


## Thermo Scientific Revco PLUS Ultra-Low Temperature Chest Freezers

Maximizing Critical Sample Protection and Storage



# Safeguarding your precious samples with advanced technology and exceptional quality

Thermo Scientific Revco PLUS ultra-low temperature freezers combine the highest reliability and superior performance with cost-effective operation and innovative features. Our Revco® PLUS chest freezers feature an advanced technology platform, refrigeration system, microprocessor controls and high-quality construction.

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# Innovative Features and Rewarding Benefits

Easy to use microprocessor control programs temperature/ alarm set points and on-board diagnostics

PLUS Power Management System with low voltage surge protection and buck/boost capabilities

Ergonomically designed handle minimizes the effort required during freezer openings and closings

State-of-the-art, robust refrigeration system improves temperature control for more consistent temperature cycling and recovery, resulting in a more stable temperature for safer sample protection

Easy to clean, stainless steel interior



Optional seven day, 6" (152 mm) circular chart recorder for validation and regulatory requirements. Check with your sales representative for details.

Convenient, hinged air filter grill allows easy access for inspection, cleaning and/or changing

Robust cabinet design constructed of high-strength steel with a corrosion-resistant coating for long-life durability

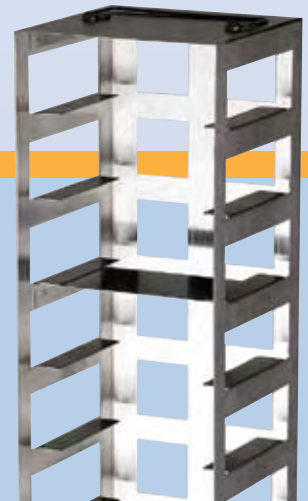
Heavy duty casters with locking tandem wheel design for easy, smooth mobility



Inner sub-lids protect bulk samples from ambient exposure during single sample retrievals



Optional stainless steel inventory racks with fiberboard boxes and dividers for sample protection



# Easy to use microprocessor control

**Mode:** Select run, settings, calibrate or configuration mode

**Temperature:** Displays actual and sample probe (optional) temperatures

**Audible/Visual Alarm**

**Low Battery and Hot Condenser Indicators**



**Message Center:** 12-character, alphanumeric LED displays setpoints, "SYSTEM OK" during operation and other messages

**Settings:** Set cabinet temperature, setpoint, overtemp alarm, undertemp alarm and back-up system temperature (optional)

**Calibrate:** calibrate control, probe temperature and sample probe temperature (optional)

**Configuration:** Configure access code, serial output, temperature alarm test and system battery test

## Additional Features:

RS-232 and 4-20 milliamp analog outputs are standard. The 4-20 milliamp output is a common analog output used to provide temperature data to independent monitoring devices and recorders.

Lifeguard Enviro-Scan microprocessor control/monitoring system for easy setup, programming and monitoring.

- Highly visible display, intuitive controls and simplified programming for easy setup, programming and to check and monitor parameters and conditions
- Personal access code to ensure setpoint security
- Numerous audible/visual alarms (power failure, high/low temp, door ajar, condenser hot, probe failure, etc.) as well as high/low alarm test offer peace of mind monitoring for sample protection





12.7 cu. ft. model



3 cu. ft. model






### Ultra-Low Temperature Chest Freezers Temperature Range -50° C to -86° C

| Model Number | Capacity<br>cu. ft. (L) | Plug/Receptacle | Electrical        | Amps/Breaker | Interior Dimensions<br>H x W x D<br>inches (mm) | Exterior Dimensions<br>H x W x D<br>inches (mm) | Shipping<br>Weight<br>lbs (kg) |
|--------------|-------------------------|-----------------|-------------------|--------------|---|---|--------------------------------|
| ULT390-10-A  | 3.0 (84.9)              | NEMA 5-20       | 120V 60 Hz 1Ø     | 10.5/20      | 16.5 x 18.5 x 18.5<br>(419 x 470 x 470)         | 43.8 x 28.5 x 28.8<br>(1113 x 724 x 732)        | 432 (196)                      |
| ULT390-10-V  |                         | European        | 230V 50 Hz 1Ø     | 5.4/15       |   |   |                                |
| ULT390-10-W  |                         | British         | 230V 50 Hz 1Ø     | 5.4/15       |   |   |                                |
| ULT1390-10-A | 12.7 (359.6)            | NEMA 5-20       | 120V 60 Hz 1Ø     | 16/20        | 28.0 x 42.5 x 18.5<br>(711 x 1080 x 470)        | 40.5 x 72.0 x 28.8<br>(1029 x 1829 x 732)       | 716 (324.8)                    |
| ULT1390-10-D |                         | NEMA 6-15       | 208/230V 60 Hz 1Ø | 12/15        |   |   |                                |
| ULT1390-10-V |                         | European        | 230V 50 Hz 1Ø     | 12/15        |   |   |                                |
| ULT1390-10-W | 17.0 (481.4)            | British         | 230V 50 Hz 1Ø     | 12/15        | 28.0 x 58.8 x 18.5<br>(711 x 1494 x 470)        | 40.5 x 87.6 x 28.8<br>(1029 x 2225 x 732)       | 821 (372.4)                    |
| ULT1790-10-A |                         | NEMA 5-20       | 120V 60 Hz 1Ø     | 16/20        |   |   |                                |
| ULT1790-10-D |                         | NEMA 6-15       | 208/230V 60 Hz 1Ø | 12/15        |   |   |                                |
| ULT1790-10-V | 20.0 (566.3)            | European        | 230V 50 Hz 1Ø     | 12/15        | 28.0 x 66.5 x 18.5<br>(711 x 1689 x 470)        | 40.5 x 96.0 x 28.8<br>(1029 x 2438 x 732)       | 833 (377.8)                    |
| ULT1790-10-W |                         | British         | 230V 50 Hz 1Ø     | 12/15        |   |   |                                |
| ULT2090-10-A |                         | NEMA 5-20       | 120V 60 Hz 1Ø     | 16/20        |   |   |                                |
| ULT2090-10-D | 20.0 (566.3)            | NEMA 6-15       | 208/230V 60 Hz 1Ø | 12/15        | 28.0 x 66.5 x 18.5<br>(711 x 1689 x 470)        | 40.5 x 96.0 x 28.8<br>(1029 x 2438 x 732)       | 833 (377.8)                    |
| ULT2090-10-V |                         | European        | 230V 50 Hz 1Ø     | 12/15        |   |   |                                |
| ULT2090-10-W |                         | British         | 230V 50 Hz 1Ø     | 12/15        |   |   |                                |

### Ultra-Low Temperature Chest Freezers Temperature Range -10°C to -40°C

| Model Number | Capacity<br>cu. ft. (L) | Plug/Receptacle | Electrical        | Amps/Breaker | Interior Dimensions<br>H x W x D<br>inches (mm) | Exterior Dimensions<br>H x W x D<br>inches (mm) | Shipping<br>Weight<br>lbs (kg) |
|--------------|-------------------------|-----------------|-------------------|--------------|---|---|--------------------------------|
| ULT350-10-A  | 3.0 (84.9)              | NEMA 5-15       | 120V 60 Hz 1Ø     | 5/15         | 16.5 x 18.5 x 18.5<br>(419 x 470 x 470)         | 43.8 x 28.5 x 28.8<br>(1113 x 724 x 732)        | 395 (179.5)                    |
| ULT350-10-V  |                         | European        | 230V 50 Hz 1Ø     | 3/15         |   |   |                                |
| ULT350-10-W  |                         | British         | 230V 50 Hz 1Ø     | 3/15         |   |   |                                |
| ULT1350-10-A | 12.7 (359.6)            | NEMA 5-20       | 120V 60 Hz 1Ø     | 10/20        | 28.0 x 42.5 x 18.5<br>(711 x 1080 x 470)        | 40.5 x 72.0 x 28.8<br>(1029 x 1829 x 732)       | 659 (299.5)                    |
| ULT1350-10-D |                         | NEMA 6-15       | 208/230V 60 Hz 1Ø | 6.5/15       |   |   |                                |
| ULT1350-10-V |                         | European        | 230V 50 Hz 1Ø     | 6.5/15       |   |   |                                |
| ULT1350-10-W | 17.0 (481.4)            | British         | 230V 50 Hz 1Ø     | 6.5/15       | 28.0 x 58.8 x 18.5<br>(711 x 1494 x 470)        | 40.5 x 87.6 x 28.8<br>(1029 x 2225 x 732)       | 764 (347.3)                    |
| ULT1750-10-A |                         | NEMA 5-20       | 120V 60 Hz 1Ø     | 10/20        |   |   |                                |
| ULT1750-10-D |                         | NEMA 6-15       | 208/230V 60 Hz 1Ø | 6.5/15       |   |   |                                |
| ULT1750-10-V | 20.0 (566.3)            | European        | 230V 50 Hz 1Ø     | 6.5/15       | 28.0 x 66.5 x 18.5<br>(711 x 1689 x 470)        | 40.5 x 96.0 x 28.8<br>(1029 x 2438 x 732)       | 776 (352.7)                    |
| ULT1750-10-W |                         | British         | 230V 50 Hz 1Ø     | 6.5/15       |   |   |                                |
| ULT2050-10-A |                         | NEMA 5-20       | 120V 60 Hz 1Ø     | 10/20        |   |   |                                |
| ULT2050-10-D | 20.0 (566.3)            | NEMA 6-15       | 208/230V 60 Hz 1Ø | 6.5/15       | 28.0 x 66.5 x 18.5<br>(711 x 1689 x 470)        | 40.5 x 96.0 x 28.8<br>(1029 x 2438 x 732)       | 776 (352.7)                    |
| ULT2050-10-V |                         | European        | 230V 50 Hz 1Ø     | 6.5/15       |   |   |                                |
| ULT2050-10-W |                         | British         | 230V 50 Hz 1Ø     | 6.5/15       |   |   |                                |

## Thermo Scientific Inventory Storage Racks for Chest Freezers

|   | Cat No. | Description<br>W x D x H inches (mm)                 | Freezer Vol.<br>cu. ft. (L)        | 2" Boxes       | 3" Boxes    | Racks/Freezer  |
|---|---------|--|------------------------------------|----------------|-------------|----------------|
| <b>Racks with Handles</b>   |         |  |                                    |                |             |                |
|    | 398184  | 2" box rack<br>5.5 x 16 x 5.5<br>(140 x 406 x 140)   | 3 (85)                             | 7              | -           | 9              |
|    | 398185  | 2" box rack<br>5.5 x 16 x 5.5<br>(140 x 406 x 140)   | 3 (85)                             | -              | 5           | 9              |
|   | 398186  | 2" box rack<br>5.5 x 26.5 x 5.5<br>(140 x 673 x 140) | 12.7 (360)<br>17 (481)<br>20 (566) | 12<br>12<br>12 | -<br>-<br>- | 21<br>29<br>33 |
|  | 398187  | 3" box rack<br>5.5 x 26.5 x 5.5<br>(140 x 673 x 140) | 12.7 (360)<br>17 (481)<br>20 (566) | -<br>-<br>-    | 8<br>8<br>8 | 21<br>29<br>33 |
| <b>Microplate Rack with Handle</b>  |         |  |                                    |                |             |                |
|  | 398188  | 27 position<br>5.3 x 25.8 x 3.6<br>(135 x 655 x 91)  | 12.7 (360)<br>17 (481)<br>20 (566) | -<br>-<br>-    | -<br>-<br>- | 33<br>48<br>51 |

## Chest Freezers Accessories

| Cat. No.   | Description:  |
|--|---|
| <b>Seven Day, 6" Temperature Chart Recorders (-100°C to +38°C)</b>                 |   |
| 398219   | Customer installed 6 inch, 7 day chart recorder for ULT390-10 with felt pen and box of recorder paper*  |
| 398220   | Factory installed 6 inch, 7 day chart recorder for ULT390-10 with felt pen and box of recorder paper  |
| 398221   | Customer installed 6 inch, 7 day chart recorder for 12.7,17, 20 cu. ft. models with felt pen and box of recorder paper*   |
| 398222   | Factory installed 6 inch, 7 day chart recorder for 12.7,17, 20 cu. ft. models with felt pen and box of recorder paper   |
| 398191   | Chart paper, 50 charts per box  |
| 398192   | Red felt-tip replacement pen for chart recorder   |
| 398193   | Blue felt-tip replacement pen for chart recorder  |
| <b>Safety Back-Up Systems</b>  |   |
| 398196   | Deluxe CO <sub>2</sub> back-up, factory pre-installed   |
| 398197   | Deluxe CO <sub>2</sub> back-up, customer installed*   |
| 398198   | LN <sub>2</sub> back-up, factory pre-installed  |
| 398199   | LN <sub>2</sub> back-up, customer installed*  |
| <b>Sensaphone® Telephone Dialing System (not available for sales requiring CE)</b> |   |
| 398203   | Monitors up to four inputs (channels) and dials up to four numbers 120V/60 Hz   |
| 398204   | Monitors up to eight inputs (channels) and dials up to eight numbers 120V/60 Hz   |
| 398205   | Monitors up to four inputs (channels) and dials up to four numbers 220V 50/60 Hz  |
| 398206   | Monitors up to eight inputs (channels) and dials up to eight numbers 220V 50/60 Hz  |
| <b>Digital Temperature, Power Monitors and Alarms</b>                              |   |
|  | The Digital Temperature/Power Monitor, which can be mounted to your equipment, includes one temperature probe encased in a stainless steel sheath with a 20 ft. (6.1m) lead wire. Monitoring range is -135°C to 99°C (-211°F to 210.2°F). Indicator lights exist for power, normal operation and alarm. Audible alarm also sounds if a power failure or alarm condition occurs. |
| 398207   | 120V/60 Hz  |
| 398208   | 230V/50 Hz  |
| 398209   | Audible/visual temp/power monitor 120/60 Hz   |
| 398211   | 120/60 Hz audible signal signal 1.5"  |
| 398212   | 230/50 Hz audible signal 1.5"   |
| <b>Data Outputs</b>  |   |
| 398213   | RS-232, 0-1V option   |
| 398214   | RS-485, 0-1V option   |
| 398215   | RS-485, 0-5V option   |
| <b>Systems Replacement Air Filters</b>   |   |
| 398216   | Replacement air filter for 3 cu. ft. (84.9L) chests   |
| 398217   | Replacement air filter for 12.7, 17 and 20 cu. ft. (359.6L, 481.4, and 566.3L) chests   |
| <b>Access Port</b>   |   |
| 398218   | Access port, 1.3" inside diameter, factory installed  |

Speak with your sales representative about additional accessories to maximize sample protection for your chest freezer

\* Must be installed by qualified professional



Sensaphone Telephone Dialing System



## Thermo Scientific Nalgene and Nunc

Thermo Scientific Nalgene and Nunc cryogenic storage give you everything you need to safely store precious specimens, organize freezer space and simplify sample retrieval. Nalgene® and Nunc™ combine to provide one-stop shopping for the widest variety and highest quality of externally and internally threaded cryovials, storage boxes, lab top coolers and “Mr. Frosty” controlled-rate freezing containers. For more information, visit [www.nalgene.com](http://www.nalgene.com) or [www.nuncbrand.com](http://www.nuncbrand.com)

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