Our -30°C general laboratory freezers are designed for medical and scientific applications such as storage of reagents, pharmaceuticals, biologicals, or other commonly used laboratory materials. Models offer cabinet sizes to fit a variety of space needs and storage volume requirements.

Our freezers feature the IntrLogic microprocessor control system, positive airflow systems, industrial quality cabinet construction and extra-strength refrigeration compressors selected for industrial, clinical and scientific use.

**IntrLogic Microprocessor Control**

Our ULT series lab freezers feature enhanced digital electronic technology designed to simplify operation and deliver greater accuracy (see pages 4 and 5).

- Pre-set -30°C operation
- Icon-based controls and displays include graphic references for universal operation
- Setpoint security with key-operated triple-position master switch controls power to all systems for added safety
- Audible/visual warnings for over-temperature, undertemperature and power failure, with visual status reports on critical functions
- Graphic thermometer confirms proper operation at-a-glance, shows normal, high or low temperature condition; steady green for normal, flashing top bar for overtemperature, flashing bulb for undertemperature
- Advanced defrost sensor manages the defrost cycle, minimizing trace amounts of frost build-up to maintain refrigeration coil efficiency
- Enlarged digital display, resolution to within 0.1°C, improves visibility
- Alarm silence, ringback and automatic reset functions
- Push button alarm test verifies sensor continuity
- Battery backup assures control panel function during power failure
- Remote alarm contacts are included on all models
General Purpose Laboratory Freezers

Temperature Range: -30°C (auto defrost)

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Cu.Ft. (L)</th>
<th>Voltage (Hz)</th>
<th>Amps/ Breaker (Plug)</th>
<th>Cabinet</th>
<th>Door</th>
<th>Shelves</th>
<th>Int. Dimensions* H x D x W inches (mm)</th>
<th>Ext. Dimensions* H x D x W inches (mm)</th>
<th>Ship Weight lb (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULT-430A</td>
<td>4.9 (133)</td>
<td>115 (60)</td>
<td>8.0/15 (P1)</td>
<td>undercounter</td>
<td>single, solid</td>
<td>3</td>
<td>20.0 x 20.0 x 20.0 (500 x 500 x 500)</td>
<td>33.4 x 26.0 x 24.0 (850 x 660 x 610)</td>
<td>212 (96)</td>
</tr>
<tr>
<td>ULT-430V</td>
<td>11.5 (326)</td>
<td>230 (50)</td>
<td>8.0/15 (P1)</td>
<td>space saver</td>
<td>single, solid</td>
<td>4</td>
<td>52.0 x 21.0 x 20.0 (1320 x 530 x 500)</td>
<td>71.9 x 28.8 x 24.0 (1830 x 740 x 610)</td>
<td>280 (127)</td>
</tr>
<tr>
<td>ULT-2330A</td>
<td>23.3 (659)</td>
<td>115 (60)</td>
<td>16.0/20 (P2)</td>
<td>upright</td>
<td>single, solid</td>
<td>4</td>
<td>58.0 x 29.0 x 24.0 (1470 x 730 x 610)</td>
<td>77.5 x 35.5 x 28.0 (1970 x 910 x 720)</td>
<td>370 (168)</td>
</tr>
<tr>
<td>ULT-2330D</td>
<td>29.2 (826)</td>
<td>208/230 (60)</td>
<td>16.0/20 (P2)</td>
<td>upright</td>
<td>single, solid</td>
<td>4</td>
<td>58.0 x 29.0 x 30.0 (1470 x 730 x 760)</td>
<td>77.5 x 35.5 x 34.0 (1970 x 910 x 870)</td>
<td>445 (202)</td>
</tr>
<tr>
<td>ULT-3030A</td>
<td>51.1 (1447)</td>
<td>208/230 (60)</td>
<td>16.0/20 (P2)</td>
<td>upright</td>
<td>double, solid</td>
<td>8</td>
<td>58.0 x 29.0 x 52.0 (1470 x 730 x 1320)</td>
<td>77.5 x 35.5 x 56.5 (1970 x 910 x 1440)</td>
<td>600 (272)</td>
</tr>
</tbody>
</table>

*Published interior volumes are nominal; usable cu. ft. (L) capacities may be offset by shelves, drawers, blower coils, or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representative. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences, and frequency of door openings. Contact our sales representative for specific inquiries regarding your application.

Cabinet Construction and Inventory System
- Cabinet capacities from 4.9 to 51.1 cu. ft. (133 to 1447 L)
- High-density, CFC-free urethane foam insulation protects cabinet from ambient temperature fluctuations and minimizes operating costs
- Positive, forced-air circulation maintains temperature uniformity at all shelf levels
- Directional air flow assures quick recovery after door openings
- Solid door with keyed door lock for added security
- Self-closing doors close against closed-cell peripheral gasket
- Door locking provision on all models
- Full-length door handle(s) on all models
- Epoxy-coated, open wire shelves, adjustable in 1" (25 mm) increments; no tools required
- Adjustable leveling feet standard; optional casters are available
- Scratch resistant painted interior and exterior finish for easy cleaning
- 1" (25 mm) access port standard on ULT-430
- Stainless steel interior and exterior surfaces
- 2" (50 mm) casters
- Additional shelves
- Finished countertop for ULT-430

Refrigeration System
- Heavy duty, industrial-grade, hermetically sealed compressors
- Automatic defrost maintains optimum cooling capacity
- Automatic condensate removal; no drain lines required

Optional Accessories
- Voltage safeguard, free standing
- Built-in 6" (152 mm), 7-day circular chart recorder (free-standing on ULT-430)
- Access port 1" (25 mm) diameter, (standard on ULT-430)

Model ULT-430 undercounter freezer, shown with optional finished countertop.
Thermo Scientific Revco lab refrigerators and freezers include enhanced digital electronic technology designed to simplify operation and deliver greater accuracy.

- Icon-based controls and displays include graphic references for universal operation
- Setpoint security with key-operated triple-position master switch controls power to all systems for added safety
- A graphic thermometer confirms proper operation at-a-glance, shows normal, high or low temperature condition; steady green for normal, flashing top bar for overtemperature, flashing bulb for undertemperature
- Auto defrost models feature an advanced defrost sensor which manages the defrost cycle, minimizing trace amounts of frost build-up to maintain refrigeration coil efficiency

**IntrLogic Control Alarm Sequence**

<table>
<thead>
<tr>
<th>Event</th>
<th>Audible Alarm</th>
<th>Visual Alarm</th>
<th>Self Corrected Event</th>
<th>Remote Alarm Contacts Activated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overtemperature</td>
<td>continuous*</td>
<td>slow flash, icon only</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Undertemperature</td>
<td>continuous*</td>
<td>slow flash, icon only</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Power Loss</td>
<td>continuous*</td>
<td>slow flash, icon only</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Door Ajar</td>
<td>delay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Battery</td>
<td>no</td>
<td></td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>Service Required</td>
<td>no</td>
<td></td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

Audible and visual warnings for door ajar, low alarm battery, system maintenance and power failure provide immediate status of critical functions. A push-button alarm test verifies sensor continuity, while the battery backup assures system readiness. The enlarged digital display improves visibility, taking the guesswork out of setpoint and performance management.

*Mute will silence audible alarm with 6-minute ring back interval; display remains flashing. Moving triple position key switch to middle position disables alarm and audible and visual warnings.
Laboratory Quality Cabinet Construction
Our refrigerators and freezers are available in 10 sizes, from compact 4.9 cu.ft. (133 L) undercounter models to spacious, triple-door 78.8 cu.ft. (2231 L) cabinets. All models are built to meet UL, CUL, CE and TUV standards for safety.

- Hermetically sealed refrigeration compressor, air-cooled condenser and automatic condensate removal for auto defrost models
- An efficient, high-capacity air circulation system optimizes top-to-bottom temperature uniformity, accelerates temperature recovery following door openings, and accommodates insertion of warm product
- CFC-free refrigerants, insulation and product packaging
- Depending on model selection, standard or optional shelves, drawers, temperature recorders, cabinet casters and other accessories are available to meet most laboratory needs

Laboratory Refrigerator and Freezer Selection Guide

<table>
<thead>
<tr>
<th>Automatic Defrost Models</th>
<th>Cu.Ft. (L)</th>
<th>4.9 (133)</th>
<th>6.1 (173)</th>
<th>11.5 (326)</th>
<th>20 (566)</th>
<th>23.3 (659)</th>
<th>29.2 (826)</th>
<th>45.8 (1297)</th>
<th>51.1 (1447)</th>
<th>78.8 (2231)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromatography Refrigerators</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
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<td>IntLogic</td>
</tr>
<tr>
<td>General Purpose Lab Refrigerators</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
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<tr>
<td>Blood Bank Refrigerators</td>
<td>IntLogic</td>
<td>IntLogic</td>
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<tr>
<td>Pharmacy Refrigerators</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
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<td>IntLogic</td>
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<tr>
<td>General Purpose Lab Freezers, -30°C</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
</tr>
<tr>
<td>Plasma Freezers, -30°C</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
</tr>
<tr>
<td>Refrigerated Incubators, Programmable</td>
<td>micro</td>
<td>micro</td>
<td>micro</td>
<td>micro</td>
<td>micro</td>
<td>micro</td>
<td>micro</td>
<td>micro</td>
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<td>micro</td>
</tr>
<tr>
<td>Refrigerated Incubators, Non-Programmable</td>
<td>micro</td>
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<td>micro</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Manual Defrost Models</th>
<th>Cu.Ft. (L)</th>
<th>4.9 (133)</th>
<th>6.1 (173)</th>
<th>11.5 (326)</th>
<th>20 (566)</th>
<th>23.3 (659)</th>
<th>29.2 (826)</th>
<th>45.8 (1297)</th>
<th>51.1 (1447)</th>
<th>78.8 (2231)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enzyme Freezer, -20°C</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
</tr>
<tr>
<td>General Purpose Freezer, -20°C</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
<td>IntLogic</td>
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<td>IntLogic</td>
<td>IntLogic</td>
</tr>
</tbody>
</table>

Remote alarm contacts are included on all models.