



**Thermo Scientific  
TS586e -86°C Freezer**

**proven**  
**Eco-friendly performance**  
**with unmatched energy efficiency**

# designed for your environment

## Thermo Scientific TS586e -86°C Freezer

everything you'd expect from the industry leading ultra-low temperature freezer. Superior sample protection with unmatched energy savings. And an **uncompromised respect for the environment.**

**A wide range of racking systems and storage vials** are available for convenient storage and maximum space utilization



**Audible/visual alarms** alert to any temperature deviation beyond pre-set high/low limits

**High ambient alert** warns if room temperature may impact on freezer performance

**Low voltage alert** warns of insufficient incoming line voltage

**RS232 interface** for data download to PC

**Performance deviation alert** warns of current or recent automatically adjusted incidents that may affect performance

**Low battery alarm** with auto-charge for battery back-up



### PRICE/ENERGY COMPARISON

**The TS586e is the most energy efficient freezer in its class...and uses more than 40% less energy than similar conventional freezers.**

#### 500 liter range units

Thermo Scientific TS586e
Competitor A
Competitor B

► **100% hydrocarbon refrigerants:** NO ozone-depleting CFCs or high greenhouse warming potential HFC's

► **CE certified and WEEE directive** compliant freezer

► **Water blown foam insulation:** environmentally-friendly insulation maximizes internal storage while assuring consistent, uniform temperature throughout the freezer

- Low noise emissions: at less than 49 dB(A), the unit resides comfortably in the lab without disturbing users
- Intuitive microprocessor control system: for comprehensive remote monitoring of compressor function, condenser temperature, door open, and ambient temperature

- Proven, powerful refrigeration system: delivers rapid cooling, fast response to door openings, and superior long-term performance under fluctuating voltage and environmental conditions
- Ergonomically-designed handle: ensures minimal effort during freezer opening and closings
- RS232 interface, for easy data transfer to a PC
- Wide range of racks, accessories and options: including optional CO<sub>2</sub> back-up system, and chart recorder
- Water-cooled condenser option for enhanced compressor stability and reliability



T586e and competitive "green" freezer energy usage (kWh/Day at -80°C setpoint)	Estimated conventional freezer energy usage (kWh/Day)	10 year carbon footprint reduction over conventional freezers in kg CO <sub>2</sub> (0.5kg CO <sub>2</sub> /kWh)	10 year energy cost savings over conventional freezers in € (based on 0.11€/kWh)
10.7	21	18746	4124.12 €
11.6	21	17472	3843.84 €
12.2	21	16380	3603.60 €

## Thermo Scientific TS586e -86°C Freezer (Not Available in North America)

Ordering Information							
Model (Order No.)	Internal Doors	Capacity L (cu. ft.)	Electrical	Amps/Breaker (Plug)	Interior Dimensions HxWxD mm (inches)	Exterior Dimensions HxWxD mm (inches)	Shipping Weight kg (lbs)
TS586e (51028176)	5	510 (18)	230V, 50 Hz	16/20 (P4)	1300 x 610 x 645 (51.2 x 24 x 25.4)	1970 x 920 x 1035 (77.6 x 36.2 x 40.8)	313 (689)

### Maximize energy savings with our water-cooled option.

Please consult your sales representative for more information.  
Order No. 51900351

## Rack Systems\*

Vials						
Order No.	Description H x D x W (mm)	Freezer Vol L (cu. ft.)	Qty of 50 mm (2 in.) Boxes	Qty of (80 mm) (3 in.) Boxes	Racks/Shelf	Racks/Freezer
H7C4-3/SA	Side Access Rack (240 x 550 x 137)	510 (18)	16	12	4	20
H7C4/00	Front Access, Sliding Drawer Rack (240 x 550 x 140)	510 (18)	16	–	4	20

Microplates						
Order No. H x D x W (mm)	Description (cu. ft.)	Freezer Vol L Plates	Deepwell Plates	Shallow-Well Shelf	Racks/Freezer	Racks/Freezer
H7C4/MP	Front Access Rack (240 x 555 x 140)	510 (18)	24	72	4	20
H7C4/MP/SA	Side-Access Rack (240 x 555 x 137)	510 (18)	24	72	4	20

## Freezer Options and Accessories

Ordering Information			
Order No.	Description	Order No.	Description
820002/0	Fiberboard Box, 2", no dividers	CRYO/2	Aluminum Box, 2", no dividers
820002/16	Fiberboard Box, 2", 30mm sections	CRYO 16/2	Aluminum Box, 2", 30mm sections
820002/25	Fiberboard Box, 2", 24mm sections	CRYO 25/2	Aluminum Box, 2", 24mm sections
820002/49	Fiberboard Box, 2", 16mm sections	CRYO 36/2	Aluminum Box, 2", 18mm sections
820002/64	Fiberboard Box, 2", 14mm sections	CRYO 49/2	Aluminum Box, 2", 16mm sections
820002/81	Fiberboard Box, 2", 13mm sections	CRYO 64/2	Aluminum Box, 2", 14mm sections
820002/100	Fiberboard Box, 2", 12mm sections	CRYO 81/2	Aluminum Box, 2", 13mm sections
820003/0	Fiberboard Box, 3", no dividers	CRYO 100/2	Aluminum Box, 2", 12mm sections
820003/16	Fiberboard Box, 3", 30mm sections	CRYO 144/2	Aluminum Box, 2", 10mm sections
820003/25	Fiberboard Box, 3", 24mm sections		
820003/49	Fiberboard Box, 3", 16mm sections	51900355	CO <sub>2</sub> Back-Up System (-30°C to -70°C)
820003/64	Fiberboard Box, 3", 14mm sections	51900353	Temperature Recorder
820003/81	Fiberboard Box, 3", 13mm sections	50058997	Chart Paper
820003/100	Fiberboard Box, 3", 12mm sections	51900354	Pt 100 Sensor (connection to external temp. monitor)
		51900351	Water Cooling for Freezer
		51900352	Left-Hinged Door
		51900353	Chart Recorder
		51900364	Five Drawers Option
		51900365	Ten Drawers Option



Drawer option

\* Racks do not include boxes or microplates

driving bold progress across cold storage

[www.thermoscientific.com/cold](http://www.thermoscientific.com/cold)



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