

NEW! Thermo Scientific
Revco[®] PLUS -86°C Freezers

Protecting Your Life's Work



Your life's work. What is it worth to you?

You spend countless lab hours developing valuable samples. Many are irreplaceable. Protecting the integrity of your work is not just important, it's immeasurable.

For more than 50 years, Thermo Scientific Revco cold storage products have been trusted by the world's leading global biotechnology, pharmaceutical, academic, government, and clinical laboratories.

More than two billion samples are stored in Thermo Scientific cold storage equipment worldwide – more than any other brand. Recognized for our dependability and quality, our cold storage solutions cover the broadest spectrum of temperature needs from +4°C to -196°C.

Revco Ultima® PLUS:
Advanced Performance,
Controls and Monitoring

6

Revco Elite® PLUS:
High Performance
and Controls

7

Revco Value® PLUS:
Basic Functionality
and Controls

8

Thermo Scientific Revco PLUS -86°C Freezers

Our life's work is safeguarding your life's work.

Introducing the new Thermo Scientific Revco PLUS -86°C upright freezers, combining the highest reliability and superior performance with cost-effective operation and innovative features.

Leveraging years of R&D expertise, our new Revco PLUS freezers are designed with a patented refrigeration system and new robust electronics platform to deliver:

Maximum Temperature Recovery

20% more heat removal capacity over other leading freezers, ensuring faster temperature recovery after door openings.*

Operational Efficiency

Uses 15% less power to maintain cabinet temperature compared to other leading freezers.* In addition, the Revco PLUS emits 15% less heat into the lab environment, minimizing air conditioning costs.*

Comfortable Lab Environment

Quiet, comfortable operation allows our -86°C freezers to reside directly in the lab, creating a more productive and efficient work environment.



* based on internal performance data

Advanced Technology, Exceptional Quality

Our Revco PLUS freezers meet the sample storage and protection needs of different lab environments.

All Revco PLUS models feature the same technology platform with the advanced refrigeration, microprocessor controls and high-quality construction.

Our Revco PLUS -86°C upright freezers include three models, with varying levels of monitoring, reporting and alarms. Whatever controls your environment requires, we have a Revco PLUS model to meet your needs.



Revco Ultima PLUS:

Advanced, eye-level control platform designed for applications requiring very detailed, sophisticated monitoring, alarm and communication functions.



Revco Elite PLUS:

Mid-range, knee-level control platform designed for applications requiring a moderate level of monitoring, alarm and communication functions.



Revco Value PLUS:

Basic, knee-level control platform designed for applications requiring basic monitoring, alarm and communication functions.

Innovative Features and Rewarding Benefits

| Refrigeration System | Ultima PLUS | Elite PLUS | Value PLUS | Benefit |
|---|-------------|------------|------------|--|
| NEW Revco PLUS refrigeration system | • | • | • | *20% more reserve heat removal capacity for quick temperature recovery after door openings; ensures protection of critical samples |
| 1 HP Industrial grade compressors | • | • | • | Provides refrigeration power |
| CFC-free refrigerants | • | • | • | Delivers environmentally friendly performance |
| DuPont Suva low-stage refrigerants | • | • | • | Specially formulated for ultra low applications |
| Downfeed evaporator | • | • | • | Smoother refrigerant flow |
| Washable condenser filter | • | • | • | Maintains peak condenser efficiency |
| Control Technology | | | | |
| Programmable microprocessor control | • | • | • | Enables precise temperature settings and flexibility for alarm set points |
| Setpoint security | • | • | • | Locks in alarm and operating setpoints |
| Alarm setpoints | • | • | • | Allows for setting high and low temperature alarm setpoints |
| NEW PLUS Time Delay | • | • | • | Programmable feature delays restart after building power failure; allows stabilized power, uniform re-start and reduced stress on compressor and electrical components |
| NEW On-board diagnostics | • | • | • | Continuously monitors system sensors to ensure proper performance; reports error codes to identify probable cause |
| NEW PLUS Power Management System | | | | |
| NEW Automatic voltage buck/boost system | • | • | • | Buck reduces incoming line voltage if too high. Boost provides additional incoming line voltage if too low; adds longevity to compressors and electronics with voltage stabilization |
| NEW Low voltage surge protection | • | • | • | Minimizes voltage spikes to protect sensitive electronic devices |
| Alarm System | | | | |
| A.I.M. (Automatic Incident Monitor) | • | • | • | Identifies temperature deviations |
| Audible/visual warning | • | • | • | Automatic |
| Battery backup | • | • | • | Automatic |
| NEW Battery capacity indicator touchpad alarm test | • | • | • | Displays battery voltage |
| RS-232 data port | • | Optional | • | Includes software for data export to PC |
| Remote alarm contacts | • | • | • | For connecting to remote monitoring systems |
| NEW 4-20mA temperature output | Optional | Optional | • | For connecting to remote monitoring systems |
| Monitoring System | | | | |
| Life-Guard compressor protection | • | • | • | Monitors/adjusts compressor performance |
| Extreme ambient alert | • | • | • | Alerts if room temperature is too warm |
| NEW Voltage indicator (Power Monitoring) | • | • | • | Displays incoming line voltage |
| Clean filter indicator | • | • | • | Advises when to remove and clean filter |
| Cabinet Construction | | | | |
| Foamed-in-place polyurethane insulation | • | • | • | Higher "R" value |
| 1" (2.54cm) diameter access port | • | • | • | Easy access through wall |
| Enhanced acoustic insulation | • | • | • | Reduces compressor sound |
| NEW Robust tandem 2 in. casters | • | • | • | Side by side locking casters for durability and high impact resistance |
| NEW Door-mounted Pressure Equalization Port (PEP) | • | • | • | Maximizes storage space/eliminates maintenance for ice removal |
| NEW Recessed power switch | • | • | • | Prevents inadvertent switch off |
| NEW Reinforced shelves | • | • | • | Reinforcement channels on shelves to support excessive loads and impact |
| LN ₂ /CO ₂ Backup System | Optional | Optional | Optional | Built in and free standing available |

NEW Operational Efficiency

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

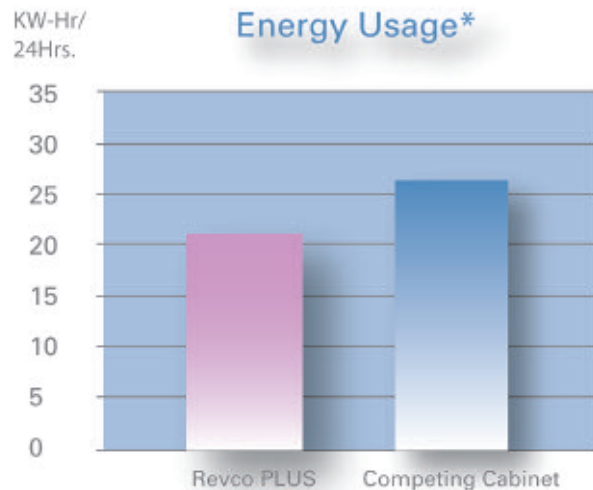
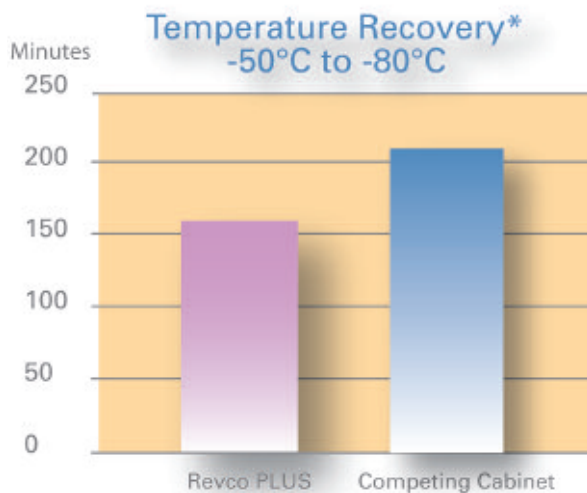
15% lower heat rejection into surrounding environment

Reduced noise levels for quieter, comfortable lab surroundings



The Revco PLUS Advantage: Highest Sample Integrity

Our Revco PLUS -86°C freezers deliver the best sample protection with advanced refrigeration technology. We guard your samples by combining the highest temperature stability, maximum recovery time and outstanding energy efficiency.



Maximum Heat Removal

Our Revco PLUS -86°C freezers feature 20% more heat removal capacity. This delivers very quick temperature recovery after door openings for stable, uniform temperatures and ultimate sample protection.

Energy Efficiency

Greater than 15% energy savings and 15% less heat rejection over other leading freezers, our Revco PLUS -86°C freezers conserve valuable energy resources to keep your lab comfortable and samples protected.

* Tested in 25°C ambient environment. Freezer cycling at -80°C. Cabinet volume, 25 cu. ft. Average cabinet temperature based on temperature mapping (17 thermocouples).



Minimized Noise Output

Featuring advanced noise abatement technology and insulation, our Revco PLUS -86°C freezers are 40% quieter so they can reside right in your lab. This speeds sample preparation and minimizes sample exposure to ambient air.

***Protect your valuable samples:
cryoboxes
microplates
bulk storage***

Our Revco racks are quality-built for ultimate sample protection. With proven reliability you can depend on year after year, our racks are completely interchangeable with all Revco PLUS -86°C freezers for additional flexibility.

***See our Rack and Accessories Guide for
all your accessories needs.***



Access Port:
1" diameter for easy
access through wall

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

Cabinet Insulation:
Minimum 5"
(127mm) CFC-Free,
foamed-in-place
urethane for
thermal protection
and structural
strength

Remote Alarm Contacts:
physical connection
to external alarm/
monitoring system

Recorder: optional
7-day, 6" (152 mm)
circular chart

Heavy Duty Casters: new 2" locking,
tandem wheel design; easy, smooth
mobility

Washable Filter: protection from
dust build-up on condenser

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

Advanced Compressor Deck:

superior heat removal and energy
efficiency; excellent insulation for
a very quiet work environment

CFC-Free Refrigerants:

DuPont® Suva 95 in low stage models

**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)



Strong Outer Door: minimum 3.5" (89mm) high strength foamed-in-place urethane insulation

Outer Door Gasket: secure door seal with five points of sealing contact

Secure Inner Doors: high-impact ABS plastic with recessed handle

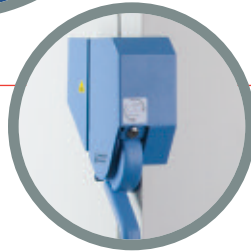


Easy-to-Use Microprocessor Controls: programmable temperature/alarm set points and on-board diagnostics



Stainless Steel Interior Shelves: new reinforced shelves, developed for excessive loads and impacts

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

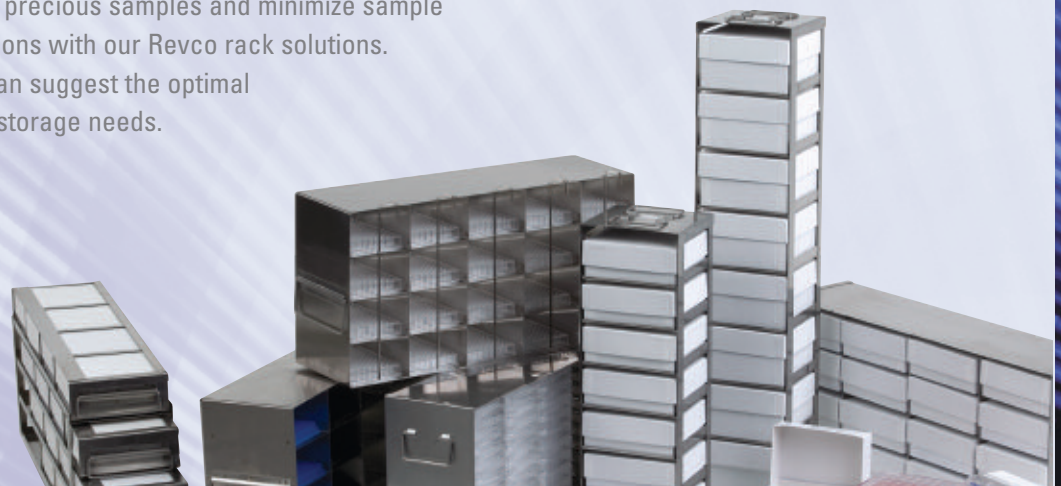


Cryolatch™: integrated door handle and latch for one-hand operation; built-in key lock and padlock compatible.

Quality-Built for Maximum Reliability

For optimized performance and operation, our Revco PLUS -86°C freezers feature robust, high-quality construction with advanced insulation, flexible storage and precision controls.

Ensure the easy retrieval of precious samples and minimize sample exposure to ambient conditions with our Revco rack solutions. Your sales representative can suggest the optimal rack configuration for your storage needs.



Thermo Scientific Revco Ultima PLUS

Advanced Performance and Controls

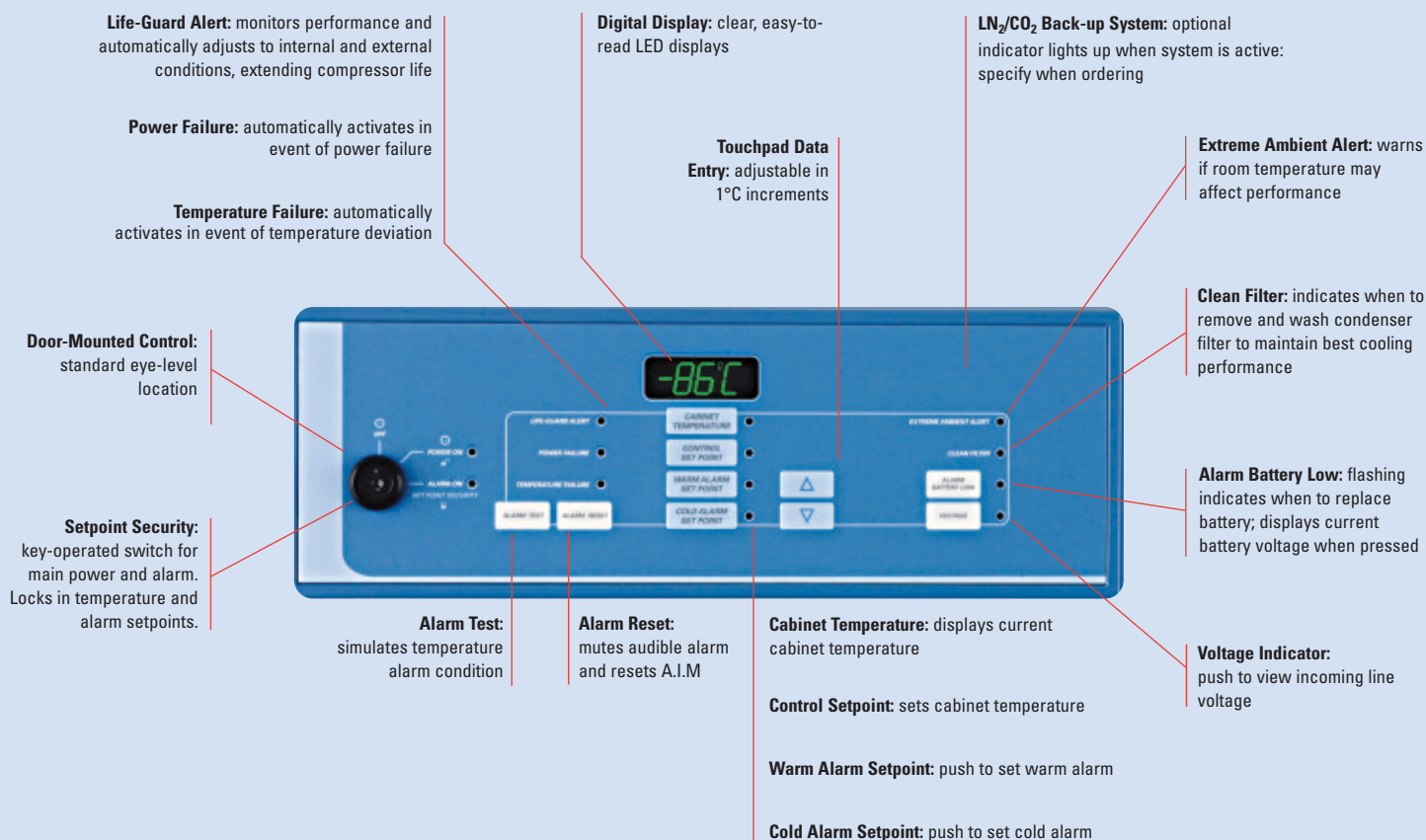
Our Revco Ultima PLUS -86°C freezer is available in 17, 21 and 25 cubic feet capacities.

Microprocessor Controls: Real-Time Monitors and Alarms

Our Revco Ultima PLUS is suited for laboratories that require sophisticated electronic monitors and alarms.

Its programmable, easy-to-use microprocessor controls provide real-time visibility and precise setpoints on temperature, power and other critical measurements to continuously ensure the security of your work.





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

Thermo Scientific Revco Ultima PLUS -86°C Upright Freezers

| Temperature Range -50°C to -86°C | | | | | | |
|----------------------------------|-----------------------|-------------------|------------------------|--|--|--------------------------------|
| Model | 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 | 17.2 | 115V/60 Hz 1Ø | 16/20 (P2) | 50.5 x 23.5 x 25 | 77.8 x 36.7 x 35.5 | 720 |
| ULT1786-10-D | (487) | 208-230V/60 Hz 1Ø | 12/15 (P4) | (1283 x 597 x 635) | (1975 x 931 x 901) | (326) |
| ULT1786-10-V | | 230V/50 Hz 1Ø | 12/16 (P7) | | | |
| ULT1786-10-W | | 230V/50 Hz 1Ø | 12/13 (P8) | | | |
| ULT2186-10-A | 20.2 | 115V/60 Hz 1Ø | 16/20 (P2) | 50.5 x 28.5 x 24.3 | 77.8 x 41.7 x 36.2 | 770 |
| ULT2186-10-D | (572) | 208-230V/60 Hz 1Ø | 12/15 (P4) | (1283 x 724 x 616) | (1975 x 1058 x 920) | (349) |
| ULT2186-10-V | | 230V/50 Hz 1Ø | 12/16 (P7) | | | |
| ULT2186-10-W | | 230V/50 Hz 1Ø | 12/13 (P8) | | | |
| ULT2586-10-A | 24.4 | 115V/60 Hz 1Ø | 16/20 (P2) | 50.5 x 34.5 x 24.3 | 77.8 x 47.7 x 36.2 | 830 |
| ULT2586-10-D | (691) | 208-230V/60 Hz 1Ø | 12/15 (P4) | (1283 x 876 x 616) | (1975 x 1210 x 920) | (376) |
| 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

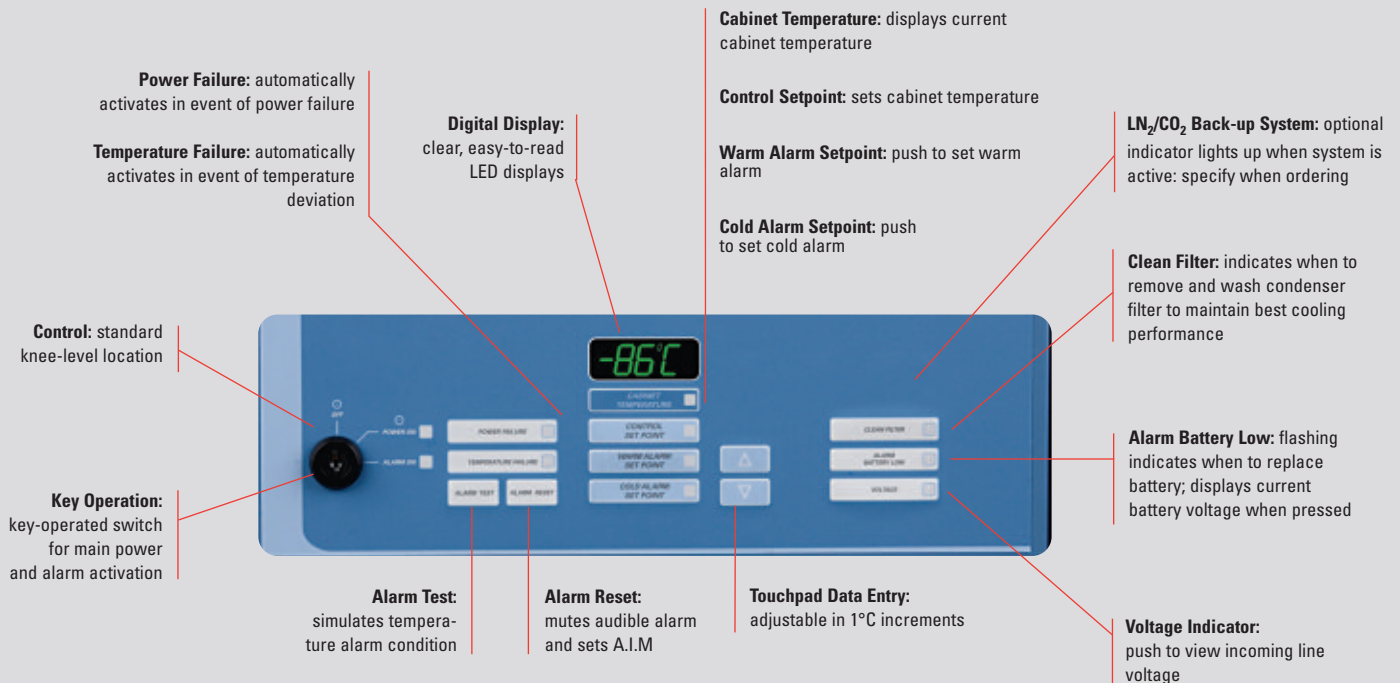
*High Performance
and Controls*

Our Revco Elite PLUS -86°C freezer is available in 17, 21 and 25 cubic feet capacities.



Microprocessor Controls: Real-Time Monitors and Alarms

Our Revco Elite PLUS is suited for environments that require a moderate level of electronic monitors and alarms. Featuring programmable, easy-to-use microprocessor controls, the Revco Elite PLUS delivers real-time visibility and precise setpoints on temperature, power and other critical measurements to protect your work.



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

Thermo Scientific Value PLUS:

Basic Performance and Controls

Our Revco Value PLUS -86°C freezer is available in 17, 21 and 25 cubic feet capacities.



Microprocessor Controls: Real-Time Monitors and Alarms

Our Revco Value PLUS is suited for laboratories that require a fundamental level of electronic monitors and alarms.



LN₂/CO₂ 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

Cabinet Temperature: displays current cabinet temperature

Control Setpoint: sets cabinet temperature

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

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

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

Thermo Scientific Revco Elite PLUS -86°C Upright Freezers

Temperature Range -50°C to -86°C

| 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 ULT1786-6-D ULT1786-6-V ULT1786-6-W | 17.2 (487) | 115V/60 Hz 1Ø 208-230V/60 Hz 1Ø 230V/50 Hz 1Ø 230V/50 Hz 1Ø | 16/20 (P2) 12/15 (P4) 12/16 (P7) 12/13 (P8) | 50.5 x 23.5 x 25 (1283 x 597 x 635) | 77.8 x 36.7 x 35.5 (1975 x 931 x 901) | 720 (326) |
| ULT2186-6-A ULT2186-6-D ULT2186-6-V ULT2186-6-W | 20.2 (572) | 115V/60 Hz 1Ø 208-230V/60 Hz 1Ø 230V/50 Hz 1Ø 230V/50 Hz 1Ø | 16/20 (P2) 12/15 (P4) 12/16 (P7) 12/13 (P8) | 50.5 x 28.5 x 24.3 (1283 x 724 x 616) | 77.8 x 41.7 x 36.2 (1975 x 1058 x 920) | 770 (349) |
| ULT2586-6-A ULT2586-6-D ULT2586-6-V ULT2586-6-W | 24.4 (691) | 115V/60 Hz 1Ø 208-230V/60 Hz 1Ø 230V/50 Hz 1Ø 230V/50 Hz 1Ø | 16/20 (P2) 12/15 (P4) 12/16 (P7) 12/13 (P8) | 50.5 x 34.5 x 24.3 (1283 x 876 x 616) | 77.8 x 47.7 x 36.2 (1975 x 1210 x 920) | 830 (376) |

Thermo Scientific Revco Value PLUS -86°C Upright Freezers

Temperature Range -50°C to -86°C

| 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 ULT1786-4-D ULT1786-4-V ULT1786-4-W | 17.2 (487) | 115V/60 Hz 1Ø 208-230V/60 Hz 1Ø 230V/50 Hz 1Ø 230V/50 Hz 1Ø | 16/20 (P2) 12/15 (P4) 12/16 (P7) 12/13 (P8) | 50.5 x 23.5 x 25 (1283 x 597 x 635) | 77.8 x 36.7 x 35.5 (1975 x 931 x 901) | 720 (326) |
| ULT2186-4-A ULT2186-4-D ULT2186-4-V ULT2186-4-W | 20.2 (572) | 115V/60 Hz 1Ø 208-230V/60 Hz 1Ø 230V/50 Hz 1Ø 230V/50 Hz 1Ø | 16/20 (P2) 12/15 (P4) 12/16 (P7) 12/13 (P8) | 50.5 x 28.5 x 24.3 (1283 x 724 x 616) | 77.8 x 41.7 x 36.2 (1975 x 1058 x 920) | 770 (349) |
| ULT2586-4-A ULT2586-4-D ULT2586-4-V ULT2586-4-W | 24.4 (691) | 115V/60 Hz 1Ø 208-230V/60 Hz 1Ø 230V/50 Hz 1Ø 230V/50 Hz 1Ø | 16/20 (P2) 12/15 (P4) 12/16 (P7) 12/13 (P8) | 50.5 x 34.5 x 24.3 (1283 x 876 x 616) | 77.8 x 47.7 x 36.2 (1975 x 1210 x 920) | 830 (376) |

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, TUV, IEC60335-2-89/Climat 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.

Line Cord Plug Reference

| 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 |  |  | | |

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