A NEW LEADER IN
ULTRA LOW TEMP FREEZERS

Benefits you need, features that make it the perfect solution.

Environmentally Friendly
- Two high efficiency compressors
- CFC-HCFC Free Refrigerant and Insulation
- All reduce energy consumption to only 15 kw/day

Added Sample Security
- 21 audible & visual alarms
- Voltage booster to protect the compressor during periods of low voltage
- Battery backup for alarms
- Rear access port for central building alarm system

Triple Seal Gasket
- Reduces frost & ice build-up
- Maximum protection for sensitive samples

Vacuum Relief Port
- Eases door openings without sacrificing superior seal
- Accessible for cleaning

5 1/2” to 6” Thick Urethane Insulation
- Reduces power consumption while improving temperature performance

Five Individual Compartments with Adjustable Shelves
- Gain maximum versatility without sacrificing temperature performance
- Designed to utilize standard racks

Five Double Wall Insulated Inner Doors
- Reduces cold air loss and improves temperature recovery after door openings
- Better temperature uniformity

User Friendly Maintenance
- Easy to access and clean condenser filter
- Low profile casters with locks

Diagnosis
- RS-232 accommodates downloading of event logs

External Monitoring
- 4-20mA output
- Remote alarm contacts
- Compatible with external alarms and monitoring systems
- Optional chart recorder

Control Center
- Large LCD control panel
- Oversized LED temperature display
- Password protected

Ergonomic Door Handle
- Easy one-hand open & close
- Key lockable for sample security

Diagnostic Capabilities
- RS-232 accommodates downloading of event logs

Low Profile Casters with Locks

Designed to fit through a 34” doorway

Available in 17, 21 & 25 Cubic Foot Models

Shown with optional chart recorder
**ADVANCED & CONFIGURABLE CONTROL**

Easy to use, multi-function control is password protected, and monitors 24 functions and conditions.

**Intuitive Interface**
Easy to follow prompts simplify changing set points, calibration and accessing diagnostics.

**Simple to Troubleshoot**
The control system monitors and records all specified conditions up to 4,000 events. This history can be downloaded for rapid assessment of any alarm.

**Functions & Conditions**
- High control probe temperature
- Low control probe temperature
- Door is ajar
- Power failure — loss of AC input voltage
- Power failure — loss of 12V power supply
- Incorrect power connected
- High ambient temperature
- Low battery voltage
- High stage system failure
- Low stage system failure
- Condenser air flow alarm
- Low voltage alarm
- High voltage alarm
- Control probe failure
- Condenser probe failure
- Heat exchanger probe failure
- Ambient probe failure
- Sample probe failure (if installed)
- Control probe disconnected
- Heat exchanger disconnected
- Condenser probe disconnected
- Ambient probe disconnected
- Sample probe disconnected (if installed)
- Failed battery test
- High Temp Alarm
- Low Temp Alarm
- AC Line Failure
- Low Line Voltage
- High Line Voltage
- Incorrect Power
- Control probe failure
- High Ambient Temp
- Low Battery

**Configure**
- Ring-back delay
- Password security (Access code)
- LCD contrast
- Run battery test
- Battery backup
- Sample

**Calibrate**
- The owner’s manual includes detailed calibration information and instructions.

**Run**
- Version details (control)
- Condenser temperature
- Heat exchanger temperature
- Ambient temperature
- Control temperature
- Line voltage
- Cycle period
- Battery life

**Settings**
- Set time
- Set date
- Access code (status message)
- High alarm
- Temperature set
- Low alarm

**21 Audible & Visual Alarms**
Ensure sample security Extend freezer life by notifying user of:
- High S System Failure
- L S System Failure
- Air Flow Problem
- Low Line Voltage
- High Line Voltage
- Control Probe Failure
- Heat Exchanger Probe Failure
- Sample Probe Failure
- Ambient Probe Failure
- Line/Boost Voltage Sensing
- Probe Unplugged
- Failed Battery Test
- Initializing Error
- Door Open

**PRECISE TEMPERATURE**
100% Precision Control for your sensitive specimen
ENGINEERED TO PERFORM & LAST

Power to Cool
• Five sides of direct contact copper evaporator tubes secured with steel tabs

Strength to Last
• Steel, double walled cabinet
• Double walled inner doors
• Triple contact gasket
• 6" of urethane insulation in critical areas

Designed to Standardize Your Lab
• Utilizes standard racks

Easy Access
• One-step filter access
• Removable sides, rear and front panels

SPECIFICATIONS

PRODUCT & INVENTORY

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Temperature Range</td>
<td>-50°C to -40°C</td>
<td>-50°C to -40°C</td>
<td>-50°C to -40°C</td>
<td>-50°C to -40°C</td>
<td>-50°C to -40°C</td>
</tr>
<tr>
<td>Dimensions exterior (HxWxD) inches</td>
<td>78.5 x 37.6 x 36.3</td>
<td>78.5 x 43.3 x 36.3</td>
<td>78.5 x 49 x 36.3</td>
<td>78.5 x 49 x 36.3</td>
<td>78.5 x 49 x 36.3</td>
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<tr>
<td>Dimensions interior (HxWxD) inches</td>
<td>50 x 23.4 x 23</td>
<td>50 x 23 x 1.2</td>
<td>50 x 23 x 1.2</td>
<td>50 x 23 x 1.2</td>
<td>50 x 23 x 1.2</td>
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<tr>
<td>Inner doors</td>
<td>5 insulated</td>
<td>5 insulated</td>
<td>5 insulated</td>
<td>5 insulated</td>
<td>5 insulated</td>
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<tr>
<td>Security</td>
<td>All models feature key lockable door &amp; passcode protectable control</td>
<td></td>
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<tr>
<td>Compressors</td>
<td>1/4 HP x 1/4 HP cascade</td>
<td>1/4 HP x 1/4 HP cascade</td>
<td>1/4 HP x 1/4 HP cascade</td>
<td>1/4 HP x 1/4 HP cascade</td>
<td>1/4 HP x 1/4 HP cascade</td>
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<tr>
<td>Insulation</td>
<td>5.5&quot; to 6&quot; FIP urethane</td>
<td>5.5&quot; to 6&quot; FIP urethane</td>
<td>5.5&quot; to 6&quot; FIP urethane</td>
<td>5.5&quot; to 6&quot; FIP urethane</td>
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<tr>
<td>Door gasket</td>
<td>3-point silicone sealing</td>
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<tr>
<td>BTU rejection</td>
<td>2150</td>
<td>2370</td>
<td>2300</td>
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<tr>
<td>Shipping weight</td>
<td>270</td>
<td>320</td>
<td>340</td>
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<tr>
<td>Electrical</td>
<td>115v/230v</td>
<td>115v/230v</td>
<td>115v/230v</td>
<td>115v/230v</td>
<td>115v/230v</td>
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<tr>
<td>Breaker requirement</td>
<td>115v / 20 amps dedicated</td>
<td>115v / 20 amps dedicated</td>
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<tr>
<td>Plug</td>
<td>115v / NEMA 5-20</td>
<td>115v / NEMA 5-20</td>
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<td>Agency listings</td>
<td>UL 471</td>
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<td>Performance</td>
<td></td>
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<td>Average stability</td>
<td>2°C</td>
<td>2°C</td>
<td>2°C</td>
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<tr>
<td>Average uniformity</td>
<td>±4.5°C</td>
<td>±4.5°C</td>
<td>±4.5°C</td>
<td>±4.5°C</td>
<td>±4.5°C</td>
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<tr>
<td>Reserve capacity</td>
<td>300 BTUh @ 25°C</td>
<td>300 BTUh @ 25°C</td>
<td>300 BTUh @ 25°C</td>
<td>300 BTUh @ 25°C</td>
<td>300 BTUh @ 25°C</td>
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<tr>
<td>Warm-up time</td>
<td>-80°C to -50°C in 5 hrs</td>
<td>-80°C to -50°C in 5 hrs</td>
<td>-80°C to -50°C in 5 hrs</td>
<td>-80°C to -50°C in 5 hrs</td>
<td>-80°C to -50°C in 5 hrs</td>
</tr>
<tr>
<td>Average energy consumption</td>
<td>15 kW Hour/day</td>
<td>16 kW Hour/day</td>
<td>18 kW Hour/day</td>
<td>16 kW Hour/day</td>
<td>18 kW Hour/day</td>
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<tr>
<td>Sound pressure level</td>
<td>55 - 65 db A scale @ 5 feet depending upon location and measurement testing</td>
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</tbody>
</table>

Storage
Inventory racks will store sixteen (16) 2" boxes arranged four boxes high by four boxes deep or twelve (12) 3" boxes arranged three boxes high by four boxes deep. Rack dimensions are 8-7/8"H x 5-1/2"W x 22-1/4"D including the handles on the front and back of the rack.

| Rack Capacity | | | | | |
| 2" Boxes | 320 | 400 | 480 | 480 | 480 |
| 3" Boxes | 240 | 300 | 360 | 360 | 360 |
| # of Racks | 20 | 25 | 30 | 30 | 30 |
| Racks/Shelf | 4 | 5 | 6 | 6 | 6 |
Supplying the tools and equipment the biotech industry needs to succeed

**A Long Tradition of Excellence**
Over 25 years’ experience of delivering quality products to protect and preserve your life’s work. Versatility & variety: from temperature presets to sizes, to shelf configurations, you get the exact products you need.

**A Warranty to Stand Behind**
The ULT line is backed by a full two-year warranty on parts and labor and an additional three years on compressor parts. A national network of trained service technicians supports this warranty.

**Ordering & Contact Information**
Please contact ABS for the nearest distributor or sales representative.

- **1-800-648-4041**
- **AmericanBiotechSupply.com**
- webmaster@americanbiotechsupply.com
- American BioTech Supply
  125 Varnfield Dr.
  Summerville, SC 29483