

Classic Pro Series

-86°C Ultra-Low Freezers

MDF-U5386S-PE

Classic **pro**



Robust cooling performance

- Safe operation with advanced refrigeration system
- Improved accessibility
- Quiet operation
- Enhanced security
- The inner doors are removable for cleaning and defrosting



Discovery powered by
precision

-86°C Ultra-Low Freezers MDF-U5386S-PE

Classic **pro**

Panasonic offers a wide range of upright -86°C freezers to suit your individual storage needs. Our Classic Pro Series freezers feature the usual high-quality components you would expect from Panasonic including HCFC-free refrigerants. All units feature full alarm systems, a cascade cooling system and a microprocessor controller.

Panasonic designed refrigeration and construction

- The newly developed refrigeration system and the freezer structure offer a quiet experimental environment.
- The newly developed back cover combined with new aerodynamically positioned components in the refrigeration compartment provide superior air flow, making it possible to drastically reduce the stress to the freezer and contributing to excellent durability.
- Two independent and insulated inner doors prevent cold air leakage.

User-friendly design

- An Easy-In/Easy-Out inner door latch tightly closes the inner door against the freezer frame with one hand operation.
- The condenser filter is situated at the bottom right side of the front panel to make filter removal and cleaning easier.



Sample security

- Alarm lamp and buzzer offer secure warning of power failure or abnormal temperature increase.
- High and low temperature warning provides an audible and visual alarm when the temperature deviates more than $\pm 5^{\circ}\text{C}$ to $\pm 20^{\circ}\text{C}$ (adjustable) from the set point.
- Alarm ring back function ensures the buzzer will resume operation should alarm conditions continue after it is silenced.
- Microprocessor-controlled filter-clog check function protects the refrigeration circuit.
- New rugged, one-handed outer door latch allows a padlock to be used to securely protect valuable samples.
- Control panel with digital display for easy operation.



Classic Pro Series		
Characteristics PUF = Rigid polyurethane foamed insulation V = Visual alarm B = Buzzer alarm R = Remote alarm		
MODEL	MDF-U5386S-PE	
Dimensions		
External dimensions (W x D x H)	mm	890 x 867 x 1990
Internal dimensions (W x D x H)	mm	630 x 600 x 1280
Effective capacity	litres	483
Net weight (approx)	kg	305
Performance		
Cooling performance ¹⁾	$^{\circ}\text{C}$	-86
Temperature setting range	$^{\circ}\text{C}$	-50 ~ -90
Temperature control range ¹⁾	$^{\circ}\text{C}$	-50 ~ -86
Control		
Controller		Microprocessor Non-volatile memory
Display		LED
Temperature sensor		Pt-1000
Refrigeration		
Refrigeration system		Cascade
High-stage compressor	W	1100
High-stage refrigerant		HFC
Low-stage compressor	W	1100
Low-stage refrigerant		HFC
Insulation material		PUF
Insulation thickness	mm	130
Alarms		
Power failure		V-B-R
High temperature		V-B-R
Low temperature		V-B-R
Filter		V-B
Construction		
Exterior material		Painted steel
Interior material		Painted steel
Inner door/lid	qty	2 (Insulated)
Outer door/lid lock		Y
Shelves (adjustable)	qty	3
Max. load - per shelf	kg	50
Max. load - total	kg	150
Access port	qty	3
- position		Back/Bottom x 2
- diameter	Ø mm	17
Casters	qty	4 (2 leveling feet)
Electrical and Noise Level		
Power supply		230V 50Hz Single phase
Noise level ²⁾	dB	49
Options		
Liquid CO ₂ Back-up		CVK-UB2-PW
Liquid N ₂ Back-up		CVK-UBN2-PW
Temperature recorders		
- Circular type (-100°C to +40°C)		MTR-G85C-PE
- Chart paper		RP-G85-PW
- Ink pen		PG-R-PW
- Continuous strip type (-100°C to +50°C)		MTR-85H-PW
- Chart paper		RP-85-PW
- Ink pen		DF-38FP-PW
- Recorder housing		MDF-S3085-PW
RS485 interface module		MTR-480-PW

notes: ¹⁾ Air temperature measured at freezer centre, ambient temperature +30°C, no load
²⁾ Nominal Value

Appearance and specification are subject to change without notice.

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for more information:

www.biomedical.panasonic.eu