

## THERMAL CHAMBERS - ACCURACY, STABILITY AND RELIABILITY

NOVONIX's line of thermal chambers are optimized for accuracy, stability, and reliability. Paired with UHPC channels, these thermal chambers complete our turnkey UHPC offering, and keep your testing programs on track. Various chamber options are available to meet your test temperature, cell format, and available power supply requirements.

Contact us to learn more about how UHPC technologies can improve your materials development and battery testing programs: [sales@novonix.ca](mailto:sales@novonix.ca)

### 16 POSITION, 2A CHAMBER

Part Numbers: TCA-PLS-10-56 | TCA-PLS-12-56 | TCA-PLS-23-56

#### Performance Features:

Accuracy At 20°C: ±0.2°C  
Accuracy At 0°C: N/A  
Point Stability At 20°C: ±0.02°C  
Point Stability At 0°C: N/A  
Set Point Resolution: 0.0  
Min. Temp. Set Point: 10°C Below Ambient  
Max. Temp. Set Point: 80°C  
Required Lab Temp Range: 18°C to 28°C  
Required Lab Temp Stability: ±1°C  
Max. Power Draw (VA) : 690  
Power Supply Options: 100V, 120V and 230V  
Heating Method: Resistive  
Cooling Method: Peltier Cooler  
Set Point Temperature Range: 10°C to 80°C



#### Physical Features:

Weight (Lbs): 65  
External Dimensions WxHxD (In): 17.1" x 17.5" x 17.5"  
Internal Dimensions WxHxD (In): 14.2" x 11" x 11.25"  
Bench and Rack Mountable? Yes  
Rack Space (U): 10U  
Integrated Cell Holders? No  
External Connector: 208131-1  
Internal Connector: 443000800

### 8 POSITION, 20A CHAMBER

Part Numbers: TCA-PHC-10-56 | TCA-PHC-12-56 | TCA-PHC-23-56

#### Performance Features:

Accuracy At 20°C: ±0.2°C  
Accuracy At 0°C: N/A  
Point Stability At 20°C: ±0.02°C  
Point Stability At 0°C: N/A  
Set Point Resolution: 0.0  
Min. Temp. Set Point: 10°C Below Ambient  
Max. Temp. Set Point: 80°C  
Required Lab Temp Range: 18°C to 28°C  
Required Lab Temp Stability: ±1°C  
Max. Power Draw (VA) : 690  
Power Supply Options: 100V, 120V and 230V  
Heating Method: Resistive  
Cooling Method: Peltier Cooler  
Set Point Temperature Range: 10°C to 80°C



#### Physical Features:

Weight (Lbs): 65  
External Dimensions WxHxD (In): 17.1" x 17.5" x 17.5"  
Internal Dimensions WxHxD (In): 14.2" x 11" x 11.25"  
Bench and Rack Mountable? Yes  
Rack Space (U): 10U  
Integrated Cell Holders? Yes  
External Connector: 208131-2  
Internal Connector: Cylindrical

### 4 POSITION, 20A CHAMBER

Part Numbers: TCA-PHL-10-56 | TCA-PHL-12-56 | TCA-PHL-23-56

#### Performance Features:

Accuracy At 20°C: ±0.5°C  
Accuracy At 0°C: N/A  
Point Stability At 20°C: ±0.05°C  
Point Stability At 0°C: N/A  
Set Point Resolution: 0.0  
Min. Temp. Set Point: 10°C Below Ambient  
Max. Temp. Set Point: 80°C  
Required Lab Temp Range: 18°C to 28°C  
Required Lab Temp Stability: ±1°C  
Max. Power Draw (VA) : 690  
Power Supply Options: 100V, 120V and 230V  
Heating Method: Resistive  
Cooling Method: Peltier Cooler  
Set Point Temperature Range: 10°C to 80°C



#### Physical Features:

Weight (Lbs): 90  
External Dimensions WxHxD (In): 17.1" x 14.5" x 21.4"  
Internal Dimensions WxHxD (In): 14.2" x 12.5" x 15"  
Bench and Rack Mountable? Yes  
Rack Space (U): 10U  
Integrated Cell Holders? No  
External Connector: 213893-2  
Internal Connector: 213893-2

### 16 POSITION, 2A WRC

Part Numbers: TCA-WLS-10-50 | TCA-WLS-12-60 | TCA-WLS-23-50 | TCA-WLS-23-60

#### Performance Features:

Accuracy At 20°C: ±1.0°C  
Accuracy At 0°C: ±0.7°C  
Point Stability At 20°C: ±0.1°C  
Point Stability At 0°C: ±0.06°C  
Set Point Resolution: 0.0  
Min. Temp. Set Point: (-20)°C  
Max. Temp. Set Point: 80°C  
Required Lab Temp Range: 15°C to 20°C  
Required Lab Temp Stability: ±1°C  
Max. Power Draw (VA) : 1265  
Power Supply Options: 100V (50Hz), 120V (60Hz), 230V (50Hz) and 230V (60Hz)  
Heating Method: Resistive  
Cooling Method: Condensing Unit (R-404A)  
Set Point Temperature Range: -20°C to 80°C



#### Physical Features:

Weight (Lbs): 135  
External Dimensions WxHxD (In): 17.1" x 17.5" x 37.8"  
Internal Dimensions WxHxD (In): 14.2" x 11" x 11.25"  
Bench and Rack Mountable? Yes  
Rack Space (U): 10U  
Integrated Cell Holders? No  
External Connector: 208131-1  
Internal Connector: 443000800

### 4 POSITION, 20A WRC

Part Numbers: TCA-WHL-10-50 | TCA-WHL-12-60 | TCA-WHL-23-50 | TCA-WHL-23-60

#### Performance Features:

Accuracy At 20°C: ±1.0°C  
Accuracy At 0°C: ±0.8°C  
Point Stability At 20°C: ±0.1°C  
Point Stability At 0°C: ±0.07°C  
Set Point Resolution: 0.0  
Min. Temp. Set Point: (-20)°C  
Max. Temp. Set Point: 80°C  
Required Lab Temp Range: 15°C to 20°C  
Required Lab Temp Stability: ±1°C  
Max. Power Draw (VA) : 1265  
Power Supply Options: 100V (50Hz), 120V (60Hz), 230V (50Hz) and 230V (60Hz)  
Heating Method: Resistive  
Cooling Method: Condensing Unit (R-404A)  
Set Point Temperature Range: -20°C to 80°C



#### PHYSICAL FEATURES:

Weight (Lbs): 155  
External Dimensions WxHxD (In): 17.1" x 17.5" x 37.8"  
Internal Dimensions WxHxD (In): 14.2" x 12.5" x 15"  
Bench and Rack Mountable? Yes  
Rack Space (U): 10U  
Integrated Cell Holders? No  
External Connector: 213893-2  
Internal Connector: 213893-2

## Common Safety Questions

### 1. Is the chamber airtight?

We chose not to design our chamber to be airtight, however, they are very well sealed and have excellent temperature accuracy and stability specification.

### 2. Do the chambers have safety certifications?

All our chambers are CE (Conformité Européenne) certified. If you have specific chamber safety requirements, we can assist in sourcing the right option for your needs.

### 3. How does the door fasten shut?

NOVONIX's chambers have their hinges on the left-hand side, swing outward, and use a Compression door latch (A7-10-301-20).

### 4. Do they have an automatic shut-off?

Our chambers have an automatic shut-off triggered at 85°C, five degrees above their maximum set-point.

### 5. Are there other safety features?

Our UHPC cyclers and their software have various additional safety features. Please see UHPC specifications for more detail on how these products work together.