

Researchers worldwide protect more than two billion samples inside Thermo Scientific cold storage equipment. With proven solutions including +4°C refrigerators to -196°C cryogenic freezers you're free to concentrate on your work without worrying about your valuable samples.

Thermo Scientific -86°C Freezers

Protecting your precious samples



Our -86°C freezers are designed for everyday reliability and minimal maintenance so that you can focus on your work

Features and Benefits

- Maximum sample protection is provided by foamed-in-place polyurethane insulation in the cabinet that also reduces the amount of power consumed and allows the cabinet to reach and maintain the temperature setpoint
- Four interior compartment doors reduce cold air loss, improving temperature recovery during door closings (five door option available)
- Centralized information center includes microprocessor control and a safety monitoring system with alarms to provide maximum sample protection
- Ergonomically designed handle ensures that minimal effort is required during freezer openings and closings
- Stainless steel interior simplifies cleaning
- Two 1 HP compressors
- Built-in voltage compensator monitors incoming voltage and adjusts for high or low voltage conditions
- Heavy gauge, cold-rolled steel cabinets have a powder coat finish for a uniform exterior surface that resists chipping/rust
- Vacuum relief port for quick re-entry under all conditions
- Three fully adjustable, solid, stainless steel shelves are included as standard
- Convenient air filter location allows easy access for inspection and changing
- Optional eye level chart recorder assists with validation requirements. Optional CO₂ or LN₂ safety back-up systems are available to provide additional sample protection in the event of a power or mechanical failure
- One year full parts and labor warranty; additional warranty available on request

Alarms (alarm/maintenance indicators):

Monitors critical freezer functions and operating parameters

Run: Used during typical freezer operation

Audible/Visual Alarm

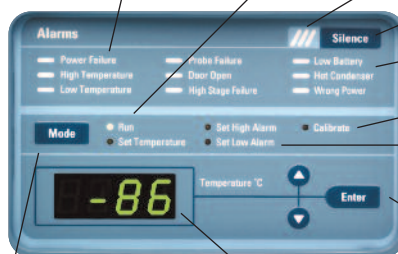
Alarm Silence

Low Battery and Hot Condenser Indicator

Calibrate: Set control probe parameters

Set High Alarm and Set Low Alarm: Used to define overtemp and undertemp setpoints

Programmable Buttons



Mode: Select Run, Set Temp, Set High Alarm, Set Low Alarm, Calibrate or optional Back-Up mode

Temperature Display

Thermo Scientific -86°C Freezer (Not Available in North America)

Ordering Information

Model No.	Order No.	Capacity L (cu. ft.)	Electrical	Amps/Breaker (Plug)	Interior Dimensions HxWxD mm (inches)	Exterior Dimensions HxWxD mm (inches)	Shipping Weight kg (lbs)
TS368	51027018	368 (13)	230V, 50 Hz	12/15 (P4)	1308 x 584 x 490 (51.5 x 23.0 x 19.3)	1976 x 846 x 787 (77.8 x 33.3 x 31.0)	323 (712)
TS490	51027019	490 (17.3)	230V, 50 Hz	12/15 (P4)	1308 x 584 x 643 (51.5 x 23.0 x 25.3)	1976 x 846 x 940 (77.8 x 33.3 x 37.0)	360.6 (795)
TS651	51027020	651 (23)	230V, 50 Hz	12/15 (P4)	1308 x 777 x 643 (51.5 x 30.6 x 25.3)	1976 x 1036 x 940 (77.8 x 40.87 x 37.0)	408.2 (900)

Freezer Options

Ordering Information

Description	Order No.
U.K. Mains Cord	51900303
Chart Recorder – Seven Days With Pen	51900931
Chart Recorder – Seven Days Inkless	51900932
Data Logging System	51900933
CO ₂ Back-Up System	51900934
LN ₂ Back-Up System	51900935
Unique Key Lock	51900942
PT100 Sensor	51900354
Five Inner-Door Option for TS368	51900938
Five Inner-Door Option for TS490	51900939
Five Inner-Door Option for TS651	51900940
Shelf Kit for TS368	50119516
Shelf Kit for TS490	50119518
Shelf Kit for TS651	50119519
Access Port	51900941



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