

TSU-4RW-N6\*

# High Performance Undercounter Refrigerator

+2 to +8°C Undercounter Refrigerator

3.0 cu.ft. | 85 L



TSU-4RW-N6

TSU-4RW-N6 high performance undercounter refrigerators are designed to meet current and evolving CDC guidelines for vaccine storage. The TSU-4RW-N6 is capable of maintaining the 5°C setpoint standard for storing vaccines with a +/- uniformity of 3°C to better reduce the risk of freezing vital vaccines and biologics. Built with accessibility in mind, this unit is ADA compliant and engineered with a glass door for easy visibility of stored contents.

## Meeting Regulatory Standards

Current and emerging guidelines from the CDC involve strict storage requirements for vaccines and biologics. The TSU-4RW-N6 is purpose-designed to meet these evolving guidelines as they pertain to temperature control, uniformity, and recovery. This unit is UL 471 listed, and meets all electrical standards required by most equivalent Nationally Recognized Testing Laboratories (NRTL).

## Ease of Use and Accessibility

With a compact footprint, the TSU-4RW-N6 is designed to be incorporated in ADA compliant workspaces, and fits under most tables, cabinets, and lab benches. A convenient glass door provides visibility into the interior of the unit to avoid unnecessary door openings. In the event an open door is forgotten, the self-closing door will mitigate scenarios that could result in lost product. An optional stacking accessory is available to maximize storage capacity when space constraints become an issue.

## Temperature Uniformity Ensures Product Safety

Strict temperature control keeps stored product within the CDC recommended 2-8°C temperature range for optimal vaccine storage. Many vaccines risk inactivation if allowed to freeze. The TSU-4RW-N6 is designed to prevent interior temperature from dropping below 2°C at any location within the cabinet, even if the unit is empty. By contrast, interior temperatures are engineered to cool back to setpoint temperatures within 15 minutes of a 3 minute door opening.



## Display and Monitoring

A buffered temperature probe and temperature display in 0.1°C increments give users temperature readings of product stored—all in real time. Easy-to-use touchpad display, and microprocessor controller provide dependable control of interior setpoints, while an electronic key lock prevents accidental setpoint changes.



## Security and Alarm Notification

High and low temperature alarms notify users when temperature excursion events are occurring. A physical key lock at the top of the unit makes the unit ergonomic for locking and possible to store important samples and controlled substances.



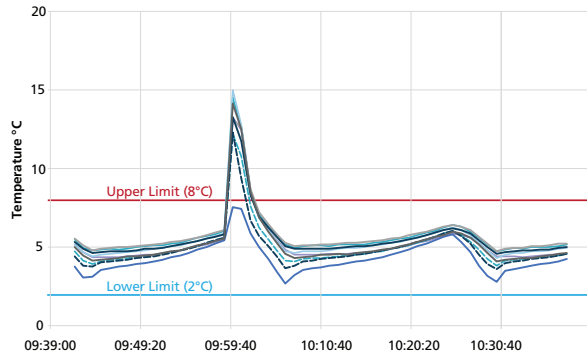
## Stable Performance

This undercounter refrigerator is engineered for stable, reliable performance. Its natural defrost cycle occurs seamlessly during regular operation, minimizing disruption and maintaining consistent temperatures—similar to our other cycle defrost products. The unit also uses HC refrigerants, which meet EPA SNAP guidelines for reduced environmental impact.

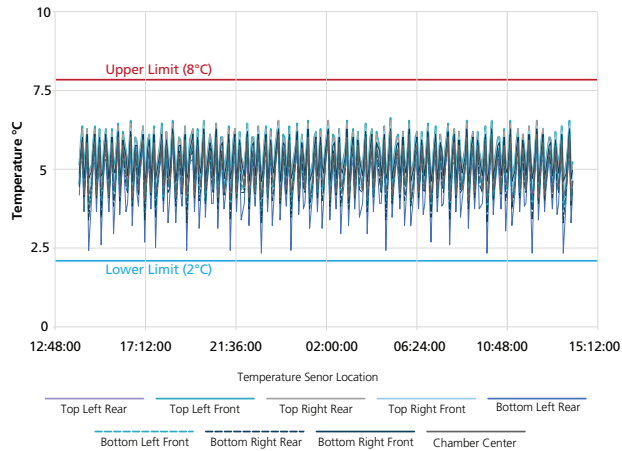
# High Performance Undercounter Refrigerator

TSU-4RW-N6\*

## Door Opening Recovery, 1 Minute

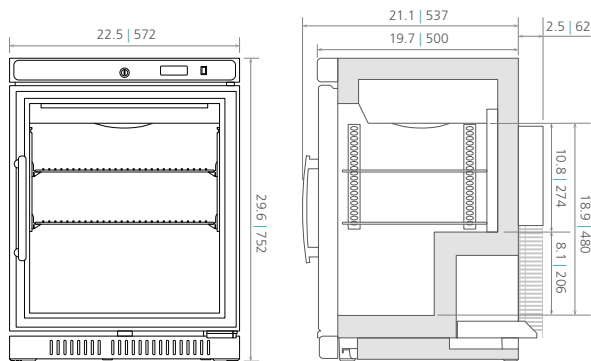


## Uniformity, Steady State, 5°C



## Dimensions

Unit : inch | mm



| Model Number                                     |                                                                                       | TSU-4RW-N6                                                  |
|--------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Exterior Dimensions (W x D x H) <sup>1)</sup>    | inches   mm                                                                           | 22.5 x 22.1 x 29.6   572 x 562 x 751                        |
| Interior Dimensions (W x D x H)                  | inches   mm                                                                           | 18.5 x 14.6 x 18.9   471 x 370 x 480                        |
| Volume                                           | cu.ft.   liters                                                                       | 3.0   85                                                    |
| Net Weight                                       | lbs   kg                                                                              | 114   52                                                    |
| Performance                                      |                                                                                       |                                                             |
| Temperature Control Range (Preset)               | °C                                                                                    | +3 to +7 (+5)                                               |
| Uniformity                                       | °C                                                                                    | ±3                                                          |
| Power Consumption <sup>2)</sup>                  | kWh/Day                                                                               | 1.06                                                        |
| BTU Nominal                                      | btu/hr                                                                                | 596                                                         |
| Noise Level <sup>3)</sup>                        | dB(A)                                                                                 | 52                                                          |
| Control                                          |                                                                                       |                                                             |
| Controller                                       |                                                                                       | Microprocessor (one control probe and one monitor probe)    |
| Display                                          |                                                                                       | LED                                                         |
| Temperature Set Method                           |                                                                                       | Touchpad                                                    |
| Temperature Sensor                               |                                                                                       | Thermistor                                                  |
| Refrigeration                                    |                                                                                       |                                                             |
| Refrigeration System                             |                                                                                       | Forced air (fin and tube)                                   |
| Compressor                                       | W                                                                                     | (1) 174                                                     |
| Refrigerant                                      |                                                                                       | R-600a                                                      |
| Defrost                                          |                                                                                       | Automatic cycle                                             |
| Insulation Material, SNAP Compliant              |                                                                                       | Rigid polyurethane, foamed-in-place, low GWP (cyclopentane) |
| Insulation Thickness                             | inches   mm                                                                           | Right, left, back, top: 2.0   50<br>Bottom: 2.2   55        |
| Construction                                     |                                                                                       |                                                             |
| Exterior Material                                |                                                                                       | Painted steel                                               |
| Interior Material                                |                                                                                       | Painted steel with stainless steel floor                    |
| Outer Door                                       | qty                                                                                   | 1 (glass, self closing)                                     |
| Key Lock                                         | qty                                                                                   | Standard door lock                                          |
| Wire Shelves, Vinyl Coated                       | qty                                                                                   | 2 (adjustable)                                              |
| Shelf Dimension (W x D)                          | inches   mm                                                                           | 17.3 x 14.0   440 x 355                                     |
| Max. Load Per Shelf                              | lbs   kg                                                                              | 26.5   12                                                   |
| Access Port                                      | qty                                                                                   | 1 (standard)                                                |
| Access Port Position                             |                                                                                       | Bottom of back of product                                   |
| Access Port Diameter                             | inches   mm                                                                           | 0.6   16                                                    |
| Leveling Feet                                    | qty                                                                                   | 4                                                           |
| Alarms (V=Visual, B=Buzzer)                      |                                                                                       |                                                             |
| High Temperature                                 |                                                                                       | V-B                                                         |
| Low Temperature                                  |                                                                                       | V-B                                                         |
| Door Alarm                                       |                                                                                       | V-B                                                         |
| Diagnostics                                      |                                                                                       | V                                                           |
| Electrical and Noise Level                       |                                                                                       |                                                             |
| Power Supply                                     |  | NEMA 5-15P, 115V 60 hz,<br>9 ft cord length                 |
| Options                                          |                                                                                       |                                                             |
| 4-20mA Analog Output                             |                                                                                       | MTR420MAC- Equipment Powered *   MTR420MAL- Loop Powered*   |
| Blackout Panel                                   |                                                                                       | BPANELTSU*                                                  |
| Stacking Kit                                     |                                                                                       | TSU-4RW STKBRACKET*                                         |
| Optional Communication System                    |                                                                                       |                                                             |
| Wireless, Cloud-Based, Automatic Data Management |                                                                                       | LabSVIFT™ (Gen 1)   LabAlert®*   V-SafeRX*                  |
| Certifications and Warranty                      |                                                                                       |                                                             |
| Certification                                    |                                                                                       | UL                                                          |
| Warranty <sup>3)</sup>                           |                                                                                       | 2 years parts and labor                                     |

<sup>1)</sup> External dimensions of main cabinet only. Depth is 23.6" (600 mm) including the door handle

<sup>2)</sup> Steady state at +5°C as tested by 3rd party testing agency.

<sup>3)</sup> Current warranty offered at time of printing and may be subject to change; US and Canada only

Specifications are subject to change without notice.

For latest specification information contact PHC Corporation of North America at [info@us.phchd.com](mailto:info@us.phchd.com).  
Performance data herein is based on independent testing at time of publication

\*TSU-4RW-N6 is manufactured by Turbo Air Inc. and distributed by PHC Corporation of North America.

\* Products manufactured by others.



PHC Corporation of North America  
1300 Michael Drive, Suite A, Wood Dale, IL 60191  
Toll Free USA (800) 858-8442, Fax (630) 238-0074  
[www.phchd.com/us/biomedical](http://www.phchd.com/us/biomedical)