PGC Flex

Reach-in
Growth Chamber

CONVIRON®

PGC FLEX Reach-in Growth Chamber

Product Overview

The PGC FLEX offers the ultimate in flexibility. In its standard configuration, the chamber operates as a single-tier high light growth chamber with a Lightright™ counterbalanced light canopy and upward airflow. A simple conversion alters the chamber's configuration to either a double or triple tier configuration with medium light intensity and horizontal airflow. The unique flexibility makes it ideal for use in facilities with multiple research programs.

Lighting

In its standard, single-tier configuration, the PGC FLEX features LED lighting that provides a broad based spectrum with intensity of 1000 micromoles/m²/s. The multi-tier configuration reduces this light intensity to 500 micromoles/m²/s in both the 2-tier and 3-tier configurations. Light output is measured by a quantum light meter and transmitted to the controller for user readout.

Refrigeration

Cooling for the PGC FLEX is provided by a top mounted water-cooled condensing unit with hot gas bypass for continuous compressor operation. An electronic modulating valve provides tight temperature control while ensuring quiet operation. Pressure transducers are included for monitoring the status of the refrigeration system. Alternative refrigeration methods are available depending on site-specific and/or user-defined requirements. Consult the factory for heat rejection information and other cooling options.

Airflow

Two airflow configurations are available with the PGC FLEX. In the standard, single-tier configuration airflow is distributed uniformly upward from Conviron's Unifloor™ plenum. When operating in either of the multi-tier configurations, air is distributed uniformly horizontally from a back wall air distribution plenum. The unit includes adjustable fresh air intake and exhaust ports

Experiment Protection

User programmable "set and forget" alarms track the chamber's operation versus user-defined set points. This allows for exceptionally accurate monitoring without the need for adjustment every time the set point is redefined. Backup "high/low" alarms provide a further level of protection while visual and audible notification is provided when any alarm is activated. Contacts for connection to a building management system are also included.

Connect from anywhere on your desktop or any LAN connected device with Conviron*Direct*.

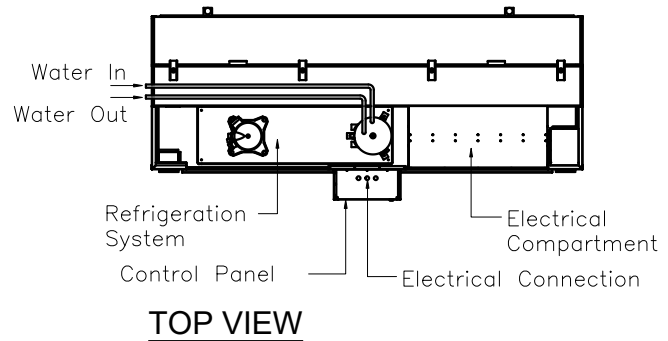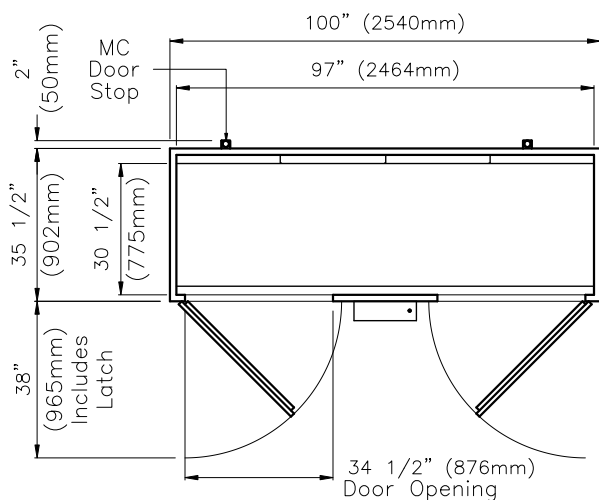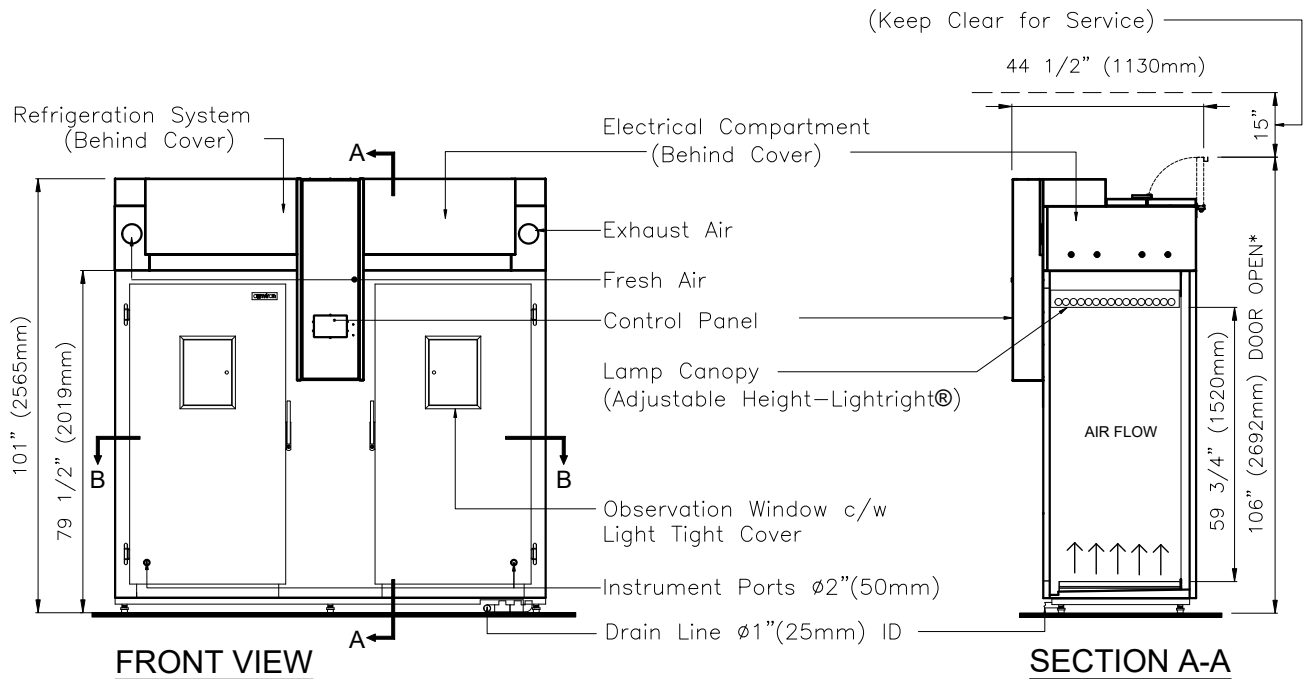*With Conviron**Direct** I always have access to my chamber — from anywhere.*

Performance Data

Number of Tiers	Temperature Range (°C)	Interior Capacity	Growth Area	Growth Height	Exterior Dimensions (WxDxH)	Light Intensities (6in. from lamp)	Electrical Service	Weight
single	10 – 40 lights ON 4 – 40 lights OFF	111 ft³ (3145 L)	19 ft² (1.8m²)	59.75" (1520mm)	100"W x 35.5"D x 101"H 2540 x 900 x 2565 (mm)	1000 µmoles/m²/s *single tier	230/400-3Ø-50Hz 120-208-3Ø-60Hz	1660lbs (755kg)
2-tier	10 – 40 lights ON 4 – 40 lights OFF	111 ft³ (3145 L)	38 ft² (3.6m²)	25" (635 mm)	100"W x 35.5"D x 101"H 2540 x 900 x 2565 (mm)	500 µmoles/m²/s	230/400-3Ø-50Hz 120-208-3Ø-60Hz	1660lbs (755kg)
3-tier	10 – 40 lights ON 4 – 40 lights OFF	111 ft³ (3145 L	57 ft² (5.2 m²)	14" (355 mm)	100"W x 35.5"D x 101"H 2540 x 900 x 2565 (mm)	500 µmoles/m²/s	230/400-3Ø-50Hz 120-208-3Ø-60Hz	1660lbs (755kg)

Certifications: CCSAUS (NRTL), CE

NOTES:

1. STANDARD REFRIGERATION SYSTEM IS WATER COOLED, 1/2"Ø (13mmØ) CONNECTION.
2. CHAMBER MUST BE SECURELY FASTENED TO FLOOR.
3. DEPTH DIMENSION IS CHAMBER SIZE ONLY. DIMENSION DOES NOT INCLUDE DOOR LATCH OR HINGES.
4. FOR BACK TO BACK INSTALLATION, ALLOW 2" (50mm) SPACE BETWEEN CHAMBERS.
5. LENGTH AND WIDTH DIMENSIONS ±1/4" (6mm), HEIGHT DIMENSION ±1" (25mm). DO NOT SCALE DRAWING.
6. OVERALL HEIGHT DIMENSION(*) INCREASES BY 3" (150mm) FOR LT OPTION.
7. OVERALL HEIGHT DIMENSION(*) INCREASES BY 6" (300mm) FOR BDH OPTION.

FRONT VIEW

SECTION A-A

TOP VIEW

NOTES:

1. STANDARD REFRIGERATION SYSTEM IS WATER COOLED, 1/2"∅ (13mm∅) CONNECTION.
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4. FOR BACK TO BACK INSTALLATION, ALLOW 2" (50mm) SPACE BETWEEN CHAMBERS.
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7. OVERALL HEIGHT DIMENSION(*) INCREASES BY 6" (300mm) FOR BDH OPTION.

REFRIGERATION SYSTEM (BEHIND COVER)

ELECTRICAL COMPARTMENT (BEHIND COVER)

EXHAUST AIR

FRESH AIR

CONTROL PANEL

LAMP CANOPY (ADJUSTABLE HEIGHT—LIGHTRIGHT®)

REMOVABLE LAMP CANOPIES

OBSERVATION WINDOW C/W LIGHT TIGHT COVER

INSTRUMENT PORTS ∅2"(50mm)

DRAIN LINE ∅1"(25mm) ID

101" (2565mm)

79 1/2" (2019mm)

FRONT VIEW

(KEEP CLEAR FOR SERVICE)

44 1/2" (1130mm)

15"

AIR FLOW

(375mm) 14 3/4
(375mm) 14 3/4
(375mm) 14 3/4
(375mm) 14 3/4

106" (2692mm) DOOR OPEN*

SECTION A-A
TTO3

MC DOOR STOP

100" (2540mm)

97" (2464mm)

2" (50mm)

35 1/2" (902mm)

30 1/2" (775mm)

38" (965mm) INCLUDES LATCH

34 1/2" (876mm) DOOR OPENING

A

A

SECTION B-B

ELECTRICAL COMPARTMENT (BEHIND COVER)

44 1/2" (1130mm)

CONTROL PANEL

LAMP CANOPY (ADJUSTABLE HEIGHT—LIGHTRIGHT®)

AIR FLOW

REMOVABLE LAMP CANOPY

DRAIN LINE ∅1"(25mm) ID

(641mm) 25 1/4"
(641mm) 25 1/4"

106" (2692mm) DOOR OPEN

SECTION A-A
TTO2