Drosophila Incubator Specification

Model No: DRSGDM

Temperature range*	18°C to 32°C
%RH (optional)*	50% to 90% RH
Temperature uniformity	± 1°C
% RH control	± 3%
Temperature control at sensor	± 0.2°C
Control resolution	± 0.1°C
Cooling/Heating type	Thermoelectric/Peltier driven-for heating/Cooling
Chamber Volume in Cu. Ft	19.1 cu.ft
External Dimension-LXWXH	27″×31″×81″ (refer to drawing)
Internal Dimension-LXWXH	22.25″ x 25.25″ x 60″ (refer to drawing)- height includes plenum which is 5″H.
Shelf dimension	21.75” x 24.875”
Cabinet specs	Stainless interior and exterior construction
Lights	LED lights with timer.
Electrical requirement	115V/60hz/1ph, Unit plugs into standard wall outlet.
Shelf quantity, type	3 per chamber/ additional shelves available, wire shelf- PVC coated with 4 installation clips. Shelf capacity- 100 lbs distributed load.
Weight specs	Chamber weight- 293bs Shipping weight- 326 lbs

*Specifications are based on 20°C ambient and standard voltage. Specifications are subject to change without notice.

Chamber options:

- Chart recorder
- Additional shelving
- Relative humidity
- Extended temperature ranges
- RO/DI water filtration system
- Water carboy

Chamber features:

This chamber is used by scientists in many research areas, from genomics to clinical epidemiology and species conservation. This chamber not only can be used in drosophila research but also in many types of insect growing projects as well.
All of the 20,40&60 series of Canden chambers interior and exterior are made out of premium stainless steel. Chamber has 2” thick CFC free insulation providing good thermal gradient. Door locks are standard in doors with double pane glass. Chambers comes with 2” access port with insulation plug. Chamber also includes pre-installed casters capable of supporting 150-200lbs per caster.

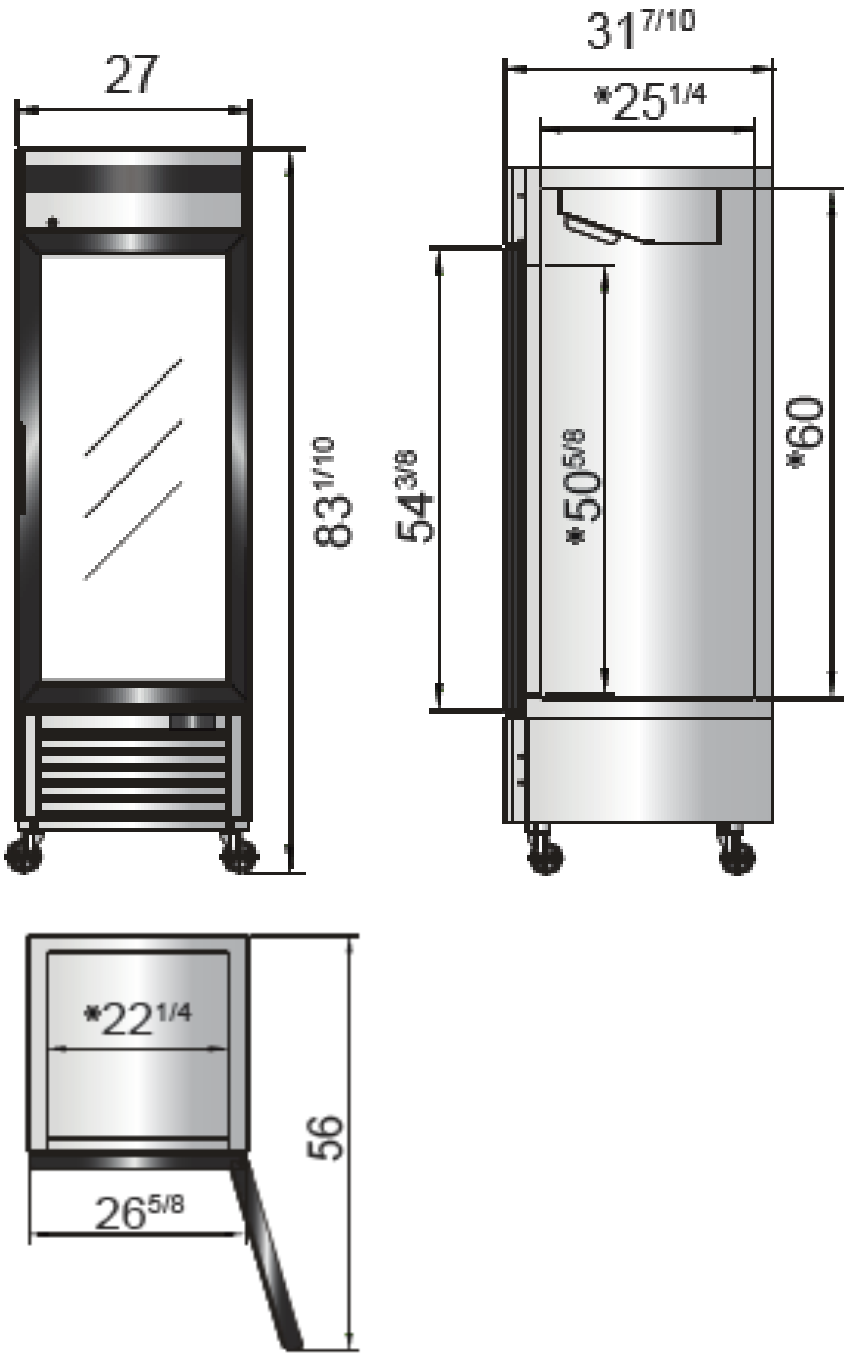
Chamber uses thermoelectric assembly for heating and cooling. This type of cooling/heating system completely eliminates need for conventional refrigeration system and failures due to mechanical components such as compressors thereby drastically increasing the life expectancy of each chamber. Maintenance cost is also lowered by the thermoelectric/Peltier driven heating/cooling system. The chamber is quiet in operation. Back wall plenum on chambers ensures uniform distribution of conditioned air. Chamber temperature setpoints are tightly controlled using PID controller.

Standard Temperature control features:

- RS485 panel mount-usb cable interface
- Simplifies Controller Management with Easy-to-Operate Graphic User Interface
- Provides Access to Advanced Scripting Capabilities
- Visually interpret thermal data
- Control access via software, export data in csv format
- 2 programmable alarm

Standard %RH control features(optional):

- 3% accuracy over the entire input range-displays PV/SV.
- On/off controller is standard. if you need PID controller with tighter control up to 1% RH- please contact us.
- Dual alarm outputs with 10+ activation methods/situation
- High brightness, large LED display

Humidity system:
Humidity control is optional. Humidity range is achieved via additive ultrasonic humidification, a controller with factory calibrated %RH sensor. Humidifier is installed typically in the rear of the chamber and can be easily serviced or replaced. RO/DI system is recommended but not required as long as the water quality specification is met. Tap water should be fine. The humidifier comes with a 15' ¼" polytube, shut off valve and quick disconnect fittings as well as a fitting to connect to water faucet.

Water quality specification:
Water conductivity greater then 0.1 µS,TDS of < 10 ppm and works in operating pressure range from 10psi to 80 psi