



Advanced Test Equipment Corp.

www.atecorp.com 800-404-ATEC (2832)



TESTEQUITY

MODEL 155 Benchtop Temperature Chamber

Model 155 offers superior temperature control with unprecedented energy efficiency



F4T Touch Screen Controller

The F4T is our next-generation controller. Featuring a touch-screen interface, it's exceptionally easy and intuitive to use. It includes Ethernet and RS-232 interfaces. A USB host port lets you transfer data log files, profile configuration files and controller configuration files via flash drive. GPIB is available as an option.



Plugs in worldwide

Since the Model 155 uses a DC compressor, we are able to power the cooling and heating systems using an internal DC power supply. This allows the Model 155 to operate from 90 to 132VAC or 180 to 264VAC, 50Hz or 60Hz, with a rear panel switch for voltage range selection.



Tri-Mode Cooling Control

TestEquity's Model 155 uses a miniature DC Variable Speed Compressor and patent-pending control architecture to achieve unprecedented energy savings and robust temperature control. Patent Pending.

FEATURES

- 0.55 Cu Ft Workspace, 12"W x 8"H x 10"D
- -20°C to +130°C with 0.01°C resolution
- F4T Touch Screen Controller with Integrated Limit Controller
- Air Temperature or Part Temperature Control
- Platinum RTD Temperature Sensors for the Highest Possible Accuracy
- 3" x 1.75" Cable Slots on Left and Right Side
- Compact Size for Benchtop Use
- Non-CFC Single-Stage Refrigeration
- High Efficiency Tri-Mode Cooling for 74% Energy Savings (patent pending)
- 115/230V Input - Plugs Into Any Outlet
- 3-Year Parts, 1-Year Labor Warranty
- Made by TestEquity in Moorpark, California

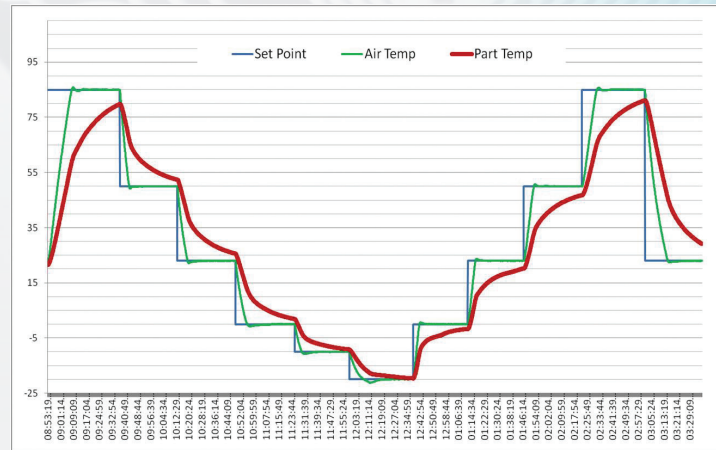
BENEFITS

TestEquity's new Model 155 Benchtop Temperature Chamber combines best-in-class energy efficiency with outstanding temperature control. Using patent-pending control architecture, it consumes 74% less energy than previous models to maintain 0°C. The chamber features a control tolerance of less than $\pm 0.08^\circ\text{C}$, operates over a range of -20°C to $+130^\circ\text{C}$ with 0.01°C display resolution, and provides 0.55 cubic feet of workspace. With the ability to control the DUT temperature directly, air temperature is precisely over-driven to achieve fast temperature settling times during transitions.

Part Temperature Control

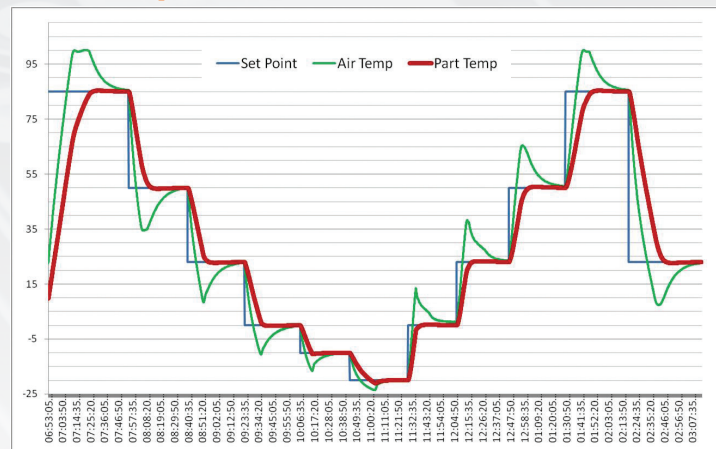
In all temperature chambers, the temperature of your DUT will always lag the air temperature due to its mass and the proximity from the air source. This causes the DUT to take a significant amount of time for its temperature to stabilize after the air temperature has reached its set point. Additionally, the DUT may never reach the desired set point temperature, especially if it is energized. Part Temperature Control eliminates these issues. Part Temperature Control allows the air temperature to be precisely "overdriven" to achieve the fastest temperature settling times.

Air Temperature Control



DUT never quite reaches the temperature setting. Longer test time if you actually wait for the DUT to reach Set Point.

Part Temperature Control



Air temperature is biased higher/lower in a precise manner for the fastest response at the DUT.



Specifications

Temperature Range	-20°C To +130°C					
Display Resolution	0.01°C					
Control Tolerance	±0.08°C, ±0.05°C typical (Short-term variations measured at the control sensor after stabilization)					
Temperature Sensor	Individual Platinum RTD sensors for air control and part temperature control					
Heat Up Transition Time	5°C/minute typical					
Cool Down Transition Time (Empty)*						
Start Temperature	End Temperature					
	+23°C	0°C	-5°C	-10°C	-15°C	-20°C
+85°C	11 min	19 min	21 min	25 min	30 min	Ultimate
+23°C	—	6 min	8 min	11 min	15 min	Ultimate
Live Load Capacity	+23°C	0°C	-5°C	-10°C	-15°C	-20°C
	200W	150W	125W	100W	75W	35W

General Specifications

Inside Dimensions	12"W x 8" H x 10"D (0.55 cubic feet)
Outside Dimensions	16.38"W x 21.88"H x 22.72"D (nominal)
Minimum Installed Clearance	12" (304mm) from the rear
Cable Slots	3" x 1.75" Cable Slot on left and right side (two total). Supplied with silicone foam plugs.
Weight	Net Weight 88 lbs. Shipping weight 126 lbs.
Input Power	90 to 132VAC/6A max. or 180 to 264VAC/3A max., 50/60Hz (rear panel switch for voltage range)

NOTE: Performance is typical and based on operation at 23°C (73°F) ambient and nominal input voltage. This product is designed for use in a normal conditioned laboratory. Due to continuous product improvement, specifications are subject to change without notice.