



Thermo Scientific™ TSX Series Ultra-Low Freezers

Designed to meet the highest protection and sustainability standards for ultra-low storage

- Outstanding peak variation when in high-performance mode: +/- 5°C
- Fast door-opening recovery: <30 minutes
- Outstanding temperature uniformity: +/- 5.2°C °
- Long warm-up time from -80°C to -50°C at <5.0 hours
- Four capacities: 400, 500, 600 and 700 2-inch box
- 12-year compressor warranty: 5 years for full parts and labor, additional 7 years for compressor*
- Low energy usage: less than 9 kWh/day depending on size

New: Optional exterior illumination kit for enhanced management of system health

* Restrictions and exclusions apply. Warranty is void if the unit is not maintained as set forth in the operation and service manuals.

Designed to keep samples safe

- Low peak variation protects samples throughout the entire freezer cabinet¹
- V-Drive technology with adaptive control is designed to detect high and low usage patterns, adjust compressor speeds, and reduce energy without compromising protection
- Records temperature and events for the lifetime of the freezer
- No expensive, free-piston engines to repair
- Backed by our Global Service and Support Team
- New exterior illumination option for quick visual freezer health status
- New frost management with adjustable cabinet heater

Designed to limit environmental impact and protect your budget

- Reduce energy usage up to 70% by replacing an older ultra-low freezer with a new TSX²
- Uses less than 9 kWh/day, depending on size
- Produces less environmental heat emissions and lowers HVAC costs
- SNAP compliant, natural hydrocarbon refrigerants
- SNAP compliant, environmentally-friendly, water-blown foam insulation
- All TSX ULTs are validated by the ACT label program in partnership with MyGreenLabs
- Manufactured in an award-winning,³ zero-waste to landfill facility

User-friendly design and lab footprint

- Intuitive easy-to-use touchscreen provides critical system performance feedback
- Match cabinet size to your footprint and storage requirements
- Quiet enough to reside directly in the laboratory. At just 45.5 dBA, the sound is comparable to a home refrigerator
- Advanced security features



All data based on internal data unless otherwise noted. Data on file.

1. Typical freezer data based on internal testing with freezer setpoint at -80°C and ambient temperature at 20°C. Performance data varies across freezer size and electrical specifications.

2. For energy savings up to 70% at -80°C set point, reference info was: 8.7 kWh/day TSX600 compared >5 year large ULT 31.9 kWh/day energy calculator. At -70°C set point, reference info was: 7.9 kWh/day TSX600 compared >5 year large ULT 31.9 kWh/day energy calculator.

3. Industry Week Best Plant Award, 2013. <http://www.industryweek.com/quality/2013-iw-best-plants-winner-thermo-fisher-scientific-growing-quality-culture-lab>

User-friendly touchscreen interface and cabinet

- **Easy-to-use**—set-up wizard, event log, temperature mapping and data downloads
- **Capacitive touch**—even when using latex gloves
- **Improved cloud-connected, wireless monitoring capability**—with Device Link standard on every TSX
- **Built-in USB port**—allows for quick data download for system diagnostics and analysis
- **Advanced security features**—alarm settings, padlock-compatible doors and optional access card entry
- **Ergonomic design**—comfortable door handle, eye-level touch-screen and shelf-level placement that doesn't require floor-level loading of racks



Specifications and Ordering Information

| Thermo Scientific TSX Series Upright Freezers (-50°C to -86°C) | | | | | | | | |
|--|------------------|------------|-----------------|-----------------------|----------------------------|---|---|--------------------------|
| Model Number | Capacity | | Electrical | Amps / Breaker (Plug) | Max. Shelf Weight lbs (kg) | Interior Dimensions H x W x D in (cm) | Exterior Dimensions H x W* x D in (cm) | Shipping Weight lbs (kg) |
| | cu. ft. (liters) | 2" cryobox | | | | | | |
| TSX40086A | 19.4 (549) | 400 | 115V / 60Hz | 9.0/15 (NEMA 5-15) | 165 (75) | 51.2 x 23.1 x 28.3 (130.1 x 58.8 x 71.9) | 78.0 x 28.3 x 37.6 (198.1 x 71.9 x 95.5) | 665 (302) |
| TSX40086D | | | 208-230V / 60Hz | 4.0/10 (NEMA 6-15) | | | | 640 (290) |
| TSX50086A | 24.1 (682) | 500 | 115V / 60Hz | 9.5/15 (NEMA 5-15) | 205 (93) | 51.2 x 28.8 x 28.3 (130.1 x 73.0 x 71.9) | 78.0 x 34.0 x 37.6** (198.1 x 86.4 x 95.5) | 721 (327) |
| TSX50086D | | | 208-230V / 60Hz | 5.1/10 (NEMA 6-15) | | | | 696 (316) |
| TSX60086A | 28.8 (816) | 600 | 115V / 60Hz | 8.5/15 (NEMA 5-15) | 245 (111) | 51.2 x 34.4 x 28.3 (130.1 x 87.3 x 71.9) | 78.0 x 39.6 x 37.6** (198.1 x 100.6 x 95.5) | 790 (358) |
| TSX60086D | | | 208-230V / 60Hz | 4.0/10 (NEMA 6-15) | | | | 765 (347) |
| TSX70086A | 33.5 (949) | 700 | 115V / 60Hz | 10.6/15 (NEMA 5-15) | 285 (129) | 51.2 x 40.0 x 28.3 (130.1 x 101.6 x 71.9) | 78.0 x 45.2 x 37.6** (198.1 x 114.8 x 95.5) | 894 (406) |
| TSX70086D | | | 208-230V / 60Hz | 5.8/10 (NEMA 6-15) | | | | 869 (394) |

* Allowance for handle and hinge, add 4.2 in (10.7 cm) to cabinet width

** Doorway width clearance is 34.5 in (87.6 cm) for TSX50086, TSX60086, and TSX70086

| Performance Data | | | | | |
|------------------|---|---|---------------------------------|--|-------------------|
| Model Number | Energy Consumption (kW-hr/day)* Standard Mode | Peak Variation from -80°C setpoint (°C)** | Door Opening Recovery (minutes) | Warm Up Time (-80°C to -50°C) (minutes)*** | Noise Level (dBA) |
| TSX40086A | 8.5 | +7.8 / +0.6 | 20 | 292 | 47.5 |
| TSX40086D | 7.7 | | | | |
| TSX50086A | 8.7 | +8.3 / +0.3 | 25 | 264 | 49.0 |
| TSX50086D | 8.5 | | | | |
| TSX60086A | 9.3 | +7.7 / +1.8 | 31 | 297 | 45.5 |
| TSX60086D | 8.6 | | | | |
| TSX70086A | 10.2 | +7.1 / +2.0 | 31 | 339 | 48.0 |
| TSX70086D | 9.4 | | | | |

* Energy Calculation: Typical freezer data based on internal testing with freezer setpoint at -80°C and ambient temperature at 20°C

** Peak Variation From Setpoint: Typical freezer data based on internal testing with freezer setpoint at -80°C and ambient temperature at 20°C

*** Warm Up Time: Typical freezer data based on internal testing with freezer setpoint at -80°C and ambient temperature at 20°C



Find out more at thermofisher.com/tsx

Thermo Scientific™ TSX Series Ultra-Low Freezers

Options and Accessories (Field Installed must be installed by a qualified professional)

| Options | Installation | TSX40086 | TSX50086 | TSX60086 | TSX70086 |
|---|--------------|-----------------|-----------------|-----------------|-----------------|
| LN2 Backup System Maintains temperature down to -80°C with liquid nitrogen. | Factory | LN4567 | LN4567 | LN4567 | LN4567 |
| | Field | FLN4567LE | FLN4567LE | FLN4567LE | FLN4567LE |
| CO2 Backup System Maintains temperature down to -67°C with CO2. | Factory | CO4567 | CO4567 | CO4567 | CO4567 |
| | Field | FCO4567LE | FCO4567LE | FCO4567LE | FCO4567LE |
| Chart Recorder (Inkless) 6" (15.2 cm), seven day inkless recorder, -115° to +50°C, +5°C resolution | Factory | CR4567 | CR4567 | CR4567 | CR4567 |
| | Field | FCR400TSXLE | FCR500TSXLE | FCR600TSXLE | FCR700TSXLE |
| Chart Recorder (Ink) 6" (15.2 cm), seven day ink recorder, -100° to +38°C, +2°C resolution | Factory | CRP4567 | CRP4567 | CRP4567 | CRP4567 |
| | Field | FGRP400TSXLE | FGRP500TSXLE | FGRP600TSXLE | FGRP700TSXLE |
| Access Key Option Card Access control. Includes five key cards. Supports ISO15693 and ISO14443 protocols. | Factory | RAC34567 | RAC34567 | RAC34567 | RAC34567 |
| | Field | FAC34567LE | FAC34567LE | FAC34567LE | FAC34567LE |
| Stainless Steel Freezer Interior | Factory | SS34567 | SS34567 | SS34567 | SS34567 |
| Twist Lock Plug NEMA L5-20P for 115V / 60Hz | Factory | US125V20ATL | US125V20ATL | US125V20ATL | US125V20ATL |
| | Field | TL125V20A | TL125V20A | TL125V20A | TL125V20A |
| Twist Lock Plug NEMA L6-15P for 208-230V / 60Hz | Factory | US230V15ATL | US230V15ATL | US230V15ATL | US230V15ATL |
| | Field | TL230V15A | TL230V15A | TL230V15A | TL230V15A |
| Twist Lock Plug NEMA L6-20P for 208-230V / 60Hz | Factory | US230V20ATL | US230V20ATL | US230V20ATL | US230V20ATL |
| | Field | TL230V20A | TL230V20A | TL230V20A | TL230V20A |
| Shelf Kit: Includes one shelf and shelf support clips | Factory | TSX5SHELFOPTION | TSX5SHELFOPTION | TSX5SHELFOPTION | TSX5SHELFOPTION |
| | Field | SK400TSX | SK500TSX | SK600TSX | SK700TSX |

| Accessories† | TSX40086 | TSX50086 | TSX60086 | TSX70086 |
|--|-----------|-----------|-----------|-----------|
| Access Key Pack (U.S.): Includes five key cards. Supports ISO15693 protocol | ACU34567 | ACU34567 | ACU34567 | ACE34567 |
| Chart Paper Ink (Pack of 50) | 17020 | 17020 | 17020 | 17020 |
| Chart Paper Inkless (Pack of 50) | 6185 | 6185 | 6185 | 6185 |
| Accessory for light bars | TSXLBSM | TSXLBSM | TSXLBLG | TSXLBLG |
| Replacement Air Filter | AF34567LE | AF34567LE | AF34567LE | AF34567 |
| Replacement Back-Up Battery | 400159 | 400159 | 400159 | 400159 |
| Alarm Delay Module: Eliminates nuisance alarms due to intermittent or transitory conditions. Adjustable delay requires alarm condition to exist for user defined period before signal is released to monitoring system. | 6903 | 6903 | 6903 | 6903 |
| Cryo Gloves Medium | 4425 | 4425 | 4425 | 4425 |
| Cryo Gloves Large | 4426 | 4426 | 4426 | 4426 |
| Seismic Restraint Kit | TF-ULT400 | TF-ULT500 | TF-ULT600 | TF-ULT700 |

* A = 115V/60Hz (NEMA 5-20 plug)

** D = 208-230V/60Hz (NEMA 6-15 plug)

† Optional accessories for TSX400/500 and TSX600/700

Find out more at thermofisher.com/tsx

Thermo Scientific™ TSX Series Ultra-Low Freezers

Packages

| TSX with two shelves of sliding drawer racks, including boxes | | | | | |
|---|------------------|------------|------------------|------------|-------------|
| Model No. | Capacity Freezer | Cubic Feet | Electrical, 60Hz | # of Racks | # of Boxes* |
| TSX40086ARAK | 400 box | 19.4 | 115V | 8 | 200 |
| TSX40086DRAK | 400 box | 19.4 | 208-230V | 8 | 200 |
| TSX50086ARAK | 500 box | 24.1 | 115V | 10 | 250 |
| TSX50086DRAK | 500 box | 24.1 | 208-230V | 10 | 250 |
| TSX60086ARAK | 600 box | 28.8 | 115V | 12 | 300 |
| TSX60086DRAK | 600 box | 28.8 | 208-230V | 12 | 300 |
| TSX70086ARAK | 700 box | 33.5 | 115V | 14 | 350 |
| TSX70086DRAK | 700 box | 33.5 | 208-230V | 14 | 350 |

| TSX with factory-installed CO2 back-up, two shelves of sliding drawer racks, including boxes | | | | | |
|--|------------------|------------|------------------|------------|-------------|
| Model No. | Capacity Freezer | Cubic Feet | Electrical, 60Hz | # of Racks | # of Boxes* |
| TSX40086ARAKCO | 400 box | 19.4 | 115V | 8 | 200 |
| TSX40086DRAKCO | 400 box | 19.4 | 208-230V | 8 | 200 |
| TSX50086ARAKCO | 500 box | 24.1 | 115V | 10 | 250 |
| TSX50086DRAKCO | 500 box | 24.1 | 208-230V | 10 | 250 |
| TSX60086ARAKCO | 600 box | 28.8 | 115V | 12 | 300 |
| TSX60086DRAKCO | 600 box | 28.8 | 208-230V | 12 | 300 |
| TSX70086ARAKCO | 700 box | 33.5 | 115V | 14 | 350 |
| TSX70086DRAKCO | 700 box | 33.5 | 208-230V | 14 | 350 |

| TSX with factory-installed access card, two shelves of sliding drawer racks, including boxes | | | | | |
|--|------------------|------------|------------------|------------|-------------|
| Model No. | Capacity Freezer | Cubic Feet | Electrical, 60Hz | # of Racks | # of Boxes* |
| TSX40086ARAKHID | 400 box | 19.4 | 115V | 8 | 200 |
| TSX40086DRAKHID | 400 box | 19.4 | 208-230V | 8 | 200 |
| TSX50086ARAKHID | 500 box | 24.1 | 115V | 10 | 250 |
| TSX50086DRAKHID | 500 box | 24.1 | 208-230V | 10 | 250 |
| TSX60086ARAKHID | 600 box | 28.8 | 115V | 12 | 300 |
| TSX60086DRAKHID | 600 box | 28.8 | 208-230V | 12 | 300 |
| TSX70086ARAKHID | 700 box | 33.5 | 115V | 14 | 350 |
| TSX70086DRAKHID | 700 box | 33.5 | 208-230V | 14 | 350 |

* 2-inch fiberboard boxes with 100-count cell dividers

| TSX with factory-installed LN2 back-up, two shelves of sliding drawer racks, including boxes | | | | | |
|--|------------------|------------|------------------|------------|-------------|
| Model No. | Capacity Freezer | Cubic Feet | Electrical, 60Hz | # of Racks | # of Boxes* |
| TSX40086ARAKLN | 400 box | 19.4 | 115V | 8 | 200 |
| TSX40086DRAKLN | 400 box | 19.4 | 208-230V | 8 | 200 |
| TSX50086ARAKLN | 500 box | 24.1 | 115V | 10 | 250 |
| TSX50086DRAKLN | 500 box | 24.1 | 208-230V | 10 | 250 |
| TSX60086ARAKLN | 600 box | 28.8 | 115V | 12 | 300 |
| TSX60086DRAKLN | 600 box | 28.8 | 208-230V | 12 | 300 |
| TSX70086ARAKLN | 700 box | 33.5 | 115V | 14 | 350 |
| TSX70086DRAKLN | 700 box | 33.5 | 208-230V | 14 | 350 |

| TSX with factory-installed chart recorder, two shelves of sliding drawer racks, including boxes | | | | | |
|---|------------------|------------|------------------|------------|-------------|
| Model No. | Capacity Freezer | Cubic Feet | Electrical, 60Hz | # of Racks | # of Boxes* |
| TSX40086ARAKCR | 400 box | 19.4 | 115V | 8 | 200 |
| TSX40086DRAKCR | 400 box | 19.4 | 208-230V | 8 | 200 |
| TSX50086ARAKCR | 500 box | 24.1 | 115V | 10 | 250 |
| TSX50086DRAKCR | 500 box | 24.1 | 208-230V | 10 | 250 |
| TSX60086ARAKCR | 600 box | 28.8 | 115V | 12 | 300 |
| TSX60086DRAKCR | 600 box | 28.8 | 208-230V | 12 | 300 |
| TSX70086ARAKCR | 700 box | 33.5 | 115V | 14 | 350 |
| TSX70086DRAKCR | 700 box | 33.5 | 208-230V | 14 | 350 |

Find out more at thermofisher.com/tsx

Thermo Scientific™ TSX Series Ultra-Low Freezers

Racks for Boxes and Microplates

| Racks for 2" (5.08 cm) Boxes | | | | | | | |
|------------------------------|-----------------------------|--|-------------------|----------|----------|----------|----------|
| Model No. | Description | Dimensions H x W x D in. (cm) | Storage | TSX40086 | TSX50086 | TSX60086 | TSX70086 |
| 920090 | Sliding Drawer Rack | 11.9 x 5.5 x 26.9 (30.2 x 14 x 68.3) | Boxes Per Rack | 25 | 25 | 25 | 25 |
| | | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | | Boxes Per Freezer | 400 | 500 | 600 | 700 |
| 1950520 | Adjustable Side Access Rack | 11.6 x 5.4 x 26.75 (29.5 x 13.7 x 67.9) | Boxes Per Rack | 25 | 25 | 25 | 25 |
| | | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | | Boxes Per Freezer | 400 | 500 | 600 | 700 |

| Racks for 3" (7.62 cm) Boxes | | | | | | | |
|------------------------------|---------------------|---|-------------------|----------|----------|----------|----------|
| Model No. | Description | Dimensions H x W x D in. (cm) | Storage | TSX40086 | TSX50086 | TSX60086 | TSX70086 |
| 920091 | Sliding Drawer Rack | 11.9 x 5.5 x 26.9 (30.2 x 14 x 68.3) | Boxes Per Rack | 15 | 15 | 15 | 15 |
| | | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | | Boxes Per Freezer | 240 | 300 | 360 | 420 |

| Racking Shelf Kits | | | | | |
|--|----------------|-----------|-----------|-----------|-----------|
| Description | Storage | TSX40086 | TSX50086 | TSX60086 | TSX70086 |
| Sliding Drawer Racks and 2" Boxes with 100 Count Cell Dividers (fits one shelf) | Model No. | RSK400SD4 | RSK500SD4 | RSK600SD4 | RSK700SD4 |
| | Racks Included | 4 | 5 | 6 | 7 |
| | Boxes Included | 100 | 125 | 150 | 175 |

| Racks for Microplates | | | | | | | |
|-----------------------|--|---|--------------------|----------|----------|----------|----------|
| Model No. | Description | Dimensions H x W x D in. (cm) | Storage | TSX40086 | TSX50086 | TSX60086 | TSX70086 |
| 1950592 | Side Access Rack with Locking Rod for Standard or Deepwell | 11.9 x 5.5 x 25.7 (30.2 x 14 x 65.3) | Plates Per Rack | 147 | 147 | 147 | 147 |
| | | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | | Plates Per Freezer | 2352 | 2940 | 3528 | 4116 |

Find out more at thermofisher.com/tsx

Thermo Scientific™ TSX Series Ultra-Low Freezers

Boxes

| Model No. | Description | # of Divisions | Quantity | Color |
|-----------|---|----------------|----------|----------|
| 5026-0909 | Thermo Scientific™ Nalgene™ polycarbonate 2" (5.08 cm) box for 1.2–2.0 mL vials | 81 | 24 | white |
| 5954 | 2" (5.08 cm) fiberboard box | 0 | 12 | white |
| 820002 | 2" (5.08 cm) fiberboard box | 81 | 1 | white |
| 820109 | 2" (5.08 cm) fiberboard box | 100 | 1 | white |
| 5956 | 3" (7.62 cm) fiberboard box | 0 | 12 | white |
| 820003 | 3" (7.62 cm) fiberboard box | 81 | 1 | white |
| 1950878 | 2" (5.08 cm) fiberboard box | 0 | 12 | multiple |
| 1950879 | 2" (5.08 cm) fiberboard box | 0 | 12 | pink |
| 1950880 | 2" (5.08 cm) fiberboard box | 0 | 12 | red |
| 1950881 | 2" (5.08 cm) fiberboard box | 0 | 12 | yellow |
| 1950882 | 2" (5.08 cm) fiberboard box | 0 | 12 | green |
| 1950883 | 2" (5.08 cm) fiberboard box | 0 | 12 | blue |
| 1950884 | 2" (5.08 cm) fiberboard box | 0 | 12 | black |

Fiberboard Dividers

| Model No. | Description | Quantity/Case |
|-----------|-----------------------------------|---------------|
| 5958 | Grid dividers for 100 12 mm vials | 12 |
| 6212 | Grid dividers for 81 13 mm vials | 12 |
| 5960 | Grid dividers for 64 14 mm vials | 12 |
| 5959 | Grid dividers for 49 16 mm vials | 12 |

Vials and Tubes

| Model No. | Description | Quantity/Case |
|-----------|--|---------------|
| 377267 | Thermo Scientific™ Nunc™ 1.8 mL screw-top round-bottom vials with internal threading | 1,800 |

Visit [thermofisher.com](https://www.thermofisher.com) for additional vials, tubes and sample storage consumables

Thermo Scientific™ TSX Series Ultra-Low Freezers

Sliding Drawer Racks for Matrix and Cryobank Tubes

| | | Freezer Model | TSX40086 | TSX50086 | TSX60086 | TSX70086 |
|---|---|---|---|---|---|---|
| 200 µL Capacity Tubes | | | | | | |
| 3747, 3748, 4988 | Thermo Scientific™ Matrix™ 200 µL 2D Internally-threaded Universal Tubes Box Dimension: 3.365 x 5.03 x 1.082 in. (8.5 x 12.8 x 2.75 cm) | Rack Model No | 1950787 | 1950787 | 1950787 | 1950787 |
| | | Freezer Rack Dimensions W x H x D | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) |
| | | Tubes per Box | 96 | 96 | 96 | 96 |
| | | Boxes Per Rack | 56 | 56 | 56 | 56 |
| | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | Tubes Per Freezer | 86,016 | 107,520 | 129,024 | 150,528 |
| 500 µL Capacity Tubes | | | | | | |
| 3734, 3735, 4898 | Thermo Scientific Matrix 500 µL 2D Open Top Tubes Box Dimension: 3.365 x 5.03 x 1.022 in. (8.5 x 12.8 x 2.6 cm) | Rack Model No | 1950787 | 1950787 | 1950787 | 1950787 |
| | | Freezer Rack Dimensions W x H x D | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) |
| 3736, 3737, 4899 | Thermo Scientific™ Matrix™ 200 µL 2D with Duraseals Installed Internally-threaded Universal Tubes Box Dimension: 3.365 x 5.03 x 1.082 in. (8.5 x 12.8 x 2.75 cm) | Tubes per Box | 96 | 96 | 96 | 96 |
| | | Boxes Per Rack | 56 | 56 | 56 | 56 |
| | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | Tubes Per Freezer | 86,016 | 107,520 | 129,024 | 150,528 |
| 374086, 374087 (including color options) | Thermo Scientific Nunc™ Cryobank™ 500 µl Internally Threaded Tubes Box Dimension: 3.365 x 5.03 x 1.394 in. (8.5 x 12.8 x 3.5 cm) | Rack Model No | 1950791 | 1950791 | 1950791 | 1950791 |
| | | Freezer Rack Dimensions W x H x D | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) |
| 3743, 3744, 3745 (including color options) | Thermo Scientific Matrix 500 µL 2D Internally Threaded ScrewTop Tubes Box Dimension: 3.365 x 5.03 x 1.745 in. (8.5 x 12.8 x 4.4 cm) | Tubes per Box | 96 | 96 | 96 | 96 |
| | | Boxes Per Rack | 42 | 42 | 42 | 42 |
| | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | Tubes Per Freezer | 64,512 | 80,640 | 96,768 | 112,896 |

Find out more at thermofisher.com/tsx

Thermo Scientific™ TSX Series Ultra-Low Freezers

Sliding Drawer Racks for Matrix and Cryobank Tubes

| | | Freezer Model | TSX40086 | TSX50086 | TSX60086 | TSX70086 |
|------------------------------|---|-----------------------------------|--|--|--|--|
| 750 µL Capacity Tubes | | | | | | |
| 3731, 3732, 4896 | Thermo Scientific Matrix 750 µL 2D Open Top Tubes Box Dimension: 3.365 x 5.03 x 1.55 in. (8.5 x 12.8 x 3.9 cm) | Rack Model No | 1950791 | 1950791 | 1950791 | 1950791 |
| | | Freezer Rack Dimensions W x H x D | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) |
| 3729, 4896 | Thermo Scientific Matrix 750 µL 2D Tubes with Duraseals Installed Box Dimension: 3.365 x 5.03 x 1.55 in. (8.5 x 12.8 x 3.9 cm) | Tubes per Box | 96 | 96 | 96 | 96 |
| | | Boxes Per Rack | 42 | 42 | 42 | 42 |
| | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | Tubes Per Freezer | 64,512 | 80,640 | 96,768 | 112,896 |

| | | | | | | |
|---|--|-----------------------------------|--|--|--|--|
| 1.0 mL Capacity Tubes | | | | | | |
| 374088, 374089 (including color options) | Thermo Scientific Nunc Cryobank 1.0 mL Internally Threaded Tubes Box Dimension: 3.365 x 5.03 x 1.92 in. (8.5 x 12.8 x 4.9 cm) | Rack Model No | 1950642 | 1950642 | 1950642 | 1950642 |
| | | Freezer Rack Dimensions W x H x D | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) |
| | | Tubes per Box | 96 | 96 | 96 | 96 |
| | | Boxes Per Rack | 35 | 35 | 35 | 35 |
| | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | Tubes Per Freezer | 53,760 | 67,200 | 80,640 | 94,080 |
| 3740, 3741, 3742 (including color options) | Thermo Scientific Matrix 1.0 mL 2D Internally Threaded ScrewTop Tubes Box Dimension: 3.365 x 5.03 x 2.3 in. (8.5 x 12.8 x 5.8 cm) | Rack Model No | 1950799 | 1950799 | 1950799 | 1950799 |
| | | Freezer Rack Dimensions W x H x D | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) |
| | | Tubes per Box | 96 | 96 | 96 | 96 |
| | | Boxes Per Rack | 28 | 28 | 28 | 28 |
| | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | Tubes Per Freezer | 43,008 | 53,760 | 64,512 | 75,264 |

Find out more at [thermofisher.com/tsx](https://www.thermofisher.com/tsx)

Thermo Scientific™ TSX Series Ultra-Low Freezers

Sliding Drawer Racks for Matrix and Cryobank Tubes

| | | Freezer Model | TSX40086 | TSX50086 | TSX60086 | TSX70086 |
|-------------------------------------|---|-----------------------------------|--|--|--|--|
| 1.4 mL Capacity Tubes | | | | | | |
| 3791, 3792, 4890 | Thermo Scientific Matrix 1.4 mL 2D Open Top Tubes Box Dimension: 3.365 x 5.03 x 1.92 in. (8.5 x 12.8 x 4.9 cm) | Rack Model No | 1950642 | 1950642 | 1950642 | 1950642 |
| | | Freezer Rack Dimensions W x H x D | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) |
| 3801, 4890 | Thermo Scientific Matrix 1.4 mL 2D Tubes with Duraseals Installed Box Dimension: 3.365 x 5.03 x 1.92 in. (8.5 x 12.8 x 4.9 cm) | Tubes per Box | 96 | 96 | 96 | 96 |
| | | Boxes Per Rack | 35 | 35 | 35 | 35 |
| 3711, 3112, 4890 | Thermo Scientific Matrix 1.4 mL Human Readable Open Top Tubes Installed Box Dimension: 3.365 x 5.03 x 1.92 in. (8.5 x 12.8 x 4.9 cm) | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | Tubes Per Freezer | 53,760 | 67,200 | 80,640 | 94,080 |
| 1.8 to 2.0 mL Capacity Tubes | | | | | | |
| 374500, 374501 | Thermo Scientific Nunc 1.8 mL Externally Threaded Universal Tubes Box Dimension: 3.365 x 5.03 x 2.15 in. (8.5 x 12.8 x 5.5 cm) | Rack Model No | 1950642 | 1950642 | 1950642 | 1950642 |
| | | Freezer Rack Dimensions W x H x D | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) |
| 374221, 374223 | Thermo Scientific Nunc Cryobank 2.0 mL Internally Threaded Tubes Box Dimension: 3.365 x 5.03 x 2.15 in. (8.5 x 12.8 x 5.5 cm) | Tubes per Box | 48 | 48 | 48 | 48 |
| | | Boxes Per Rack | 35 | 35 | 35 | 35 |
| | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| | | Tubes Per Freezer | 26,880 | 33,600 | 40,320 | 47,040 |
| 5.0 mL Capacity Tubes | | | | | | |
| 374220, 374222 | Thermo Scientific Nunc Cryobank 5.0 mL Internally Threaded Tubes Box Dimension: 3.365 x 5.03 x 3.78 in. (8.5 x 12.8 x 9.6 cm) | Rack Model No | 1950819 | 1950819 | 1950819 | 1950819 |
| | | Freezer Rack Dimensions W x H x D | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) | 5.5 x 11.9 x 26.96 in. (14 x 30.3 x 68.5 cm) |
| | | Tubes per Box | 48 | 48 | 48 | 48 |
| | | Boxes Per Rack | 21 | 21 | 21 | 21 |
| | | Racks Per Shelf | 4 | 5 | 6 | 7 |
| | | Racks Per Freezer | 16 | 20 | 24 | 28 |
| Tubes Per Freezer | 16,128 | 20,160 | 24,192 | 28,224 | | |

Find out more at thermofisher.com/tsx