



**NEW! Thermo Scientific Revco PLUS  
Ultra-Low Temperature Upright Freezers**

*Maximizing Critical Sample Protection and Storage*

# Innovative Features and Rewarding Benefits

Features	Advantage	Benefit	Thermo Scientific Revco PLUS Model
<b>Refrigeration System</b>	Up to 20% greater heat removal capacity over ordinary freezers. Ensures faster temperature recovery after door openings.*	Quicker recovery after door openings, ensuring protection of critical samples.	<b>Ultima, Elite, Value</b>
	Consumes up to 15% less power than leading competitor.*	Cost of ownership is lower and is also friendlier to the environment.	
	Emits up to 15% less heat into the environment than leading competitor.*	Less heat is emitted into the lab environment thus requiring less energy and HVAC equipment to keep the lab environment cool.	
	Noise levels are reduced by up to 40% over previous generations, decreasing interruption in the lab.	A quieter freezer allows the unit to be placed directly inside the lab, saving time.	
<b>Microprocessor Control</b>	Set point controls for the temperature and alarm system. NEW feature for the Thermo Scientific Revco Value PLUS!	More precise settings and flexibility for temperature set points and alarm controls.	
<b>PLUS Time Delay</b>	Programmable feature delays restart of a bank of freezers after building power failure allows stabilized power and a uniform re-start.	<ul style="list-style-type: none"> <li>Eliminates costs and down time associated with tripping a circuit breaker after a power failure.</li> <li>Reduces stress on the compressor and electrical components.</li> </ul>	
<b>On Board Diagnostics</b>	The system will report error codes, pointing the researcher or service technician to a probable cause.	Error indications will allow the researcher or service technician to diagnose problems faster, leading to lower down time inconvenience to the researcher and minimizing exposure to samples.	
<b>Automatic Voltage Buck/Boost System</b>	Buck will reduce incoming line voltage in the event the voltage is too high. Boost will provide additional voltage to incoming line voltage in the event voltage is too low.	This feature will add to the longevity of the freezer by stabilizing the voltage to the unit.	
<b>Optional Integrated Back Up System</b>	Integrated back up system is programmable at the user interface.	Provides user with assurance that samples will not be compromised in the event of a power outage.	
<b>Recessed Power Switch</b>	Power switch is recessed into the housing to keep the unit from inadvertently switching off.	Controls down time due to accidentally switching off the power supply.	
<b>Reinforced Shelves</b>	Stiffeners have been added to all stainless steel shelves for excessive loads and impacts.	Allows storage of high-load and non-standard samples, such as microplate hotels.	
<b>Door Mounted Pressure Equalization Port (PEP)</b>	The door mounted PEP does not take up valuable storage space and does not require maintenance (ice removal).	Periodic ice removal from PEP is not required, allowing the researcher to focus on his/her samples and not waste time maintaining the unit.	
<b>Voltage Indicator (Power Monitor)</b>	Voltage indicator button will provide incoming line voltage when pressed.	Provides fast and accurate information on incoming line voltage.	<b>Ultima, Elite</b>
<b>New Communication Outputs (Option)</b>	4-20mA option for additional communication output devices.	Flexibility in options for connecting to remote alarm systems.	
<b>Battery Readout</b>	Readout is in actual voltage and not percentage of voltage in battery.	Provides user with assurance that alarms and displays will function in the event of a power outage.	

## Environmentally Friendly\*

**15% lower power consumption** reduces ownership cost and is environment friendly

**15% lower heat rejection** into the laboratory environment for a more comfortable work environment

**20% more heat removal capacity** for quick temperature recovery after door openings

**40% quieter** so they can reside in the lab; this speeds sample preparation and minimizes sample exposure to ambient air

\* Based on internal performance data



## 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 freezers feature an advanced technology platform, refrigeration, microprocessor controls and high-quality construction, delivering:*

- › **Maximum Temperature Recovery**  
Up to 20% more heat removal capacity over ordinary freezers, ensuring faster temperature recovery after door openings.\*
- › **Operational Efficiency**  
Up to 15% less power to maintain cabinet temperature compared to other freezers.\*

- › **Comfortable Lab Environment**  
Quiet, comfortable operation allows our ultra-low temperature freezers to reside directly in the lab, creating a more productive and efficient work environment.
- › **Environmentally-Friendly**  
Up to 15% less heat into the lab environment, minimizing air conditioning costs.\*

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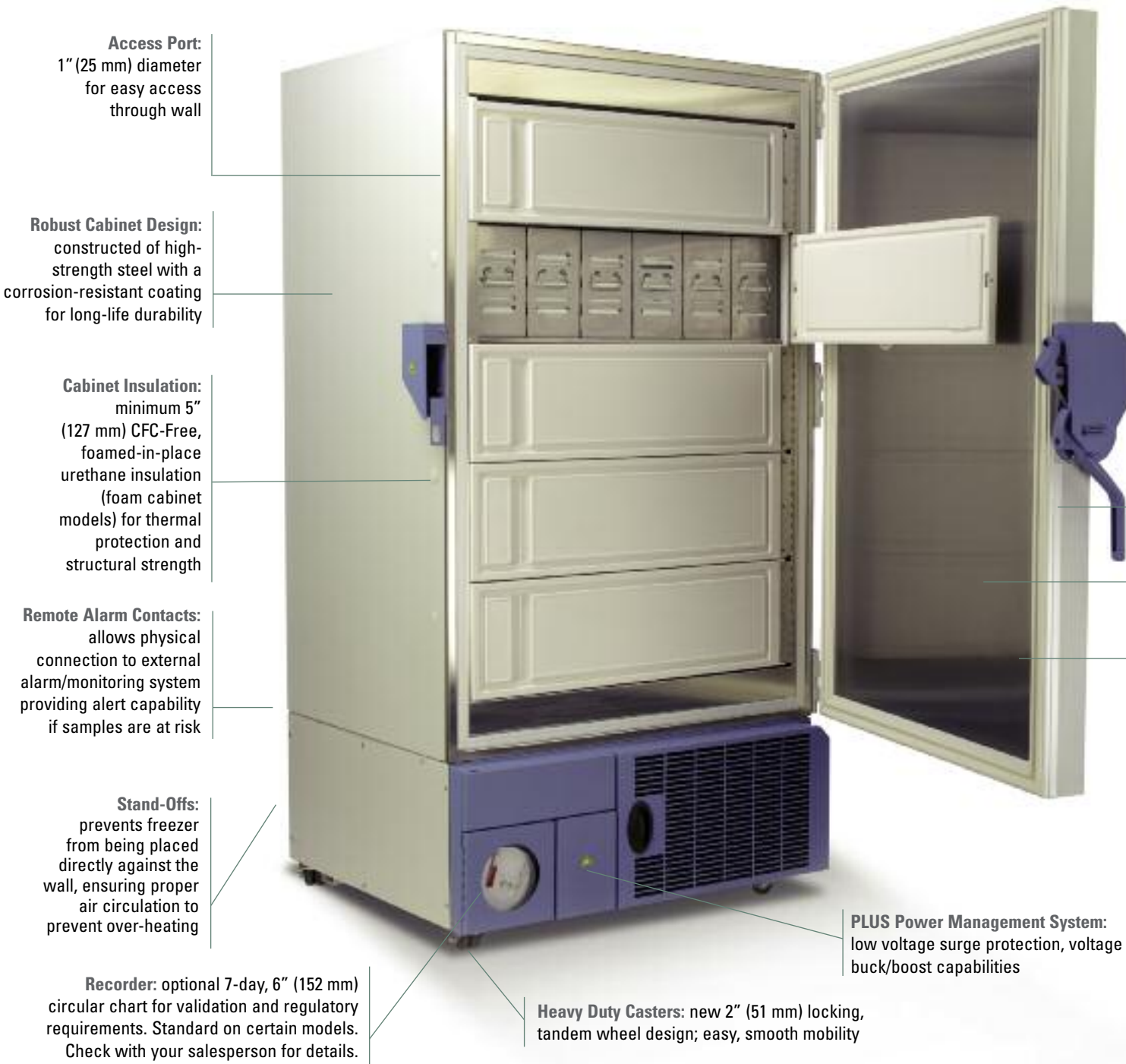
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## **NEW!** Thermo Scientific Revco PLUS HD

Our new Revco PLUS HD freezers feature a highly-efficient, innovative thin wall insulation technology. This allows for expanded interior storage capacity without increasing the exterior cabinet footprint.



**Access Port:**  
1" (25 mm) diameter  
for easy access  
through wall

**Robust Cabinet Design:**  
constructed of high-  
strength steel with a  
corrosion-resistant coating  
for long-life durability

**Cabinet Insulation:**  
minimum 5"  
(127 mm) CFC-Free,  
foamed-in-place  
urethane insulation  
(foam cabinet  
models) for thermal  
protection and  
structural strength

**Remote Alarm Contacts:**  
allows physical  
connection to external  
alarm/monitoring system  
providing alert capability  
if samples are at risk

**Stand-Offs:**  
prevents freezer  
from being placed  
directly against the  
wall, ensuring proper  
air circulation to  
prevent over-heating

**Recorder:** optional 7-day, 6" (152 mm)  
circular chart for validation and regulatory  
requirements. Standard on certain models.  
Check with your salesperson for details.

**Heavy Duty Casters:** new 2" (51 mm) locking,  
tandem wheel design; easy, smooth mobility

**PLUS Power Management System:**  
low voltage surge protection, voltage  
buck/boost capabilities



**Cryolatch™:** integrated door  
handle and latch for one-hand  
operation; built-in key lock and  
padlock compatible



**Easy-to-Use Microprocessor  
Controls:** programmable temperature/  
alarm set points and on-board  
diagnostics



**Washable Filter:** provides protection  
from dust on the condenser, causing  
reduced refrigeration performance  
and increased risk to samples



**Door-Mounted Pressure Equalization  
Port (PEP):** maintenance-free PEP  
allows for quick re-entries after door  
openings and eliminates the need for  
ice removal (PEP is hidden from view)

## Quality, Reliable Construction

*Delivering the highest quality you expect, our Revco PLUS freezers feature robust, high-quality construction with your choice of foam or HD insulation, flexible storage and precision controls.*

### **Secure Inner Doors:**

high-impact ABS plastic with recessed handle

### **Outer Door Gasket:**

unique door seal with five points of sealing contact protects against heat leaks and minimizes frost build-up

### **Insulated Outer Door:**

minimum 3.5" (89 mm) high strength foamed-in-place urethane insulation

### **High Density Insulation (Revco PLUS HD freezers):**

innovative composite thin wall design creates more storage without increasing cabinet footprint

### **Environmentally-Friendly, CFC-Free Refrigerants:**

DuPont® Suva 95 in low-stage models

### **Stainless Steel Interior Shelves:**

new reinforced shelves, developed for excessive loads and impacts



**The world's largest ultra-low temperature freezer utilizes HD technology and saves valuable floor space**

*Our 32 cubic foot HD model features 10 inner doors to reduce sample exposure to ambient air.*

*Our Revco racks are quality-built for ultimate sample protection. With proven reliability, our racks are completely interchangeable with all Revco PLUS freezers.*

**See our Racks & Accessories Guide for additional information.**



**Inventory Racks:** optional stainless steel with fiberboard boxes and dividers for complete sample protection



**Packaging - Processing**  
**Bid on Equipment**  
1-847-683-7720  
[www.bid-on-equipment.com](http://www.bid-on-equipment.com)



## **NEW!** Thermo Scientific 32 cu ft Revco Ultima PLUS HD

*The Largest Capacity Ultra-Low Temperature Freezer Available*

**Our 32 cu ft freezer delivers the industry's highest capacity and vial to footprint ratio – store up to 70,000 sample vials in 35 inventory racks.**

### **More Capacity, Small Footprint**

Uses HD technology and design to allow 31.4 cu ft (889 L) of capacity in a 24.8 cu ft (702 L) footprint. Features seven optional racks per shelf and five shelf positions hold up to 700 2" (50mm) boxes, 525 3" (76mm) boxes or 3,430 microplates.

### **Ultimate Sample Protection**

Each inner door operates independently on a continuous hinge to protect entire sample contents from ambient thermal exposure.

### **Flexible Interior**

Five shelves, three adjustable in 1" (25 mm) increments, permit alternate inventory configuration.

### **Sophisticated Microprocessor Controls**

Our Revco Plus HD line features sophisticated, easy-to-read microprocessor controls – delivering industry-leading performance to protect the integrity of your work.

**Packaging - Processing**

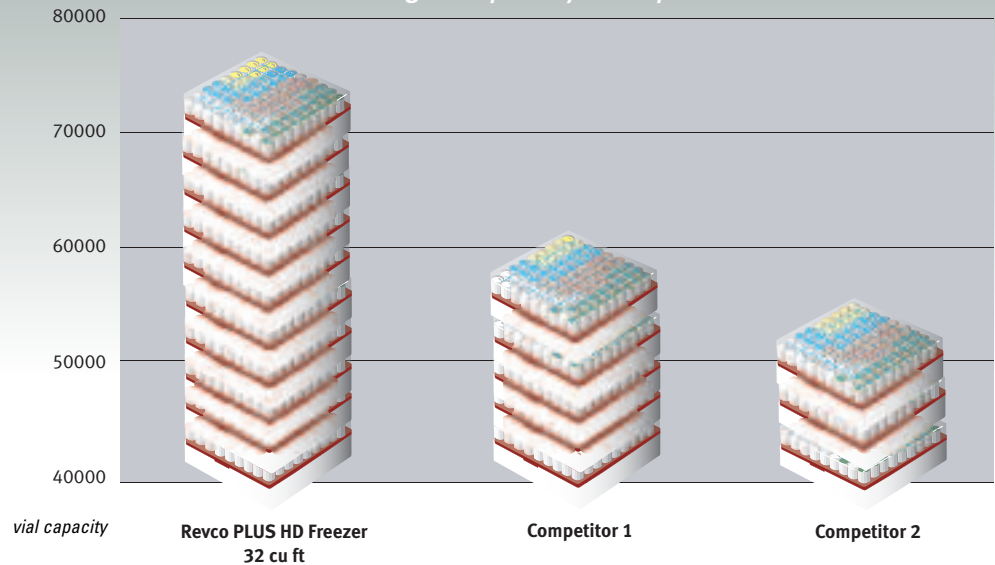
**Bid on Equipment**

1-847-683-7720

[www.bid-on-equipment.com](http://www.bid-on-equipment.com)

## Storage Capacity Comparison

Store up to  
**70,000 samples**  
– more than  
any other freezer  
on the market!



## Ultima PLUS HD Control Panel

**Life-Guard Alert:** monitors performance and alerts the user to changes in external and internal conditions

**Power Failure:** automatically activates in event of power failure

**Temperature Failure:** automatically activates in event of temperature deviation

**Digital Display:** clear, easy-to-read LED displays

**Touchpad Data Entry:** adjustable in 1°C increments

**LN<sub>2</sub>/CO<sub>2</sub> Back-Up System:** optional indicator lights up when system is active: specify when ordering

**Extreme Ambient Alert:** warns if room temperature may affect performance

**Clean Filter:** indicates when to remove and wash condenser filter to maintain best cooling performance

**Alarm Battery Low:** flashing indicates when to replace battery; displays current battery voltage when pressed

**Voltage Indicator:** push to view incoming line voltage

**Door-Mounted Control:** standard eye-level location

**Setpoint Security:** key-operated switch for main power and alarm. Locks in temperature and alarm setpoints.

**Alarm Test:** simulates temperature alarm condition

**Alarm Reset:** mutes audible alarm and resets A.I.M.

**Cabinet Temperature:** displays current cabinet temperature

**Control Setpoint:** sets cabinet temperature

**Warm Alarm Setpoint:** push to set warm alarm

**Cold Alarm Setpoint:** push to set cold alarm

### Additional Features:

#### PLUS Power Management System:

- **Low Voltage Surge Protection:** minimizes voltage spikes; protects sensitive electronics
- **Voltage Buck/Boost:** protective device used to correct low or high voltage into the unit; protects and extends the life of electrical components

**A.I.M. Automatic Incident Monitor:** identifies temperature deviation (due to power failure or temperature failure) beyond alarm setpoint

**Battery Backup:** continuous charge provides full function to control panel in case of power failure

**On-Board Diagnostics:** continuously monitors sensors to ensure proper performance

**NEW! Standard Features:** Chart recorder, RS232 output and 4-20 milliamp output

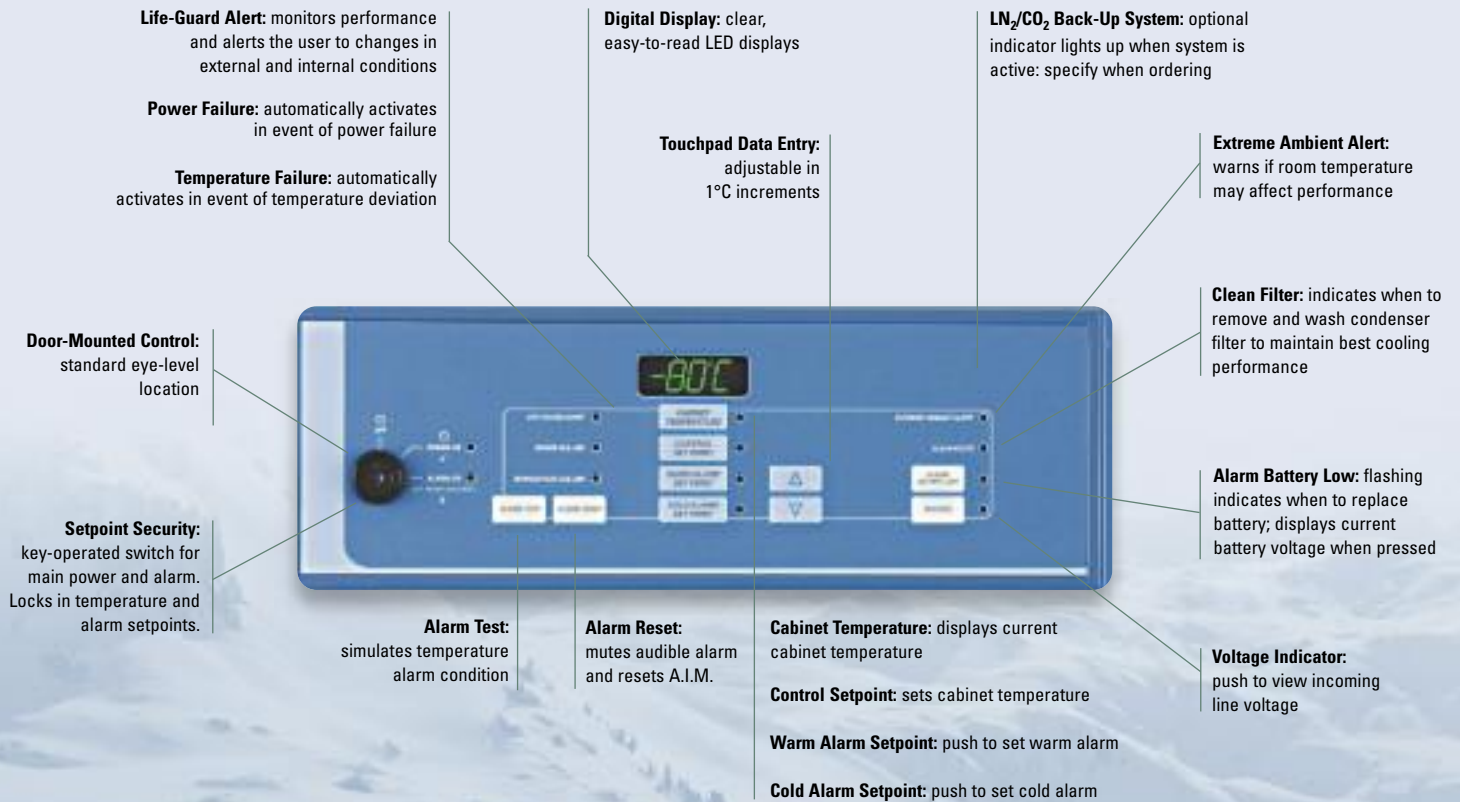
All Thermo Scientific Revco PLUS freezers feature programmable, easy-to-use microprocessor controls. Our control systems offer real-time visibility and precise setpoints on temperature, power and other critical measurements to continuously ensure the security of your work.



## Thermo Scientific Revco Ultima PLUS

Our Revco Ultima PLUS freezers are suited for laboratories that require sophisticated electronic monitors and alarms for the highest level of sample protection.

### Ultima PLUS Control Panel

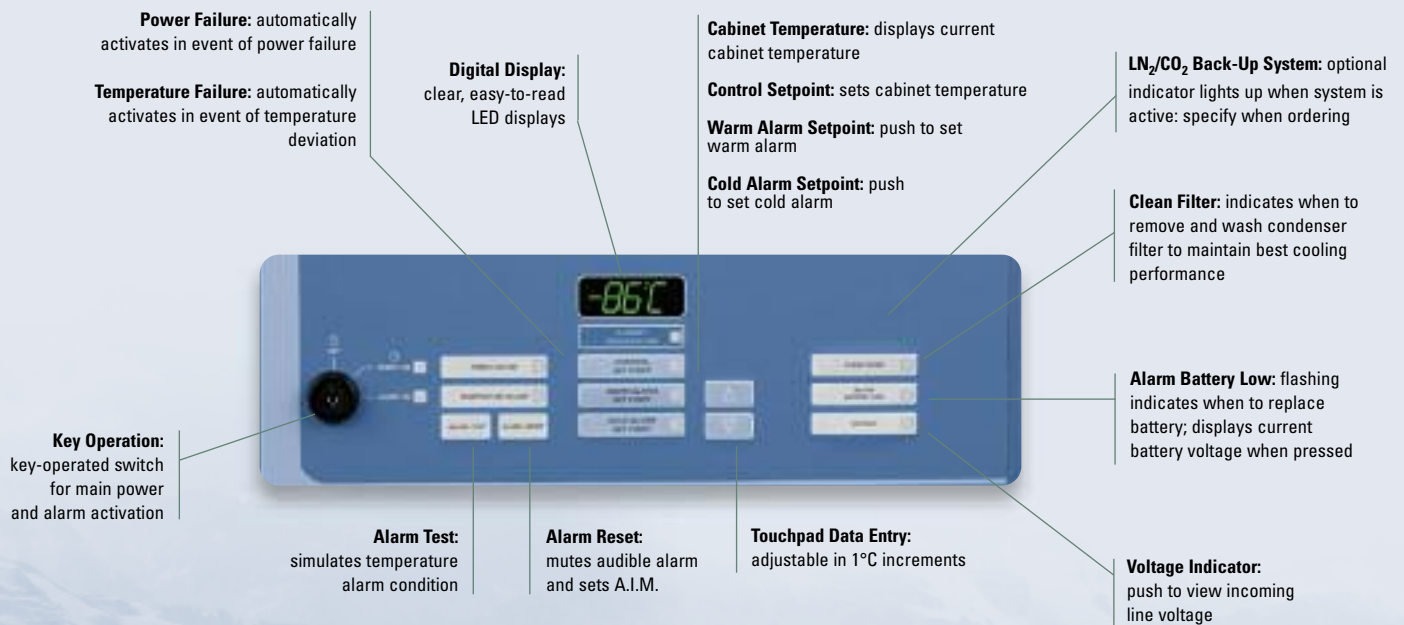




## Thermo Scientific Revco Elite PLUS

Our Revco Elite PLUS freezers are suited for environments that require a moderate level of electronic monitors and alarms for sample protection.

### Elite PLUS Control Panel





## Thermo Scientific Revco Value PLUS

**Our Revco Value PLUS freezers are suited for laboratories that require a fundamental level of electronic monitors and alarms without compromising sample protection.**

### Value PLUS Control Panel



**LN<sub>2</sub>/CO<sub>2</sub> Back-Up System:** optional indicator lights up when system is active: specify when ordering

**Control:** standard knee-level location

**Key Operation:** key-operated switch for main power and alarm activation

**Audible Warning:** activates automatically in event of temperature deviation

**Power Failure:** automatically activates in event of power failure

**Digital Display:** clear, easy-to-read LED displays

**Touchpad Data Entry:** adjustable in 1°C increments; alarm setpoint in 5°C increments

**Cabinet Temperature:** displays current cabinet temperature

**Control Setpoint:** sets cabinet temperature

### Additional Features: for Thermo Scientific Revco PLUS Freezers

**PLUS Power Management System:**

- **Low Voltage Surge Protection:** minimizes voltage spikes; protects sensitive electronics
- **Voltage Buck/Boost:** protective device used to correct low or high voltage into the unit; protects and extends the life of electrical components

**A.I.M. Automatic Incident**

**Monitor:** identifies temperature deviation (due to power failure or temperature failure) beyond alarm setpoint\*

**Battery Backup:** continuous charge provides full function to control panel in case of power failure

**On-Board Diagnostics:**

continuously monitors sensors to ensure proper performance

\* not available on Value models

**Thermo Scientific Revco Ultima PLUS HD Ultra-Low Temperature Upright Freezers**

Model No.	Capacity Cu Ft (L)	Electrical	Amps/Breaker (Plug)	Interior Dimensions H x W x D inches (mm)	Exterior Dimensions H x W x D inches (mm)	Shipping Weight lbs (kg)
ULT2586-10HD-A	24.8 (702)	115V/60 Hz 1Ø	16/20 (P2)	50.5 x 34.5 x 24.3 (1283 x 876 x 616)	77.8 x 43.0 x 36.8 (1975 x 1092 x 935)	825 (358)
ULT2586-10HD-D		208-230V/60 Hz 1Ø	12/15 (P4)			
ULT2586-10HD-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT2586-10HD-W		230V/50 Hz 1Ø	12/13 (P8)			
ULT3280-10HD-D	31.4 (889)	208-230V/60 Hz 1Ø	12/15 (P4)	50.5 x 39.1 x 27.3 (1283 x 993 x 693)	77.8 x 48.0 x 36.8 (1975 x 1219 x 935)	930 (478)
ULT3280-10HD-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT3280-10HD-W		230V/50 Hz 1Ø	12/13 (P8)			

**Thermo Scientific Revco Ultima PLUS Ultra-Low Temperature Upright Freezers**

Model No.	Capacity Cu Ft (L)	Electrical	Amps/Breaker (Plug)	Interior Dimensions H x W x D inches (mm)	Exterior Dimensions H x W x D inches (mm)	Shipping Weight lbs (kg)
ULT1786-10-A	17.4 (493)	115V/60 Hz 1Ø	16/20 (P2)	50.5 x 23.5 x 25 (1283 x 597 x 635)	77.8 x 37.0 x 37.0 (1975 x 940 x 940)	720 (326)
ULT1786-10-D		208-230V/60 Hz 1Ø	12/15 (P4)			
ULT1786-10-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT1786-10-W		230V/50 Hz 1Ø	12/13 (P8)			
ULT2186-10-A	20.4 (578)	115V/60 Hz 1Ø	16/20 (P2)	50.5 x 28.5 x 24.3 (1283 x 724 x 616)	77.8 x 42.0 x 36.3 (1975 x 1066 x 922)	770 (349)
ULT2186-10-D		208-230V/60 Hz 1Ø	12/15 (P4)			
ULT2186-10-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT2186-10-W		230V/50 Hz 1Ø	12/13 (P8)			
ULT2586-10-A	24.8 (702)	115V/60 Hz 1Ø	16/20 (P2)	50.5 x 34.5 x 24.3 (1283 x 876 x 616)	77.8 x 48.0 x 36.3 (1975 x 1219 x 922)	830 (376)
ULT2586-10-D		208-230V/60 Hz 1Ø	12/15 (P4)			
ULT2586-10-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT2586-10-W		230V/50 Hz 1Ø	12/13 (P8)			

**Thermo Scientific Revco Elite PLUS Ultra-Low Temperature Upright Freezers**

Model No.	Capacity Cu Ft (L)	Electrical	Amps/Breaker (Plug)	Interior Dimensions H x W x D inches (mm)	Exterior Dimensions H x W x D inches (mm)	Shipping Weight lbs (kg)
ULT1786-6-A	17.4 (493)	115V/60 Hz 1Ø	16/20 (P2)	50.5 x 23.5 x 25 (1283 x 597 x 635)	77.8 x 37.0 x 37.0 (1975 x 940 x 940)	720 (326)
ULT1786-6-D		208-230V/60 Hz 1Ø	12/15 (P4)			
ULT1786-6-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT1786-6-W		230V/50 Hz 1Ø	12/13 (P8)			
ULT2186-6-A	20.4 (578)	115V/60 Hz 1Ø	16/20 (P2)	50.5 x 28.5 x 24.3 (1283 x 724 x 616)	77.8 x 42.0 x 36.3 (1975 x 1066 x 922)	770 (349)
ULT2186-6-D		208-230V/60 Hz 1Ø	12/15 (P4)			
ULT2186-6-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT2186-6-W		230V/50 Hz 1Ø	12/13 (P8)			
ULT2586-6-A	24.8 (702)	115V/60 Hz 1Ø	16/20 (P2)	50.5 x 34.5 x 24.3 (1283 x 876 x 616)	77.8 x 48.0 x 36.3 (1975 x 1219 x 922)	830 (376)
ULT2586-6-D		208-230V/60 Hz 1Ø	12/15 (P4)			
ULT2586-6-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT2586-6-W		230V/50 Hz 1Ø	12/13 (P8)			

**Thermo Scientific Revco Value PLUS Ultra-Low Temperature Upright Freezers**

Model No.	Capacity Cu Ft (L)	Electrical	Amps/Breaker (Plug)	Interior Dimensions H x W x D inches (mm)	Exterior Dimensions H x W x D inches (mm)	Shipping Weight lbs (kg)
ULT1786-4-A	17.4 (493)	115V/60 Hz 1Ø	16/20 (P2)	50.5 x 23.5 x 25 (1283 x 597 x 635)	77.8 x 37.0 x 37.0 (1975 x 940 x 940)	720 (326)
ULT1786-4-D		208-230V/60 Hz 1Ø	12/15 (P4)			
ULT1786-4-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT1786-4-W		230V/50 Hz 1Ø	12/13 (P8)			
ULT2186-4-A	20.4 (578)	115V/60 Hz 1Ø	16/20 (P2)	50.5 x 28.5 x 24.3 (1283 x 724 x 616)	77.8 x 42.0 x 36.3 (1975 x 1066 x 922)	770 (349)
ULT2186-4-D		208-230V/60 Hz 1Ø	12/15 (P4)			
ULT2186-4-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT2186-4-W		230V/50 Hz 1Ø	12/13 (P8)			
ULT2586-4-A	24.8 (702)	115V/60 Hz 1Ø	16/20 (P2)	50.5 x 34.5 x 24.3 (1283 x 876 x 616)	77.8 x 48.0 x 36.3 (1975 x 1219 x 922)	830 (376)
ULT2586-4-D		208-230V/60 Hz 1Ø	12/15 (P4)			
ULT2586-4-V		230V/50 Hz 1Ø	12/16 (P7)			
ULT2586-4-W		230V/50 Hz 1Ø	12/13 (P8)			

Models with this code	have this plug	require this receptacle	NEMA Reference	
			Plug	Receptacle
P1			5-15P	5-15R
P2			5-20P	5-20R
P3			5-30P	5-30R
P4			6-15P	6-15R
P5			6-20P	6-20R
P6			6-30P	6-30R
P7 European				
P8 British				

WARRANTY INFORMATION

**United States and Canada:**

Standard Revco PLUS models carry a 2-year warranty on parts and labor and a total 3, 4, or 5 year warranty on compressor parts for the Value PLUS, Elite PLUS, and Ultima PLUS, respectively.

**International (Outside of U.S. and Canada):**

Standard Revco PLUS models carry a 16-month full warranty for parts and a total 60-month warranty on compressor parts for the Value PLUS, Elite PLUS, and Ultima PLUS.

CERTIFICATION INFORMATION AND LINE CORD INFO

- Meets NEMA, UL61010-1, UL471, CUL, CE, IEC60335-2-89/Climate Class T (Tropical) criteria
- Calibration Certification Available
- Validation Testing Program Available



Freezers supplied with line cord plugs (P) require corresponding receptacles illustrated in the Line Cord Plug Reference. Catalog selection charts list each standard model with voltage, rated amperage, recommended circuit breaker size and NEMA electrical plug information.

For racks and accessories, please see the **Thermo Scientific Revco Rack and Accessory Guide**



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 further information, visit [www.nalgene.com](http://www.nalgene.com) or [www.nuncbrand.com](http://www.nuncbrand.com)

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