

Temperature Chamber

Smallest Footprint in its Class

TestEquity Model 140 provides full-range temperature testing with the smallest footprint in its class. Based on the field proven technology of our popular Model 1007C, it offers a more compact package at an economical price.

- ◆ 4 Cu Ft Workspace
- ◆ -73°C to +175°C Temperature Range
- ◆ Programmable Temperature Controller
- ◆ RS-232 Interface, Optional GPIB
- ◆ LabVIEW Drivers
- ◆ High/Low Limit Control & Alarm
- ◆ 4" Access Ports on Left & Right Side
- ◆ Viewing Window & Interior Light
- ◆ Non-CFC Cascade Refrigeration
- ◆ Low-Maintenance Design
- ◆ Fast Delivery from Stock

Programmable Temperature Controller

Easy to use microprocessor-based controller stores 256 steps in up to 40 profiles. Includes RS-232 interface.



High/Low Temperature Limit Control and Alarm

Provides user adjustable independent protection against excess temperatures.

Viewing Window

Our unique design virtually eliminates exterior window sweating during normal temperature cycling conditions.

Two 4" Access Ports

Lets you attach wires and sensors to your test sample through both the left and right sides of the chamber.

Adjustable Shelf

A heavy duty stainless steel wire shelf ensures proper airflow around your test sample for uniform temperature distribution.

Model 140



Casters

Rugged casters permit easy movement.

Chamber Condensate Drain

The chamber floor has a drain to permit removal of condensate from the evaporator that can occur when cycling between low to high temperatures.

World's Best Chamber Warranty

Only TestEquity offers a 3-year warranty on parts and a 1-year warranty on labor at your domestic site. Our nationwide service network is qualified to do the job right. And we always have replacement parts in stock for immediate shipment.



TESTEQUITY

Easy to Use Programmable Controller

Up to 256 steps can be programmed into as many as 40 nameable profiles. The context sensitive information key and guided steps make profile programming fast and easy. A four-line backlit LCD displays programming, setup, operating and help information. A large LED readout indicates the actual chamber temperature with 0.1° resolution. Internal logic provides refrigeration compressor control for responsive and reliable performance. Includes an RS-232 interface. Optional GPIB interface is available.

High/Low Limit Controller and Alarm

Provides independent protection against excess temperatures. Both high and low limits can be set. The limit controller will shut down the chamber and trigger the audible alarm in the event of an out of limit condition. A set of uncommitted contacts are available to provide a safety power interlock for your test sample.

Reliability and Safety That's Designed In

Non-CFC refrigerants are used in a cascade (two compressors) configuration. Expansion valves provide optimum performance throughout the operating range. Pressure regulators keep the operating pressures within safe limits regardless of load conditions. Liquid injection ensures cool compressor operation during high-temperature pull down for long life. Sequential starting of each compressor reduces the current demand on start-up. Each compressor is protected by a pressure switch. Care has been taken to use a minimum number of fittings, joints and welds to reduce the possibility of refrigerant leaks.

All electrical control components are UL approved. Each branch circuit is individually protected. The nichrome air-heater has a low watt-density and even heat distribution for reliable performance and fast response. A fusible link provides fail-safe protection against thermal runaways, in addition to the microprocessor-based high/low limit controller.

Specifications

Temperature Range	-73°C to +175°C				
Control Tolerance	±0.2°C				
Uniformity	±0.5°C				
Cool Down Time (empty chamber)					
		End Temp			
Start Temp	+23°C	0°C	-40°C	-55°C	-65°C
+23°C	-----	4 min	18 min	25 min	33 min
+85°C	12 min	18 min	32 min	38 min	45 min
Heat Up Time	7°C/minute typical (empty chamber)				
Live Load Capacity	+23°C	0°C	-40°C	-55°C	-55°C
	1000 W	800 W	500 W	400 W	300 W
Input Voltage	208 or 230 V nominal, 1 PH, 60 Hz				
Current Draw	Max Current Draw 25 A; 30 A Service Required				
Line Cord	14' with molded NEMA L6-30P Plug				
Inside Dimensions	22" W x 18" H x 18" D (4 cubic feet)				
Outside Dimensions	30" W x 64" H x 42" D				
Access Ports	4" Port on left and right side (two total)				
Weight	Net: 800 lbs; Shipping: 950 lbs				
Sound Level	62 dBA in cooling mode				

NOTE: Performance is typical and based on operation at 23°C (73°F) ambient and nominal input voltage with an empty chamber. Designed for use in a normal conditioned laboratory. Operation at higher ambient temperatures will result in decreased cooling performance. Operation above 30°C (85°F) or below 16°C (60°F) ambient is not recommended.

Due to continuous product development, specifications are subject to change without notice.

Visit <http://www.testequity.com/testequity> for complete specifications.

Available Options

- ◆ GPIB Interface
- ◆ Additional Shelves
- ◆ Additional Ports
- ◆ Event outputs
- ◆ GN₂ & Dry Air Purge
- ◆ 50 Hz Export Version



Also Available for Rent

TestEquity LLC
2450 Turquoise Circle
Thousand Oaks, CA 91320

800-732-3457
805-498-9933
www.testequity.com