

TH030 FREEZE THAW CHAMBERS

TH Series Overview

The TH series chambers are our state of the art freezer environmental chambers used for a variety of applications. Controls are able to be quickly exchanged for future upgrades or repair.

TH030

The TH030 is a single-door freeze thaw chamber.

TH055

The TH055 is a 2-door freeze thaw chamber.



Featured photo is the TH030 single-door freeze thaw chamber open door view to show adjustable internal racks.



Featured photo is the TH030 single-door freeze thaw chamber closed door view.



TH SERIES: FREEZE THAW CHAMBERS

Performance

Range -23° C to 50° C, options to eliminate defrost available, temperature control $\pm 0.2^{\circ}\text{C}$ (non-defrost), temperature uniformity $\pm 2.5^{\circ}\text{C}$ (non-defrost).

Quiet Operation

The TH series incubators utilize quiet, highly efficient DC fans.

Greatly Reduced Direct and Indirect Energy Loads

The TH Series freezers utilize less energy than comparable freeze thaw chambers and introduce less impact upon building cooling systems. This efficiency "dual benefit" allows our chambers to be located in spaces unsuitable for other chambers.

Options Available

Data Logging

Chart Recorder

Touch Screen Control Interface

Widely Proven, Non-Proprietary Controllers

Standard controllers for the TH Series are manufactured by Fuji Electric and are ideal for laboratory freezers. Unlike many proprietary controllers, this controller is commercially available and proven in tens of thousands of installations. Standard functions include: autotuning, fuzzy logic, PID control, programmable alarms, calibration capability, offset capability, etc. A touchscreen control interface is optional. Other controller manufacturers are also supported (Watlow, Allen-Bradley etc.)

Services and Warranties

We offer technical support throughout the lifetime of your freezer. In addition to standard warranties, we also offer extended warranties for cooling components, parts and labor. We also provide qualifications, validations and preventive maintenance services at an additional cost. Please ask for a quote.

Refrigeration System

The TH Series provides an oversized and balanced, environmentally friendly R404A refrigeration system, epoxy coated evaporator, large evaporator and coil heater permit for a short defrost cycle. Along with an automatic evaporator fan morto to delay frost during defrost.

TH030 Freeze Thaw Chamber Specifications (ambient 21° C)

NOTE: All Specifications come standard as following. We offer customized specification options as mentioned below. If you have specifications in mind that are not listed, please contact our sales team. We will accommodate your needs.

Performance	Standard	Customized Options
Temperature Range	-23° C to 50° C	Available
Ambient Temperature	21° C ± 3° C	Available
Temperature Control	± 0.2° C	Available
Temperature Uniformity	± 0.8° C	Available
Control Resolution	0.1° C	Available
Temperature Sensor	NIST Traceable PT 100 RTD Class A	Available

Control System	Standard	Customized Options
Controller	Microprocessor based PID	West EC-44, Future Design Touchpad + More
Control Readout	Actual and Set-Point Values	Trending, Duty Cycle
Calibration Correction Capability	Actual and Set-Point Values	Available
Uniformity Off Set	Standard 0.1 Resolution	Available
Alarm	Audible and Visual	Text, Email, Web Server, Remote Access
Alarm Type	Deviation in 0.1° C with Delay	Absolute 0.1 Resolution with Delay
Remote Monitoring	Available	Dry Alarm Contact, RS 485 & Analog Output
Password Protection	Numeric	Numeric, Alpha Numeric
Audit Trail	N/A	Available
Universal Power Supply for Monitoring	N/A	Available

Construction	Standard	Customized Options
Exterior	Stainless Steel Door & Front, Aluminum Sides	Stainless Steel Door, Front & Sides
Interior	Aluminum Side Walls & Back, Stainless Steel Floor & Ceiling	Stainless Steel Side Walls, Back, Floor, Door Liner & Ceiling
Shelving	3 Gray PVC Coated, Adjustable 1" Increments, Supports Up to 150 lbs of Evenly Distributed Weight	Stainless Steel, Chrome Plate or Custom
Casters	2.75" Total Weight Capacity is 300 lbs per Castor, Not Including the Weight of the Chamber	5" Casters or Seismic Legs

Capacity & Dimensions	US Standard	Metric
Interior Capacity	24 ft ³	619 liters
Installation Dimensions	56.59"H, 27.5" W, 33.75" D	2045 mm x 1981 mm x 871.22 mm
Operation Dimensions	52.59"H, 23.5" W, 29.75" D	2164 mm x 1981 mm x 917 mm
Usable Interior Dimensions	52.59"H, 23.5" W, 29.75" D	1486 mm x 1822 mm x 736 mm
Shelf Dimensions	22.25" W, 26.25" D	565 mm x 667 mm
Crated Weight	455 lbs	551 kg

Electrical	US Standard	International
Voltage	115v / 60HZ	230 / 50 / 1
RLA	4	5.8 With Step Down Transformer
Cord Length	7 ft	9 ft

TH030 Freeze Thaw Chamber Technical Drawings

