



## T2 Series

The Tenney T2 Temperature and Humidity Cycling Chamber simulates a wide range of temperature and humidity conditions while utilizing minimal floor space. We specifically designed these chambers to have a compact exterior and an ample interior workspace.

The T2 Temperature and Humidity Cycling Chamber design allocates space within the interior of the cabinet for all standard options. This greatly improves the mobility of the unit as well as the overall appearance.

### ► Features

- All models feature vapor-tight, continuously welded stainless steel interiors
- 3-inch port is standard on left side
- 3-inch diameter phenolic non-marking casters
- Temperature and humidity conditions are controlled with the Watlow F4T profiling type dual channel 1/4 DIN controller
- Data logging and Graphical trend chart for Watlow F4T controller
- RS 485 communications
- Low workspace height to ease the loading and unloading of product
- Accurate control and display with minimum maintenance
- Vertical recirculation conditioning system

### ► Options: \*Humidity Model Only

- RS 232 communications
- VersaTenn V touch screen controller\*
- 5 gallon water reservoir\*
- Recirculating system for humidity water\*
- Water demineralizer\*
- Additional ports
- Viewing windows up to 6" x 8" and thermal insulated
- Interior lighting
- Shelving, adjustable and removable
- Automatic CO2 or LN2 cooling boost system
- Boost heating system
- GN2 purge system
- Recording instruments
- Tempguard IV Over-temperature Protection
- External dryer for obtaining humidity levels as low as 5%\*
- NIST Calibration
- Tenney Environmental offers calibration services accredited to the ISO 17025 standard
- Additional engineered to order custom configurations available



**Baker Furnace, Blue M, Gruenberg, Lindberg/MPH,  
Lunaire, Tenney, Wisconsin Oven**

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*Specifications and Product Information are subject to change without notice.*

Model	T2C		T2RC	
Cubic Feet	2			
Liters	56			
Work Space (WxDxH)	16" x 13.5" x 16" 406mm x 343mm x 406mm		16" x 13.5" x 16" 406mm x 343mm x 406mm	
Exterior (WxDxH)	26" x 27" x 65" 660mm x 686mm x 1651mm		26" x 27" x 68" 660mm x 686mm x 1727mm	
Approx Unit Weight	495 lbs / 225 kg		565 lbs / 257 kg	
Approx Crated Weight	545 lbs / 248kg		615 lbs / 279 kg	
Cooling Rates (empty chamber) Min (°C/min)				
180°C to -65°C	111 (2.2)	ambient to -20°C	13 (3.4)	
180°C to ambient °C	48 (3.2)	ambient to -35°C	20 (2.9)	
125°C to -35°C	54 (2.9)	ambient to -40°C	26 (2.4)	
85°C to -40°C	46 (2.7)	ambient to -65°C	49 (1.8)	
85°C to 25°C	17 (3.5)	ambient to -68°C	57 (1.6)	
Heating Rates (empty chamber) Min (°C/min)				
-65°C to 180°C	100 (2.4)	-35°C to ambient	21 (2.7)	
-65°C to 25°C	32 (3.2)	-68°C to ambient	23 (4.0)	
-40°C to 25°C	37 (3.3)	ambient to 85°C	18 (3.3)	
-20°C to 85°C	32 (3.2)	ambient to 125°C	36 (2.7)	
-40°C to 85°C	37 (3.3)	ambient to 180°C	70 (2.1)	
-35°C to 180°C	104 (2.0)			
Live Load Watts @ -18°C			300	
Live Load Watts @ -40°C			200	
Live Load Watts @ -54°C			150	
Change Rates (empty chamber)				
Ambient to 200°C°	90 minutes	Ambient to -12°C	10 minutes	
Ambient to 150°C	40 minutes	Ambient to -40°C	30 minutes	
Ambient to 100°C°	25 minutes	Ambient to -54°C	45 minutes	
Ambient to 93°C	17 minutes	Ambient to -65°C	70 minutes	
Ambient to 65°C	9 minutes	Ambient to -73°C	100 minutes	
Ambient to 2°C	5 minutes	Ambient to -75°C	Ultimate	
Ambient to -7°C	7 minutes			

	T2C		T2RC	
Temperature Control	±1.0°C after stabilization			
Humidity Control	N/A		±5% RH after stabilization	
Air Flow Rate	50 CFM			
Heat Capacity	500 W			
Refrigeration	Two (2) 1/2 HP			
Humidifier	N/A		500 W-GPH 0.15	
Condenser	Air Cooled			
Condenser Discharge Air	Exits on right side of the chamber			
Heat of Rejection	Maximum 6300 BTU's per hour			
Power	120V - 1PH - 60 Hz			
Amp - Fuse	20			
Amp - Under Load	16			
NEMA Plug	Male Plug NEMA 5 - 20P			
Standard Ports Included (loc)	3" Standard Port w/ Plug centered left sidewall			
Decibel Level	Less than 58 dBa as measured 3 feet from chamber, 5 feet from the floor at right angles			
Load Per Shelf	10 lbs / 5 kg per shelf (Maximum chamber load including shelf and floor load not to exceed 50 lbs / 23 kg)			
Number of Shelves Standard	None			
Max Number of Shelves	4 Shelves			
Shelf Spacing	2" / 50mm on Pilasters			
Chamber Spacing Requirement	18" / 458mm on all sides			
Floor Load Rating	50 lbs / 23 kg			
Temperature Range				
Standard Temperature Range	-68°C to 180°C			
Optional Temperature Range	-75°C to 200°C		-75°C to 180°C	
Humidity Range	N/A		20% to 95% in the dry bulb range of +20°C to 85°C as limited by a 5°C dewpoint	

Performance is based upon an empty chamber operating at 24°C (75°F) ambient air.  
On 50Hz or higher than 24°C ambient, performance may be reduced. Consult factory regarding any special cooling requirements.