

Thermo Scientific HERAFreeze Top and Basic Freezers

Solutions for safe sample storage

Safeguarding your precious samples

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

Thermo Scientific HERAFreeze freezers are engineered to provide reliable, user-friendly operation and the safe, protected ultra-low temperature environment your precious samples require.

superior
reliability



▲
Our -86°C freezers are available
in chest and upright configurations

-86°C Upright Freezers

Energy-efficient upright freezers maximize storage capacity and minimize operating costs. Upright models are ideal for everyday storage, and maintain constant temperatures even when doors are opened frequently.

-86°C Chest Freezers

Maximize storage capacity and minimize operating costs. Chest freezers provide a safe, stable environment for long-term storage and sample archiving.

Racks and Accessory Systems

Our racks and accessories enable freezers to be configured for specific storage applications. Perfectly matched boxes, inserts and racks integrate to make inventory management more efficient and optimize the use of available freezer space.

page 4

Y

page 4

page 7



▲ Built-in control panel

◀ HERAfreeze® racks for upright freezers

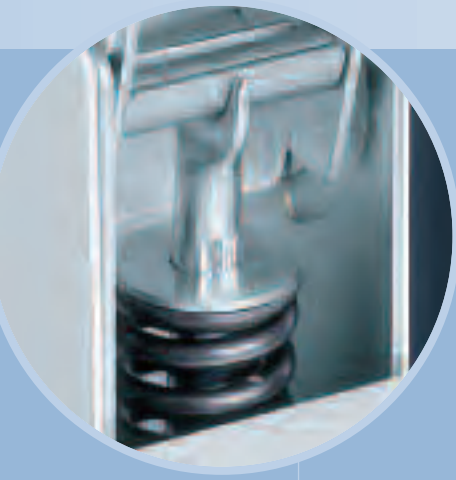
Thermo Scientific HERAfreeze -86°C Upright and Chest Freezers

Secure, energy-efficient sample storage

Our upright and chest freezers are available in a wide range of sizes and two control configurations (Top and Basic) to meet a variety of short and long-term sample storage needs.

All models use the powerful refrigeration system, which provides rapid cooling, fast response to door openings and unmatched long-term performance under fluctuating voltage and environmental conditions.

- Capacities from 220 ltrs to 630 ltrs
- Energy-saving design reduces energy consumption by up to 60% compared to other models
- Easy to clean, corrosion-resistant interiors
- Upright models available with right or left-hinged doors
- Casters with locking brakes provide mobility and make installation easier



Easy-open lid
with torque-compensated, tensioned hinges that keep the lid open at any angle and allow safe, smooth closures



Ergonomically designed handle
with security keylock for effortless door openings and closures with just one hand

Upright and



High visibility display
large LED display on all models enable at-a-glance monitoring



Flexible shelf positions
for a variety of inventory configurations



Five inner doors
in upright models create independent storage compartments, so ambient thermal exposure is minimized when samples are accessed

Dual gasket system
ensures a tight door seal and minimizes frost build-up. The outer seal is heated to prevent condensation and sticking doors

Polystyrene inner lids
on chest models protect samples by minimizing heat transfer

Top and Basic Control

Top model freezers feature an intuitive microprocessor control system that offers comprehensive remote monitoring capabilities and incorporates an RS232 interface for data download to a PC.

- Easy input of temperature and high/low alarm setpoints
- Optional temperature back-up system
- Continuous remote monitoring of compressor function, condenser temperature, door/lid open and ambient temperature

Basic model freezers incorporate an easy-to-use solid-state control system with an RS232 option.

- Digital setpoint and display
- Adjustable over and low-temperature alarm
- Monitoring of compressor function and door/lid open

Chest Freezers



-86°C Top Upright and Chest Freezers

Temperature Range: -50°C to -86°C

Model (Catalog No.)	Internal Doors	Volume Liters (cu.ft.)	Interior Dimensions H x W x D, mm (inches)	Exterior Dimensions H x W x D, mm (inches)	Electrical*	Amps/Breaker	Ship Weight kg (lbs)
HFU 486 Top Upright (51019572)	5	400 (14)	1300 x 610 x 505 (51.2 x 24 x 19.9)	1970 x 920 x 895 (77.6 x 36.2 x 35.3)	230 V/50 Hz 1ø	16/20	273 (600)
HFU 586 Top Upright (51019573)	5	510 (18)	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)	230 V/50 Hz 1ø	16/20	313 (689)
HFU 686 Top Upright (51019574)	5	630 (22)	1300 x 755 x 645 (51.2 x 24.7 x 25.4)	1970 x 1065 x 1035 (77.6 x 42 x 40.8)	230 V/50 Hz 1ø	16/20	335 (737)
HFC 286 Top Chest (51019553)	—	220 (7.8)	705 x 630 x 500 (21.8 x 24.8 x 19.7)	1070 x 1350 x 910 (42.2 x 53.2 x 35.9)	230 V/50 Hz 1ø	16/20	202 (444)
HFC 486 Top Chest (51019565)	—	375 (13.3)	705 x 1070 x 500 (27.8 x 42.2 x 19.7)	1070 x 1790 x 910 (42.2 x 70.5 x 35.9)	230 V/50 Hz 1ø	16/20	250 (550)
HFC 586 Top Chest (51019566)	—	525 (18.6)	705 x 1490 x 500 (27.8 x 58.7 x 19.7)	1070 x 2210 x 910 (42.2 x 87 x 35.9)	230 V/50 Hz 1ø	16/20	286 (629)

*Other power supplies available on request.

-86°C Basic Upright and Chest Freezers

Temperature Range: -50°C to -86°C

Model (Catalog No.)	Internal Doors	Volume Liters (cu.ft.)	Interior Dimensions H x W x D, mm (inches)	Exterior Dimensions H x W x D, mm (inches)	Electrical*	Amps/Breaker	Ship Weight kg (lbs)
HFU 486 Basic Upright (51019575)	5	400 (14)	1300 x 610 x 505 (51.2 x 24 x 19.9)	1970 x 920 x 895 (77.6 x 36.2 x 35.3)	230 V/50 Hz 1ø	16/20	270 (594)
HFU 586 Basic Upright (51019576)	5	510 (18)	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)	230 V/50 Hz 1ø	16/20	310 (682)
HFU 686 Basic Upright (51019577)	5	630 (22)	1300 x 755 x 645 (51.2 x 29.7 x 25.4)	1970 x 1065 x 1035 (77.6 x 42 x 40.8)	230 V/50 Hz 1ø	16/20	332 (730)
HFC 286 Basic Chest (51019567)	—	220 (7.8)	705 x 630 x 500 (21.8 x 24.8 x 19.7)	1070 x 1350 x 910 (42.2 x 53.2 x 35.9)	230 V/50 Hz 1ø	16/20	202 (444)
HFC 486 Basic Chest (51019568)	—	375 (13.3)	705 x 1070 x 500 (27.8 x 42.2 x 19.7)	1070 x 1790 x 910 (42.2 x 70.5 x 35.9)	230 V/50 Hz 1ø	16/20	250 (550)
HFC 586 Basic Chest (51019569)	—	525 (18.6)	705 x 1490 x 500 (27.8 x 58.7 x 19.7)	1070 x 2210 x 910 (42.2 x 87 x 35.9)	230 V/50 Hz 1ø	16/20	286 (629)

*Other power supplies available on request.

Two Levels of Control Sophistication – Top and Basic

Top Microprocessor Control

For demanding storage applications

Our Top control features an intuitive microprocessor control system that offers comprehensive remote monitoring capabilities and incorporates an RS232 interface for data download to a PC.

Our Top control offers active and passive supervision of all functions for unsurpassed safety and security. Door-mounted controls and eye-level displays simplify operation and enable at-a-glance monitoring.

- Easy input of temperature and high/low alarm setpoints
- Set parameters for temperature back-up, alarm delay and lock on/off
- Continuous remote monitoring of compressor function, condenser temperature, door/lid open, and ambient temperature

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 and automatically compensates for low source power

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

Basic Solid-State Control

For reliable, routine storage

Our Basic control incorporates an easy-to-use solid-state control system with an RS232 option.

Our Basic control features a high visibility digital temperature display.

- Digital setpoint and display
- Adjustable over and low-temperature alarm
- Monitoring of compressor function and door/lid open

Basic



Bright LED display shows setpoint and actual temperature at the push of a button

Integrated preset overtemperature alarm provides an audible alert to warm conditions

Adjustable over and low-temperature alarm

Thermo Scientific HERAfreeze Racks and Accessories

Maximize the value of your freezer

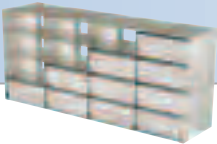
Now there's a way to get exceptionally efficient storage configurations that maximize your productivity while reducing operating costs.

Our racks provide a complete, customizable solution for all of your application needs – cryoboxes, microplates, bulk or kits – along with proven reliability and quality you can depend on year after year.



> Racks – Upright Freezers

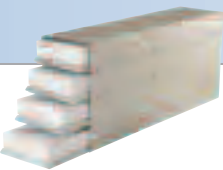
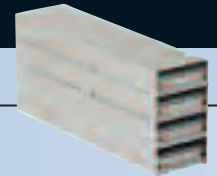
Vials – Side Access Racks



Cat No.	Description Size: H x D x W, mm	Freezer Volume Liters (cu.ft.)	Quantity of 2" Boxes	Quantity of 3" Boxes	Racks/Shelf	Total Racks/ Freezer
H6C4-3/SA	Adjustable Side Access Rack 240 x 410 x 137	400 (14.1)	12	9	4	20
H7C4-3/SA	Adjustable Side Access Rack 240 x 550 x 137	510 (18)	16	12	4	20
		630 (22.2)	16	12	5	25

*Boxes not included

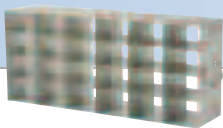
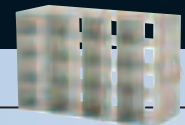
Vials – Front Access Racks



Cat No.	Description Size: H x D x W, mm	Freezer Volume Liters (cu.ft.)	Quantity of 2" Boxes	Quantity of 3" Boxes	Racks/Shelf	Total Racks/ Freezer
H6C4/00	Sliding Drawer Rack 240 x 420 x 140	400 (14.1)	12	-	4	20
H7C4/00	Sliding Drawer Rack 240 x 550 x 140	510 (18)	16	-	4	20
		630 (22.2)	16	-	5	25

*Boxes not included

Microplates – Side Access Racks



Cat No.	Description	Size: H x D x W, mm	Freezer Volume Liters (cu.ft.)	Capacity Shallow well	Capacity Deep well	Racks/Shelf
H6C4/MP/SA	Microplates	240 x 370 x 137	400 (14.1)	48	16	4
H7C4/MP/SA	Microplates	240 x 550 x 137	510 (18)	72	24	4
			630 (22.2)	72	24	5

Thermo Scientific HERAfreeze Racks and Accessories



> Racks – Upright Freezers

Microplates – Front Access Racks							
Cat. No.	Description	Size: H x D x W, mm	Freezer Volume Liters (cu.ft.)	Capacity Shallow well	Capacity Deep well	Racks/Shelf	
H6C4/MP	Microplates	240 x 420 x 140	400 (14.1)	48	16	4	
H7C4/MP	Microplates	240 x 555 x 140	510 (18)	72	24	4	
			630 (22.2)	72	24	5	

*Microplates not included



> Racks – Chest Freezers

Vials							
Cat No.	Description	Size: H x D x W, mm	Freezer Volume Liters (cu.ft.)	Quantity of 2" Boxes	Quantity of 3" boxes	Racks/freezer	
K7A12	Vertical Cryobox Rack	585 x 139 x 140	220 (7.8)	12	–	12	
			375 (13.3)	12	–	21	
			525 (18.6)	12	–	30	

Microplates							
Cat No.	Description	Size: H x D x W, mm	Freezer Volume Liters (cu.ft.)	Shallow well	Deep well	Racks/freezer	
K7/10SD	Microplate	595 x 131 x 87	220 (7.8)	30	10	20	
			375 (13.3)	30	10	40	
			525 (18.6)	30	10	55	

*Microplates not included

Thermo Scientific HERAfreeze Cryo Boxes



> Cryo Boxes – Upright/Chest Freezers

Fiberboard (BFB) Boxes – Light, Flexible and Economical

H: 35 mm Cat. No.	H: 50 mm Cat. No.	H: 75 mm Cat. No.	H: 100 mm Cat. No.	H: 130 mm Cat. No.	Color	Size: D x W, mm
50058600	50058610	50058620	50058920	50058540	White	131 x 131, Lid: 137 x 137
50058601	50058611	50058621	50058921	–	Red	131 x 131, Lid: 137 x 137
50058603	50058613	50058623	50058923	–	Blue	131 x 131, Lid: 137 x 137
50058604	50058614	50058624	50058924	–	Green	131 x 131, Lid: 137 x 137
50058607	50058617	50058627	50058927	–	Yellow	131 x 131, Lid: 137 x 137

Dividers for Fiberboard (BFB) Boxes

3 x 3	5 x 5	7 x 7	8 x 8	9 x 9	10 x 10	13 x 13	16 x 16
50058549	50058559	50058569	50058579	50058589	50058599	50058609	50058619

Polycarbonate (BPC) Boxes – Robust, Flexible and Temperature Resistant

H: 53 mm Cat. No.	H: 80 mm Cat. No.	H: 96 mm Cat. No.	Color	Sample Places	Size: D x W, mm
50058507	–	–	Red	64	131 x 131
50058571	50058581	50058591	Red	81	131 x 131
50058573	50058583	50058593	Blue	81	131 x 131
50058574	50058584	50058594	Green	81	131 x 131
50058577	50058587	50058597	Yellow	81	131 x 131
50058561	–	–	Red	100	131 x 131
50058563	–	–	Blue	100	131 x 131
50058564	–	–	Green	100	131 x 131
50058567	–	–	Yellow	100	131 x 131

Polypropylene (BPP) Boxes – Robust and Autoclavable

H: 45 mm Cat. No.	H: 46 mm Cat. No.	Color	Sample Places	Size: D x W, mm
50059050	–	White	64	134 x 134
50059051	–	Red	64	134 x 134
50059053	–	Blue	64	134 x 134
50059054	–	Green	64	134 x 134
50059055	–	Pink	64	134 x 134
50059057	–	Yellow	64	134 x 134
–	50059060	White	81	133 x 133
–	50059061	Red	81	133 x 133
–	50059063	Blue	81	133 x 133
–	50059064	Green	81	133 x 133
–	50059065	Pink	81	133 x 133
–	50059067	Yellow	81	133 x 133

Thermo Scientific HERAfreeze Cryo Boxes and Freezer Options



> Cryo Boxes – Upright/Chest Freezers

Stainless Steel (BSS) Boxes

H: 50 mm Cat. No.	H: 75 mm Cat. No.	H: 100 mm Cat. No.	Box Cover	Size: D x W, mm
50058908	50058918	50058919	50067768	136 x 136

Dividers for Stainless Steel (BSS) Boxes

7 x 7	8 x 8	9 x 9	10 x 10
50058911	50058916	50058917	50058914



NALGENE and NUNC cryogenic storage give you everything you need to safely store precious specimens, organize freezer space and simplify sample retrieval. NALGENE and NUNC combine to provide one-stop shopping for the widest variety and highest quality of externally and internally threaded cryovials, storage boxes, lab top coolers and controlled rate freezing containers.

For further information regarding these products – visit www.nalgene.com or www.nunc.com



> Options – Top and Basic Chest and Upright Freezers

	Top Freezers	Basic Freezers
	Cat. No.	Cat. No.
Safety Backup System		
CO ₂ back-up system (-30°C to -70°C, adjustable in 1°C increments)	51900355	51900361
Temperature Recorders and Sensors		
Temperature recorder	51900353	51900353
Chart paper	50058997	50058997
Pt 100 sensor (allows connection to an external temperature monitoring system)	51900354	51900354
RS 232 Interface	–	51900362
Water Cooling	51900351	51900351

Water Cooling Option

Chest and Upright freezers are available with a water-cooled condenser in place of the standard air cooling system. The condenser minimizes heat

dissipation into the work environment, making a water-cooled Thermo Scientific HERAfreeze unit the perfect choice for labs that contain several items of heat-

generating equipment. Water cooling also offers the possibility of energy recovery.

Thermo Scientific HERAfreeze Equipment



> Equipment – Top and Basic Chest and Upright Freezers

	Top Freezers	Basic Freezers
Cooling		
Air cooling	●	●
Water cooling	■	■
CO2 back-up system	■	■
Data capture		
Circular chart recorder	■	■
Pt 100 connection	■	■
RS 232 interface	●	■
Floating alarm contact	●	●
Doors		
Right hinged	●	●
Left hinged	■	■
Operating Panel		
Top version at the side	●	N/A
Top version on the side	●	N/A
Basic version on the side	N/A	●
Basic version inside the machine component	N/A	●
Adjustments		
Set temperature	-50 to -86°C	-50 to -86°C
Heat alarm	-1 to -40K freely adjustable	-1 to -40K freely adjustable
Cold alarm	-1 to 40K freely adjustable	-1 to -40K freely adjustable
Back-up temperature	■ ¹⁾ -30 to -70°C	■ ¹⁾ -30 to -70°C
Back-up	■ ¹⁾ on/off	■ ¹⁾ on/off
Accumulator supply can be switched off	●	●
Alarm delay	0 to 240 mins.	N/A
Test operation	●	●
Keyboard lock	●	N/A
Monitoring		
Compressor	●	●
Condensor Temperature	●	N/A
Door / lid open	●	●
Ambient temperature	●	N/A

● included in the price ■ optional accessory N/A - not included in the product range ¹⁾ control in preparation

ABOUT THERMO FISHER SCIENTIFIC

Thermo Fisher Scientific Inc. (NYSE: TMO) is the world leader in serving science, enabling our customers to make the world healthier, cleaner and safer. With annual revenues of \$10 billion, we have more than 30,000 employees and serve over 350,000 customers within pharmaceutical and biotech companies, hospitals and clinical diagnostic labs, universities, research institutions and government agencies, as well as environmental and industrial process control settings. Serving customers through two premier brands, Thermo Scientific and Fisher Scientific, we help solve analytical challenges from routine testing to complex research and discovery. Thermo Scientific offers customers a complete range of high-end analytical instruments as well as laboratory equipment, software, services, consumables and reagents to enable integrated laboratory workflow solutions. Fisher Scientific provides a complete portfolio of laboratory equipment, chemicals, supplies and services used in healthcare, scientific research, safety and education. Together, we offer the most convenient purchasing options to customers and continuously advance our technologies to accelerate the pace of scientific discovery, enhance value for customers and fuel growth for shareholders and employees alike. Visit www.thermofisher.com.

North America: USA/Canada +1 866 984 3766 (866-9-THERMO)

Europe: Austria +43 1 801 40 0, Belgium +32 2 482 30 30, France +33 2 2803 2180, Germany national toll free 08001-536 376, Germany international +49 6184 90 6940, Italy +39 02 02 95059 434-254-375, Netherlands +31 76 571 4440, Nordic/Baltic countries +358 9 329 100, Russia/CIS +7 (812) 703 42 15, Spain/Portugal +34 93 223 09 18, Switzerland +41 44 454 12 12, UK/Ireland +44 870 609 9203

Asia: China +86 21 6865 4588 or +86 10 8419 3588, India toll free 1800 22 8374, India +91 22 6716 2200, Japan +81 45 453 9220, Other Asian countries +852 2885 4613 **Countries not listed:** +49 6184 90 6940 or +33 2 2803 2180

www.thermo.com/cold

© 2009 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.

BRC-SHERAFREEZE0209

Thermo
SCIENTIFIC