

Temperature range	10°C to 40°C
Temperature uniformity	± 0.7°C
Temperature control at sensor	± 0.2°C
Control resolution	± 0.1°C
Humidity range (optional)	50% to 80% (operating temp range: 15°C to 28°C )
Humidity control	±3%
Cooling/Heating type	Thermoelectric/Peltier driven-for heating/Cooling
Chamber Volume in Cu. Ft	3 cu.ft
External Dimension-LXWXH	27" x 22" x 23.5"
Internal Dimension-LXWXH	21" x 13.5" x 20"
Cabinet specs	Durable-Polyethylene construction with CFC Free polyurethane insulation.
Lights	LED lights with timer.
Electrical requirement	115V/60hz/1ph, Unit plugs into standard wall outlet.
Shelf quantity, type	2 per chamber/ additional shelves available, wire shelf- PVC coated or stainless steel.
Weight specs	Chamber weight- 35lbs Shipping weight- 50lbs

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

**Chamber options:**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Access ports</li> <li>• Additional shelving</li> </ul> | <ul style="list-style-type: none"> <li>• Humidity control</li> <li>• RO/DI water filtration system</li> <li>• Water carboy</li> </ul> |
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**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 where researchers are constrained by laboratory space.

Chamber feature a unique double shell-filled with commercial-grade polyurethane material for optimal insulation. Inlaid sealing ring and nylon latch for enhanced seal/performance. The chamber is made out of LLPDE material shell.

The IRC3 models comes with 12 molded slots. We provide 2 wire shelves with each chamber. Additional shelves are available for purchase. Shelves can support up to 25lbs distributed load. The Chamber comes with 2 hidden molded handles that enables users to move the chamber with ease. The chamber is also stackable without additional parts.

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 while in operation. Chamber temperature setpoints are tightly controlled using PID controller.

Temp Controller Models used: Watlow Legacy, ATEC 302

**Temperature control features:**

- Simplifies Controller Management with Easy-to-Operate
- Control Temp, Monitor alarm notification via Bluetooth App(Watlow model)
- Provides Access to Advanced Scripting Capabilities
- Visually interpret thermal data
- Control access via software, export data in csv format
- 2 programmable alarm

**Standard Humidity control features:**

- %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

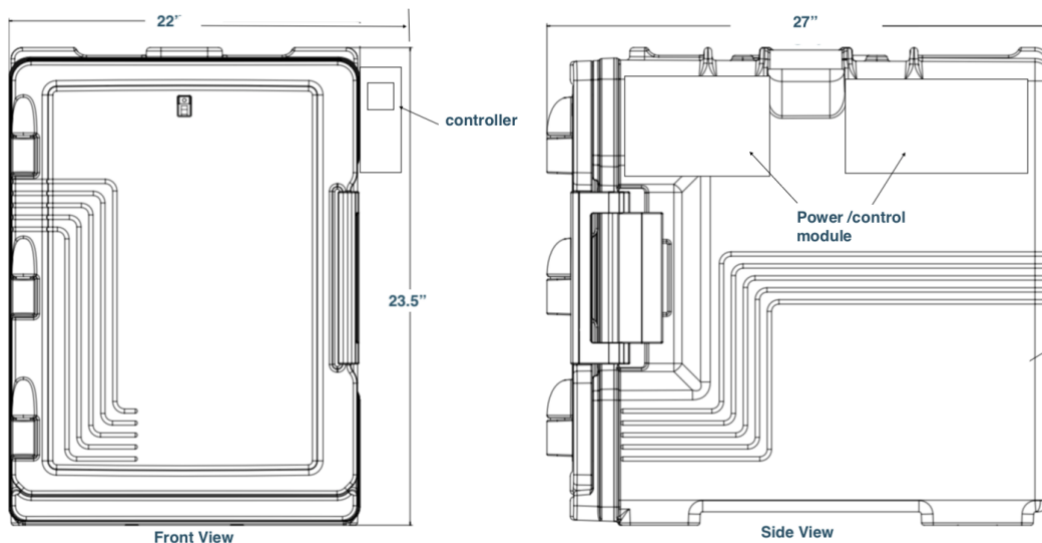
**Humidity system:**

Humidity control is optional. Humidity range is achieved via additive ultrasonic humidification, a controller with 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' 1/4" 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

**Technical specs and drawings**



- Add 5" in the rear for humidifier models (32" overall depth)