2,-3 is standard with programmed dimming capabilities to achieve 500-1000 µmol/m2/s (6") of broad PAR 5000K making this useful for entomology, arabidopsis, tissue culture, C3, C4, cannabis, algae, and general corn, wheat or soybean plant studies. Dimming is "all at once" type. Fixtures are easy to clean, white powder-coated aluminum with robust sealed LEDs. Fixtures are attached to (removable) shelves above and can be manually height adjusted in 1/2" increments as study needs change.

Cooling System

Industrial grade, top-mount, air cooled hot-gas bypass system is used for extended life and tight temperature control. System is designed to be drop-in for easier repair/replacement. Industry-leading 3-year warranty for cooling components. PG068's come standard with polymer coated evaporator coils.

Airflow

Airflow is through back wall plenum down to bottom of chamber for minimal plant disturbance and maximum uniformity.

Insulation

2" non-CFC urethane and poly-iso for superior thermal performance

Options

Controls – Touchpad, UPS
Humidification and Dehumidification w/programmability
Cabinet – Window (w/light tight cover), Stainless Exterior, Custom Sizes
Condensate Recirculation, Pan, or Pump
Lighting – Broad Spectrum, Custom, Dimmable with Closed Loop Control, T5, T8
Cooling – Water Cooled Compressors
CO2 Monitoring or Control

Virtual Touchscreen/Controls

Users can view process value and set point from front of the chamber as the actual PID controllers are placed in this location. The controllers can still be interfaced with or locked out, and only controlled via the virtual touchscreen. The virtual touchscreen is a CE and UL listed feature that can be accessed through the free viewer app (Easy Access) provided from a mobile device or desktop. Normal customer set-ups monitor or program multiple chambers through a phone or PC. Included advantages:

- Data logging with the ability to verify the integrity of the data via the EASY Convertor tool
- USB storage up to 32GB can be used for data log files and accessed via web browser or FTP. These files can be emailed daily and weekly
- Built in 4GB flash memory and RTC (Real Time Clock)
- Allows for users to be logged in while having different levels of access, also includes an automatic log off function
- Alarm notification: Preprogrammed email or text (phone carrier name required) will be setup that contains brief trouble shooting help notes and phone number plus link to Darwin Chambers technical support team. Chamber(s) can be named by user to identify which chamber is in alarm. Preprogrammed text and email alarm events able to be categorized to different levels. Email and/or text will also be sent to notify user when chamber goes back into spec and is out of alarm.
- SD card slot for expansion of storage and one USB hot port and 2 gigabit ethernet ports
- Programmable temperature and dimming of lights

Cabinet Construction

Interior of 20-gauge, 304 stainless steel. This is a differentiator vs competitor thinner (26-gauge), galvanized, wet painted interior
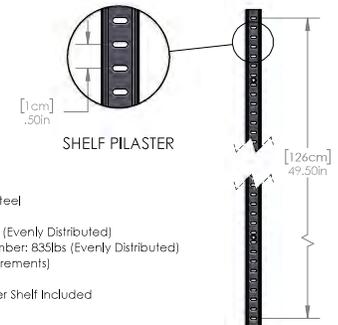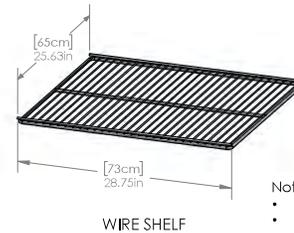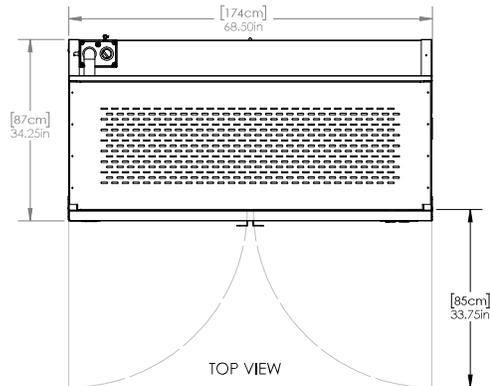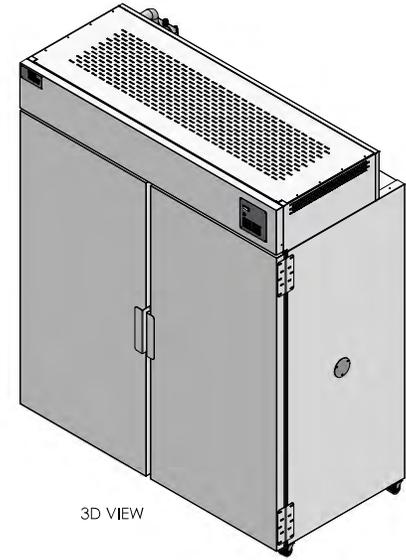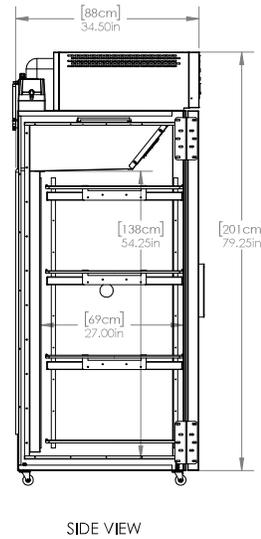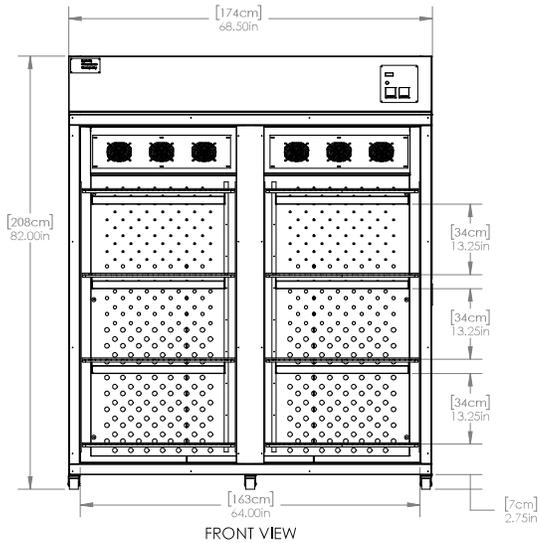Exterior of 20-gauge, galvanized steel for more resistance to dents vs 24-gauge
Door exterior of 20-gauge aluminum for long life. Magnetic gasket. Industrial hinges
Includes 2&3/4" casters (rated at 300lb/ea.) or leveling legs Includes 2" access port

Shelving

Open wire 304 stainless steel capable of supporting 150lbs/shelf evenly supported

Model	Temp Range Lights On	Shelving Dimensions	Growth Height	Exterior Dimensions	Light Intensity 6" from Lamps	Growth Tiers
PG068-1	10 to 60° C	28.75" W x 25.50" D 73cm W x 65cm D	44" 111cm	68.50" W x 34.50" D x 82.00" H 174cm W x 88cm D x 208cm H	500-1000 µmol/m2/s	1
PG068-2	10 to 60° C	28.75" W x 25.50" D 73cm W x 65cm D	21" 53cm	68.50" W x 34.50" D x 82.00" H 174cm W x 88cm D x 208cm H	500-1000 µmol/m2/s	2
PG068-3	10 to 60° C	28.75" W x 25.50" D 73cm W x 65cm D	13" 33cm	68.50" W x 34.50" D x 82.00" H 174cm W x 88cm D x 208cm H	500-1000 µmol/m2/s	3

[174cm]
68.50in

[208cm]
82.00in

[34cm]
13.25in

[34cm]
13.25in

[34cm]
13.25in

[163cm]
64.00in

[7cm]
2.75in

FRONT VIEW

[88cm]
34.50in

[201cm]
79.25in

[138cm]
54.25in

[69cm]
27.00in

SIDE VIEW

3D VIEW

[174cm]
68.50in

[87cm]
34.25in

[85cm]
33.75in

TOP VIEW

[65cm]
25.63in

[73cm]
28.75in

WIRE SHELF

[1cm]
.50in

SHELF PILASTER

[126cm]
49.50in

Notes:
- Shelf Material: 304 Stainless Steel
- Shelf Finish: Polished Steel
- Max Weight per Shelf: 150lbs (Evenly Distributed)
- Max Load Capacity of Chamber: 835lbs (Evenly Distributed)
- Pilaster Height: 49.5" (1/2" Increments)
- Minimum Spacing: 2"
- 4 Stainless Steel Shelf Clips per Shelf Included
- 2" I.D. Access Port Included

Note: Tolerances are 0.25" unless otherwise stated
*Dimensions and components are subject to change without notice.