

Ultra-Low Temperature Chest Freezers



SANYO Ultra-Low Temperature Chest Freezer lineups for ultra-low temperature storage needs to support the forefront of life science researches.



Advanced Features

Specially designed compressor and cascade refrigeration system

Specially designed for rugged ultra-low temperature applications in a laboratory environment (HFC refrigerants only).



Micro-processor Temperature Control with LED Digital Display

Extremely accurate, easy-to-read display. The temperature inside the freezer can be set and monitored easily by means of a microprocessor temperature control with an LED digital display. The thermostat incorporates a platinum resistor (Pt. 100Ω), precision and durability.

Integrated Cabinet Design

High-performance refrigeration system with foamed-in-place cabinet insulation maximizes interior temperature uniformity and protects against fluctuating ambient

Self-diagnostic function

The temperature sensor, filter sensor and cascade sensor monitor operation conditions continuously. Should abnormality be picked up, an error code and the current temperature will be displayed in turn.

Ring back function

The alarm buzzer can be silenced by pressing the BUZZER key on the control panel. (The remote alarm signal is not cancelled.) Should the alarm condition continue after a certain suspension, the alarm buzzer sound will resume.

Easy Maintenance

(MDF-193/193AT have no filters)

Filter check lamp notifys the user of a clogged condenser filter. The condenser filter is situated at the front panel to make filter removing and cleaning easier.



Note: The position of the filter check lamp is shown on the control panel (see photo shown at the bottom of this page).

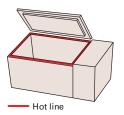
Standard casters and levelling feet

Standard-equipped heavy duty casters make it easy to move a freezer when necessary. The levelling feet keep a freezer level and firm on the floor.

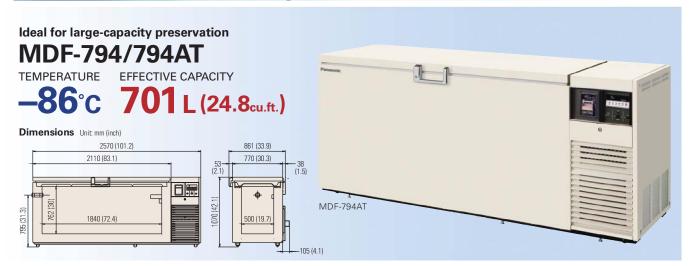
Safety Device

Built-In Temperature & Power Failure Alarms (Lamp/Buzzer)

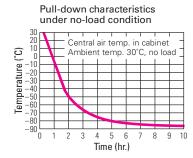
In case of power failure or an irregular rise in temperature, a rechargeable battery-operated indicator lamp and alarm will be activated. A compact recording unit which automatically records the inside temperature, and a backup system with liquefied CO2 or N2 which is selfactivated when a power outage occurs are also available separately. This equipment helps insure that the contents will be protected in the event of any power failure or mechanical trouble.

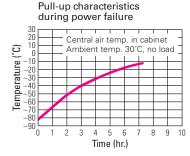


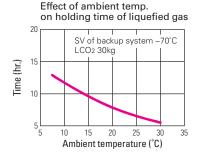
-86°C Ultra-Low Temperature Chest Freezers



Performance Data







Specifications

Specifica	ations		
Model No.		MDF-794/794AT	
Temperature Range		−20°C to −86°C	
Exterior Dimensions (W x D x H)		2570 x 770 x 1070 (mm)	
		101.2 x 30.3 x 42.1 (inch)	
Interior Dimensions (W x D x H)		1840 x 500 x 762 (mm)	
		72.4 x 19.7 x 30.0 (inch)	
Effective Capacity		701 liters (24.8 cu.ft.)	
Exterior Cabinet		Galvanised steel with baked on finish	
Interior Cabinet		Stainless steel	
Inner Lid		4	
Insulation		Foamed-in-place rigid polyurethane	
Compressor	High stage side	Hermetic type, 1,100 W	
	Low stage side	Hermetic type, 1,100 W	
Evaporator	High stage side	Cascade condenser	
Lvaporator	Low stage side	Tube on sheet (shared with interior)	
Condenser	High stage side	Fin and tube type	
Ounachach	Low stage side	Shell and tube type	
Temperature Control		Microprocessor: Keypad input	
		Set value memory: non-volatile memory	
Temperature	Display	Digital display	
Sensor		Platinum resistance (Pt. 100 W)	
Safety		Cylinder key on the lid handle	
Alarm system		Selectable high temp. alarm (+10°C & +15°C from set point)	
		Power failure alarm, Filter check lamp (Except MDF-193/193AT which have no filters), Remote alarm contact	
Net Weight (Approx.)		335kg (739 lbs.) —794 345kg (761 lbs.) —794AT	

Voltage specification by destination

-			
ative	Europe	230V, 50Hz (CE)	MDF-794-PE/794AT-PE
esent	Korea	220V, 60Hz	MDF-794-PK/794AT-PK
Rep.	Thailand	220V, 50Hz	MDF-794-PB

ATN: LN₂ backup system, temperature recorder AT: LCO₂ backup system, temperature recorder

Optional Accessories

Storage Racks (Aluminium)

Model No.	MDF-19SC-PW	MDF-39SC-PW	MDF-49SC-PW	MDF-59SC-PW
Case Dimensions	207 x 144 x 413 (mm)	155 x 155 x 515 (mm)	207 x 144 x 539 (mm)	207 x 144 x 665 (mm)
(W x D x H)	8.1 x 5.7 x 16.3 (inch)	6.1 x 6.1 x 20.3 (inch)	8.1 x 5.7 x 21.2 (inch)	8.1 x 5.7 x 26.2 (inch)
Number of Drawers	3	4	4	5
Applicable Model (Rack capacity)	MDF-193/193AT (6)	MDF-394 (20)	MDF-1156/1156ATN (6)	MDF-594/594AT (18) MDF-794/794AT (24)

Inventory Racks (Stainless steel)

Model No.	Box Type	External Dimensions (mm)			Freezer Model	
Wiouei No.	(Capacity)	Width	Depth	Height	(Rack capacity)	
IR-207C-PW	2" (7)	144	142	405	MDF-193 (6)	
IR-209C-PW	2" (9)	144	142	518	MDF-394 (21), 1156 (9)	
IR-213C-PW	2" (13)	144	142	592	MDF-594 (24), 794 (36)	
IR-305C-PW	3" (5)	144	142	405	MDF-193 (6)	
IR-306C-PW	3" (6)	144	142	518	MDF-394 (21), 1156 (9)	
IR-309C-PW	3" (9)	144	142	747	MDF-594 (24), 794 (36)	



Temperature Recorder

Model No.	MTR-85H-PW	MTR-155H-PW
Recording Range	-100 to +50°C	−170 to +30°C
Freezer Model	MDF-193 MDF-394 MDF-594 MDF-794	MDF-1156

ULT-Freezer Backup Kits

CVK-UB2-PW/UB2I-PW:
LCO2 Backup Kit for MDF-794/594/394
CVK-UBN2-PW/UBN2I-PW:
LN2 Backup Kit for MDF-794/594/394
CVK-AT2-PW:
LCO2 Backup Kit for MDF-1156
CVK-ATN2-PW:
LN2 Backup Kit for MDF-1156
I: version for North America only

- *Cooling performance is indicated by the temperature reached at the center of the freezer (at ambient temperature of 30°C with no load). In order to use the freezer at a stable temperature for a long time, it is recommended that the temperature be set to at least 5°C higher than the indicated lowest temperature.

 In addition, depending on the usage conditions, it may not be possible to reach the indicated lowest temperature.
- Caution: Panasonic guarantees the product under certain warranty conditions. Panasonic in no way shall be responsible for any loss of content or damage to content.
- Appearance and specifications are subject to change without notice.



Panasonic Healthcare Co., Ltd., Gunma Factory is certified for:

Quality management system: ISO9001 Medical devices quality management system: ISO13485





Panasonic Healthcare Co., Ltd., Gunma Factory is certified for:

Environmental management system: ISO14001

DISTRIBUTED BY:



PT. SIGMA BIMED

Indonesia Sole Distributor

Jl. Agung Utara Raya Blok A 36D/42 Sunter Agung Jakarta Utara 14350 Indonesia

Telp. (62-21) 64716568, 70240088, 70240099, 87960123, 87960456

Fax. (62-21) 64716566, 87961123, 87961456

Email: sigmabimed@indo.net.id, sales@sigmabimed.com

Website : www.sigmabimed.com kemenkes RI AKL



Panasonic Healthcare., Ltd.

1-1-1 Sakata, Oizumi-Machi, Ora-Gun, Gunma 370-0596, Japan ©Panasonic Healthcare Co,. Ltd. 2012