

Ultra-low freezer recommendations

Looking to upgrade or purchase an ultra-low freezer? Consider using energy efficient units provided by Stirling Ultracold or Thermo Fisher. Duke University, University of Colorado, University of California (Davis and beyond) and University of Minnesota have indicated no issues with these units and the freezers have performed spectacularly with energy consumption and heat being cut in half.

Stirling Ultracold

Provides industry leading energy efficient ultra-low freezers. Additionally, they have been found to be a cost saving, reliable alternative to conventional ultra-low freezers that use cascade or compressor-based refrigeration systems. [Learn more](#) at their website.

Models:

- [Shuttle](#)
- [Undercounter](#)
- [Upright](#)

Benefits:

- 100 percent natural refrigerants | engine: 10g helium; thermosiphon: 90g ethane.
- Fastest door opening temperature recovery.
- Fastest initial pull-down to -80°C.
- Generates 50 percent less heat.
- Largest storage capacity per sq. ft. of floor space.
- Lowest total costs of ownership.
- No surge currents, no oil, low maintenance.
- Plugs into any outlet worldwide.
- Seven-year engine warranty.
- Slowest warm-up after power outage.
- Uses 50 percent less power.

Thermo Fisher Scientific

Provides industry leading energy efficient ultra-low freezers. [Learn more](#) at their website.

Models:

- [TSX400](#) – 400 box capacity
- [TSX600](#) – 600 box capacity

Benefits:

- Choice of standard or high-performance modes offering significant energy savings over conventional refrigerant ultra-low freezers.
- Natural refrigerants for lower environmental impact and higher cooling efficiency.
- Outstanding door-opening recovery time | 17 minutes for TSX400 and 24 minutes for TSX600.
- Quiet operation.
- Touch screen interface featuring alarm status, door-opening status, temperature status, environmental conditions and back-up status.
- TSX Series freezers are manufactured in a zero waste to landfill facility.
- Warm-up time (from -80C to -50C) in 303 minutes (TSX600); 250 minutes (TSX400).
- Water-blown foam insulation, eliminating chemical emissions and reducing the out-gassing common in other foam products.