GEN 1000

Reach-In Chamber

CONVIRON®

GEN1000 Reach-in Chamber

Product Overview

With its unique ability to adapt to different research applications, the GEN1000 offers an economical and flexible solution for plant science. The base chamber can be fitted with one of four specially configured kits each with airflow, lighting and shelving designed to suit specific plants and applications.

Tall Plant (TA) Kit:

Upward airflow, maximum growth height and light intensity for taller plants such as cereal crops, horticultural plants and silviculture.

Short Plant (SH) Kit:

Horizontal airflow over multiple shelves optimizes growth area for shorter plants, like Arabidopsis. Ideal for research in propagation, genetics, physiology and other moderate light experiments.

Tissue Culture (TC) Kit:

Low light and multiple tiers to maximize space and provide upward airflow that minimizes condensation in petri dishes and jars used in propagation and genetics experiments.

Incubation (IN) Kit:

Low light and multiple tiers for nurturing young seedlings into shorter plants.

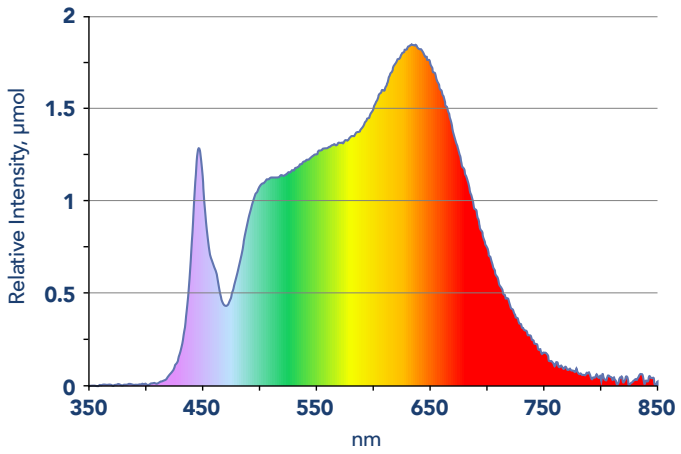
Entomology:

The GEN1000 can be easily adapted for entomology research by selecting the optional phenolic coated refrigeration coil, which protects it from insect damage.

Lighting

The standard lighting systems for the GEN1000 incorporate broad spectrum 12W T5 LED fixtures configured to suit the intensity required for each application and kit. Lamp and ballast combinations have been designed to ensure uniform light distribution. As standard, lighting can be dimmed by the user through the controller. Closed loop dimming with a light meter is available as an option.

LED Spectrum



Energy saving LEDs ideal for research requiring an all-purpose broad white spectrum.

Airflow

Precisely designed and manufactured air plenums are used for each of the four application kits. The TA kit utilizes a solid rear plenum and distributes air from the chamber floor for uniform upward airflow. The SH and IN kits both use a perforated rear plenum that distributes the air horizontally across multiple shelves. The TC kit incorporates individual air-shelves that distribute air vertically to minimize condensation within petri dishes and containers.

Refrigeration

The air-cooled refrigeration system is optimized to ensure uniform conditions regardless of the particular kit installed. Kits do not alter the configuration of the refrigeration system and as such, kits can be interchanged by the user if additional kits are selected.

Control and Monitoring

The GEN1000 comes equipped with Conviron's most advanced controller – the CMP6060. In addition to powerful programming and reporting capabilities, the CMP6060 includes a full-color, high resolution touchscreen with an intuitive graphic interface. Users can create custom programs for key parameters such as temperature, lighting and humidity and receive audio, visual and email notifications of alarms. Options include connection to your local area network (LAN) and connectivity to a central PC or mobile device with Conviron Central Management™. CMPLink allows seamless integration with an Argus Control system.

The CMP6060 home screen provides an easy-viewing dashboard for set points, actual conditions and quick access to other control features.

Base Chamber Data

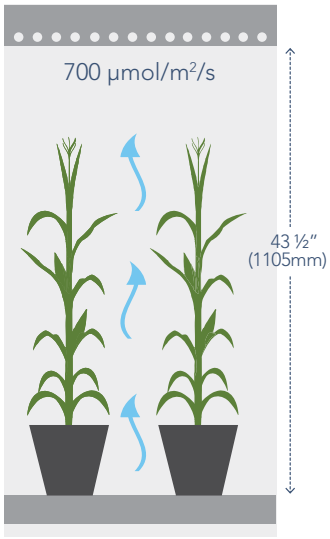
The GEN1000 chamber is designed to fit through a standard commercial doorway and ship in one piece requiring minimal assembly and easy installation in any research lab. With foamed-in-place CFC-free insulation, painted galvanized steel exterior and galvannealed interior, the GEN1000 is highly durable, resistant to corrosion, and easy to clean, operate and maintain.

Temperature °C	Interior Volume	Ext Dimensions W x D x H	Weight	Electrical Service	Safety Certifications
4-40 Lights Off	27.6ft³	41 x 32 ½ x 77 (in)	700 Lbs	120-1Ø-60Hz-2 wire	cTUVus (NRTL)
10-45 Lights On	781L	1040 x 825 x 1960 (mm)	320 Kg	230-1Ø-50Hz-2 wire	CE-mark, TÜV
Control: ±0.5					

One Chamber. **Four** Applications.

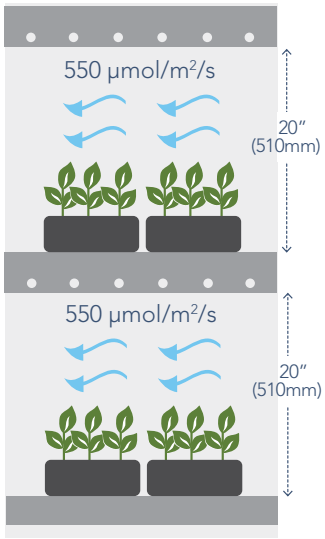
The GEN1000 can be fitted with one of four kits. Additional kits are available allowing researchers to convert the chamber to adapt to a variety of research programs that require different light intensity, airflow direction, growth height and growth space.

Tall Plant



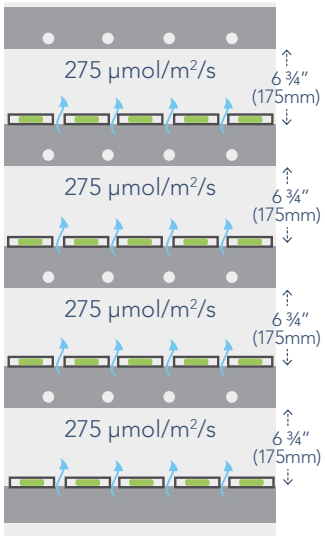
Growth Area
6.31ft² (0.58m²)

Short Plant



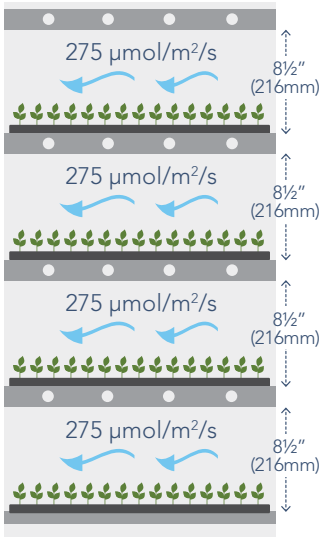
Growth Area
11.3 ft² (1.05m²)

Tissue Culture



Growth Area
22.6 ft² (2.1m²)

Incubation



Growth Area
22.6 ft² (2.1m²)

Extend Your Capabilities with These Options

- UPS surge protection on power supply
- Observation window to ease viewing
- Phenolic-coated refrigeration coil for entomology applications
- Dehumidification
- Additional lit tier for the SH kit
- Condensate pump and drip pan
- Low temperature (2°C) operation
- Water-cooled condensing unit
- Ultrasonic humidification to 90%RH lights off
- Additive CO_2 and control

With ConvironDirect I always have access to my chamber— from anywhere.

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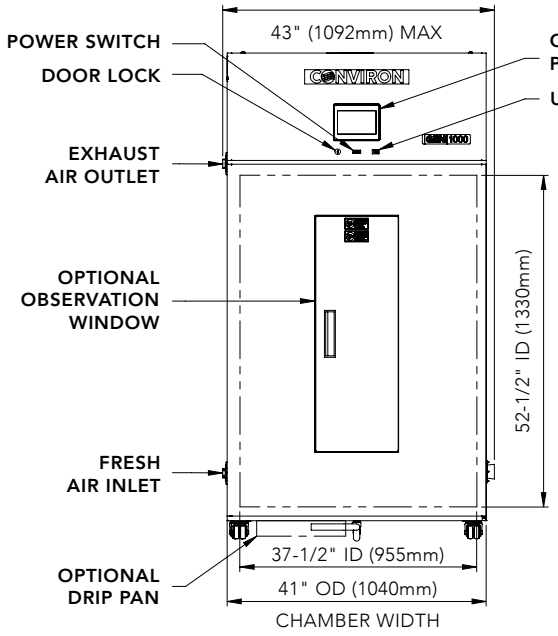
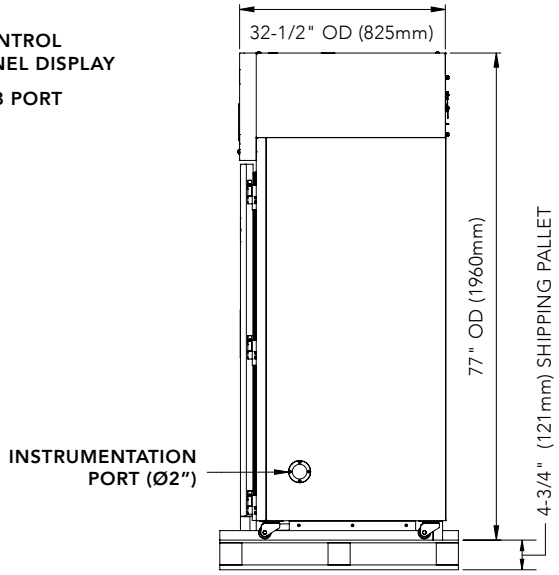
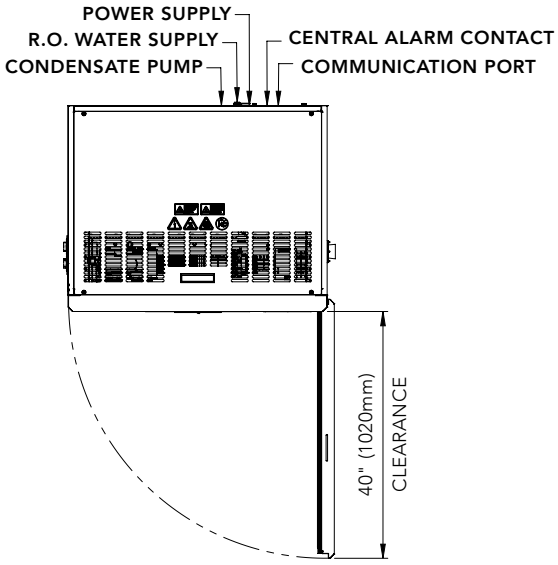


FRONT VIEW



SIDE VIEW



TOP VIEW

NOTES

1. REQUIRES A MINIMUM OF 4" (102 mm) FROM REAR OF THE CHAMBER TO BACK WALL. HEPA FILTER AND/OR DUCTED COLLAR OPTION ADDS 2" TO THE OVERALL WIDTH OF THE CHAMBER.
2. LENGTH AND WIDTH DIMENSIONS ±1/4" (6mm). HEIGHT DIMENSIONS ±1" (25mm) DUE TO POTENTIAL ADJUSTMENT OF LEVELING FEET.
3. STANDARD REFRIGERATION SYSTEM IS AIR-COOLED, SELF-CONTAINED. WATER COOLED REFRIGERATION IS OPTIONAL.

CE TÜV Management System Certified to ISO 9001

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REF: GEN1000 Data Sheet, 2024, MK0090, rev 13
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