

NEW! Thermo Scientific™ TLE Series Ultra-Low Freezers



Dependable -80°C storage with energy-savings and sustainability features

- **Low peak variation** helps ensure sample protection throughout entire cabinet
- **Fast door opening recovery** in as little as 13 minutes
- **0.93°C steady-state temperature** variation over time
- **Long warm-up time** from -80°C to -50°C in 5 hours
- **Four capacities:** 300, 400, 500 and 600 2-inch box



Designed to keep your samples safe

- Worry-free storage. With low peak variation, samples are protected throughout the entire cabinet.¹
- Records temperature and events
- Backed by our Global Service and Support Team

Limit environmental impact and lower HVAC costs

- Uses as low as 9.4 kWh/day, depending on size
- Less heat emission lowers HVAC costs
- SNAP compliant, natural hydrocarbon refrigerants
- Environmentally-friendly, water-blown foam insulation is compliant with SNAP
- Manufactured in an award-winning, zero-waste to landfill facility








User-friendly and quiet

- Completely new freezer and user interface.
- Quiet enough to reside directly in the laboratory. At just 50 dBA, the sound is comparable to a home refrigerator.²

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

User friendly touch-screen interface and cabinet

-  **Easy-to-use** set-up wizard, event log, temperature mapping and data downloads
-  **Capacitive touch** even when using latex gloves
-  **Touch-screen datalogging and temperature mapping** eliminates the need for a separate chart recorder
-  **Built-in USB port** for exporting data
-  **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 do not require floor-level loading of racks
-  **Four inner doors** minimize ambient temperature during sample retrieval



Specifications & Ordering Information

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						
TLE30086A	14.9	300	115V / 60Hz	12.6/20 (NEMA 5-20)	125	51.2 x 17.8 x 28.3	78.0 x 23.0 x 37.6	712
TLE30086D	(422)		208-230V / 60Hz	5.6/15 (NEMA 6-15)	(57)	(130.1 x 45.2 x 71.9)	(198.1 x 58.4 x 95.5)	(323)
TLE40086A	19.4	400	115V / 60Hz	13.0/20 (NEMA 5-20)	165	51.2 x 23.1 x 28.3	78.0 x 28.3 x 37.6	687
TLE40086D	(549)		208-230V / 60Hz	5.9/15 (NEMA 6-15)	(75)	(130.1 x 58.8 x 71.9)	(198.1 x 71.9 x 95.5)	(312)
TLE50086A	24.1	500	115V / 60Hz	12.5/20 (NEMA 5-20)	205	51.2 x 28.8 x 28.3	78.0 x 34.0 x 37.6**	734
TLE50086D	(682)		208-230V / 60Hz	5.0/15 (NEMA 6-15)	(93)	(130.1 x 73.0 x 71.9)	(198.1 x 86.4 x 95.5)	(333)
TLE60086A	28.8	600	115V / 60Hz	12.7/20 (NEMA 5-20)	245	51.2 x 34.4 x 28.3	78.0 x 39.6 x 37.6**	820
TLE60086D	(816)		208-230V / 60Hz	6.2/15 (NEMA 6-15)	(111)	(130.1 x 87.3 x 71.9)	(198.1 x 100.6 x 95.5)	(372)

* 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 TLE50086 and TLE60086



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)
TLE30086	9.4	+8.5 / -2.4	13	254	52
TLE40086	9.8	+8.7 / -1.2	15	262	52
TLE50086	10.8	+6.6 / -1.0	21	258	50
TLE60086	11.5	+6.5 / -0.8	26	300	50

* 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/cold

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

Options	Installation	TLE30086	TLE40086	TLE50086	TLE60086
LN2 Backup System Maintains temperature down to -80°C with liquid nitrogen. Models for TLE300 are stand alone.	Factory Installed	N/A	LN4567	LN4567	LN4567
	Field Installed	FLN300A* FLN300D**	FLN4567LE	FLN4567LE	FLN4567LE
CO2 Backup System Maintains temperature down to -67°C with CO2. Models for TLE300 are stand alone.	Factory Installed	N/A	CO4567	CO4567	CO4567
	Field Installed	FCO300A* FCO300D**	FCO4567LE	FCO4567LE	FCO4567LE
Chart Recorder (Inkless) 6" (15.2 cm), seven day inkless recorder, -115° to +50°C, +5°C resolution	Factory Installed	N/A	CR4567	CR4567	CR4567
	Field Installed	N/A	FCR400LE	FCR500LE	FCR600LE
Chart Recorder (Ink) 6" (15.2 cm), seven day inkless recorder, -115° to +50°C, +5°C resolution	Factory Installed	N/A	CRP4567	CRP4567	CRP4567
	Field Installed	6383-6A* 6393-6D**	FCRP400LE	FCRP500LE	FCRP600LE
Access Key Option Card Access control. Includes five key cards. Supports ISO15693 and ISO14443 protocols.	Factory Installed	RAC34567	RAC34567	RAC34567	RAC34567
	Field Installed	FAC34567LE	FAC34567LE	FAC34567LE	FAC34567LE
Stainless Steel Freezer Interior	Factory Installed	SS34567	SS34567	SS34567	SS34567
Twist Lock Plug NEMA L5-20P for 115V / 60Hz	Factory Installed	US125V20ATL	US125V20ATL	US125V20ATL	US125V20ATL
	Field Installed	TL125V20A	TL125V20A	TL125V20A	TL125V20A
Twist Lock Plug NEMA L6-15P for 208-230V / 60Hz	Factory Installed	US230V15ATL	US230V15ATL	US230V15ATL	US230V15ATL
	Field Installed	TL230V15A	TL230V15A	TL230V15A	TL230V15A
Twist Lock Plug NEMA L6-20P for 208-230V / 60Hz	Factory Installed	US230V20ATL	US230V20ATL	US230V20ATL	US230V20ATL
	Field Installed	TL230V20A	TL230V20A	TL230V20A	TL230V20A
Accessories		TLE30086	TLE40086	TLE50086	TLE60086
Access Key Pack (U.S.): Includes five key cards. Supports ISO15693 protocol		ACU34567	ACU34567	ACU34567	ACU34567
Shelf Kit: Includes one shelf and shelf support clips		SK300	SK400	SK500	SK600
Chart Paper Ink (Pack of 50)		17020	17020	17020	17020
Chart Paper Inkless (Pack of 50)		N/A	6185	6185	6185
Replacement Air Filter		AF34567LE	AF34567LE	AF34567LE	AF34567LE
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-ULT300	TF-ULT400	TF-ULT500	TF-ULT600

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

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

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