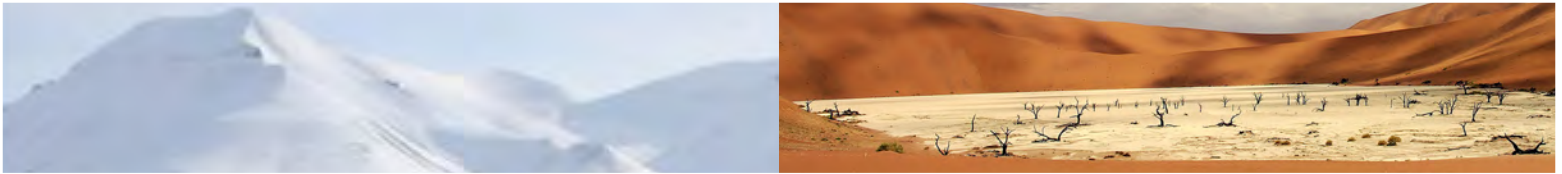




## Series 4-2168

## User Guide



Tested To Extremes



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# SPECIFICATION SHEET

## Series 4-2168



### Product Overview

The longest-duration passive thermal shipper available, up to seven days of control.

Validated to hold chilled medical materials at a safe temperature for 168 hours for safety-assured transport in the 1° to 10°C and 2° to 8°C range. Outer removable TIC® Insert with matching lid, bottom panels and hinged sidewall that folds flat and inner removable TIC® Insert have integrated 4°C PCM and are preconditioned in a -18°C or colder freezer for most shipping situations.

### Specifications

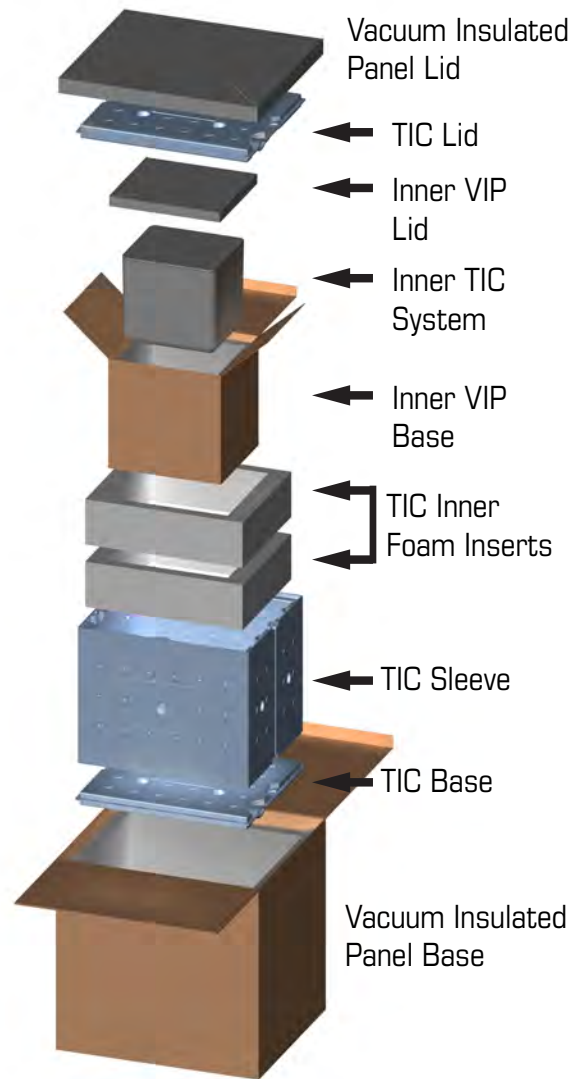
Temperature Range	Within 1° - 10°C
Payload Capacity (Liters/Cubic Inches)	2/127.5
Payload Area Dimensions (LxWxH)	6"x5"x4.25
Exterior Dimensions (LxWxH)	17.5"x13.5"x12.5"
Tare Weight	37 LBS
Thermal Performance (ISTA Summer Profile)	168+ Hrs
Insulator	Vacuum Insulated Panels

### Ensuring Consistent Performance

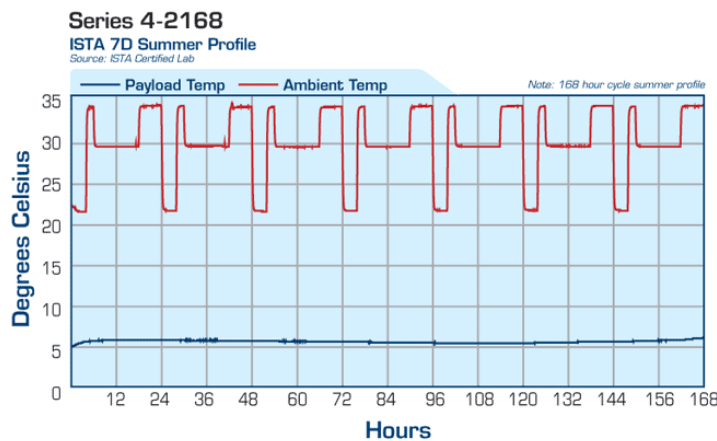
Exterior Ambient Conditions	Holds Payload 2° - 8°C
ISTA 7D summer shipping profile	168+ Hours
ISTA 7D winter shipping profile	120+ Hours
*Performance based on full payload preconditioned at 4°C	

- Always precondition TIC System before use according to instructions on TIC lid.
- Ensure all components are clean and not damaged.
- Follow assembly instructions printed on outside corrugate box.
- After loading, avoid opening container unnecessarily.
- Ensure both TIC lid and VIP lid are secure before sealing for transport.

### Product Components



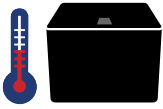
### ISTA Testing Performance



ISTA Profile: ISTA (International Safe Transit Association) provides performance testing standards, training and education. The ISTA 7D shipping profiles simulate typical temperature ranges for summer (22° to 35° C) and winter (-10° to 18° C) conditions. For more information, visit [www.ista.org](http://www.ista.org).



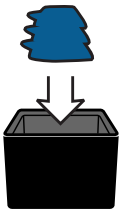
1



### Precondition Inner TIC® System

- Remove TIC® (Thermal Isolation Chamber) System (lid and base) from VIP (Vacuum Insulated Panel) base by pulling open tab on front of corrugated box and removing silver VIP lid.
- Precondition TIC System in a refrigerator between 4° and 8°C for 4 to 8 hours. Verify that the refrigerant is liquid.

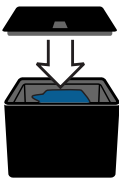
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### Load Payload

- Ensure payload (product to be shipped) is preconditioned at 4°C before loading into TIC base. Do not overpack.
- Add non-insulating filler to fill empty payload space to prevent contents from shifting during transit.

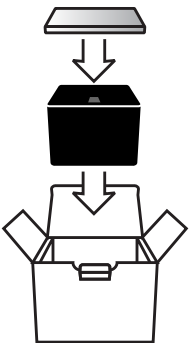
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### Secure TIC System

- Place TIC lid over payload, ensuring lid lies flat without forcing onto TIC base.

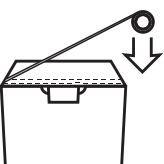
4



### Assemble Credo Container

- Lower TIC System into VIP base and place VIP lid over TIC, making sure both lids lie flat and level.

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### Close and Seal Container

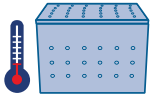
- Close and seal box with packing tape where indicated.

# USING YOUR CREDO THERMAL PACKAGING SOLUTION

## Series 4-2168



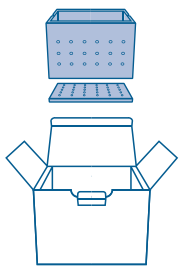
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### Precondition Outer TIC® System

- Remove TIC® (Thermal Isolation Chamber) System (lid, base and sleeve) from VIP (Vacuum Insulated Panel) base by pulling open tab on front of corrugated box and removing silver VIP lid.
- Precondition TIC System at  $-18^{\circ}\text{C}$  (or colder) for a minimum of 12 hour. Separate TIC lid, base and sleeve during preconditioning.

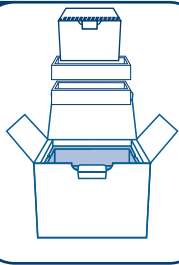
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### Assemble TIC Base and Sleeve

- After surface frost has melted insert the TIC base into the insulator base.
- Insert TIC sleeve into the insulator by pressing in on the two long ends of the panel to open into a cube.

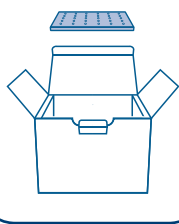
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### Load Inner Chamber

- Ensure that the custom foam inserts are not broken.
- Insert the already assembled inner Credo system into the custom foam inserts. Do not force as this can break the custom foam inserts.

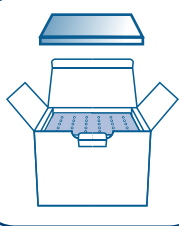
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### Insert TIC lid

- Place TIC lid over payload area making sure it rests flat without forcing.

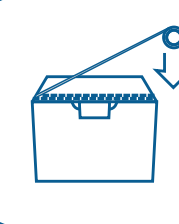
10



### Insert Insulator lid

- Place Insulator lid over payload area making sure it rests flat without forcing.

11



### Close and Seal Container

- Close and seal box with packing tape where indicated.



### How to clean Credo components:

- TIC® System (lid and base): The TIC lid and base can be cleaned using warm water and soap or alcohol. Sterilization can be performed using alcohol or other salt-based disinfectants.
- VIP Base and Lid: VIP base and lid can be cleaned using a damp rag with soap or a rag with alcohol. Avoid removing VIP base from outer corrugated box unless corrugated or VIP is damaged and needs to be replaced.
- DO NOT:
  1. Autoclave any of the components.
  2. Use any volatile organic compounds such as acetone or methyl ethyl ketone on any of the components.
  3. Expose any of the TIC components or VIPs to extreme heat (+75° C or above).

### How to validate thermal compliance:

Minnesota Thermal Science offers certified PC based temperature data loggers that fit inside the container and provide accurate, continuous time and temperature data in Excel format. Reference our white paper “Best Practices for Validating Thermal Performance” to validate or compare the performance of any packaging solution.

### Where to find transportation validation information:

This container has been ISTA transportation certified. A validation statement can be found on the bottom of the outer corrugated box.

### How to verify components are working properly:

Any packaging solution should be periodically checked to ensure all components are working properly. Reference our white paper “Best Practices for Validating Thermal Performance” to validate or compare the performance of any packaging solution.

### How to inspect and replace Vacuum Insulated Panels (VIPs)

The Vacuum Insulation Panels (VIPs) inside Credo containers are extremely effective as long as they hold an interior vacuum. Inspect TIC lid and TIC base surfaces to ensure they are gripped tight. Another indicator of a compromised panel is a loss of rigidity. A loose skin or non-rigid panel indicates vacuum loss and the product should be returned for refurbishment.

The VIP lid and VIP base will expire and should be replaced before expiration date printed on each panel. Call 1-877-537-9800 if a component needs refurbishment.