

## Chest Freezers

-86°C Ultra-Low Temperature Freezer

### Temperature Uniformity

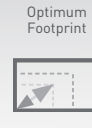
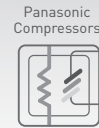
PRO series is manufactured with foam-in-place insulation. The innovative design maximizes interior temperature uniformity, in spite of ambient temperature changes.

### Energy Saving Design

PRO Series provide energy savings while minimizing carbon footprint throughout the laboratory without compromising performance.

### Panasonic Compressor Technology

All models use Panasonic-designed compressors for ultra-low temperature applications, operating within -20°C to -80°C for extended versatility.

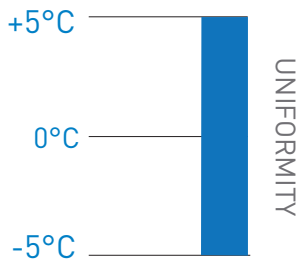


17.1 cu.ft. | 24.8 cu.ft.



### Uniformity

High-performance refrigeration system with foam-in-place cabinet insulation **maximize interior temperature uniformity** and **protect against fluctuating ambient temperatures**.

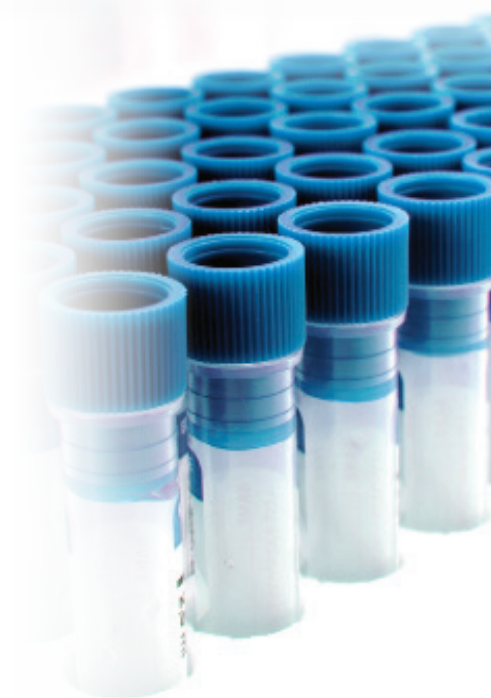
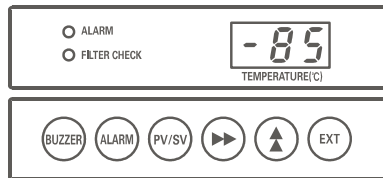


Surpasses the customer preference of +/- 5°C\*



### Microprocessor Controls

Comprehensive **setpoint, alarm, monitoring, and diagnostic functions** are based on Panasonic-built microprocessor controller with digital display of all input/output functions.





# Chest Freezers

## -86°C Ultra-Low Temperature Freezer

High-performance refrigeration system with foam-in-place cabinet insulation maximize interior temperature uniformity and protect against fluctuating ambient temperatures. Ideal for storage of biological samples, tissues and specimens.

### Uniformity through Superior Insulation:

In ultra-low temperature freezers, effective insulation is critical.

The insulation used in Panasonic ultra-low freezers is two layers of rigid, foam-in-place polyurethane, placed together to form a double-insulation wall.

This design prevents the insulation layers from distortion and cracking that might occur due to temperature differences inside and outside.

Frost and icing on the top edges and gaskets are prevented by utilization of a heated mullion, which recycles heat from the refrigeration system without affecting chamber uniformity.

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

In case of power failure or an irregular rise in temperature, a high capacity, rechargeable battery-operated indicator lamp and alarm will be activated.

Optional CO<sub>2</sub> and LN<sub>2</sub> back-up systems are available and are self-activated when a power outage occurs. This equipment helps ensure that the contents will be protected in the event of any power failure or mechanical trouble.

An optional wireless monitoring system (LabAlert) is also available.

### Panasonic-Designed Refrigeration:

Designed by Panasonic specifically for rugged ultra-low temperature applications in a laboratory environment.

MODEL	MDF-594C-PA	MODEL	MDF-794C-PA
TEMPERATURE	-20°C to -86°C	TEMPERATURE	-20°C to -86°C
CABINET INSULATION	Rigid polyurethane foam-in place	CABINET INSULATION	Rigid polyurethane foam-in place
INTERIOR DIMENSIONS	50.3" x 19.7" x 30" (1280 x 500 x 762 mm)	INTERIOR DIMENSIONS	72.4" x 19.7" x 30" (1840 x 500 x 762 mm)
EXTERIOR DIMENSIONS	79.1" x 30.3" x 42.1" (2010 x 770 x 1070 mm)	EXTERIOR DIMENSIONS	101.2" x 30.3" x 42.1" (2570 x 770 x 1070 mm)
AREA FOOTPRINT (NOMINAL)	8.37 sq.ft. (0.78 m <sup>2</sup> )	AREA FOOTPRINT (NOMINAL)	10.63 sq.ft. (0.99 m <sup>2</sup> )
VOLUME	17.1 cu.ft. (487 liters)	VOLUME	24.7 cu.ft. (701 liters)
STORAGE	2"/51 mm boxes: 351 3"/76 mm boxes: 243	STORAGE	2"/51 mm boxes: 507 3"/76 mm boxes: 351
STORAGE (RACKS) FOR 2" FIBERBOARD BOXES	24 (each rack is 13 boxes deep with locking rod)	STORAGE (RACKS) FOR 2" FIBERBOARD BOXES	39 (each rack is 13 boxes deep with locking rod)
STORAGE (RACKS) FOR 3" FIBERBOARD BOXES	27 (each rack is 9 boxes deep with locking rod)	STORAGE (RACKS) FOR 3" FIBERBOARD BOXES	39 (each rack is 9 boxes deep with locking rod)
POWER REQUIREMENTS	208 / 220V / 60hz built-in voltage booster	POWER REQUIREMENTS	208 / 220V / 60hz built-in voltage booster
NET WEIGHT	668lbs. (303kg.)	NET WEIGHT	765lbs. (347kg.)
ALARMS	Selectable high temp. alarm (+10°C & +15°C from set point), Power Failure alarm, Filter check lamp, Remote alarm contact.	ALARMS	Selectable high temp. alarm (+10°C & +15°C from set point), Power Failure alarm, Filter check lamp, Remote alarm contact.
INNER SUB-LID	3	INNER SUB-LID	4