

## Biomedical Pro Series

# -30°C / -40°C Plasma Freezers

MDF-U5412-PE

Biomedical **pro**



### Reliable storage for valuable samples

- High freezing power
- Stable & uniform temperature design
- Ideal freezing environment for plasma and blood related products
- Alarm and safety devices for secure storage

Panasonic MDF-U5412-PE provides an ideal freezing environment for preservation of blood plasma, vaccines, test samples, and other biological specimens. The user-friendly design includes a built-in door latch for each of the double outer doors, and simple calibration is possible via the control panel. This, coupled with a visual and audible alarm system, ensures that your samples are both safe and secure, but also easy to access when you need them.

### Stable & uniform temperature design

- Double outer doors.
- Full-height storage containers on each shelf.
- Cooling tubes under every shelf.
- Direct cooling system for stable temperature control.
- Fine-controllable refrigeration circuit with valve.

### Large storage capacity

- 300ml Fresh Frozen Plasma bag x 280 pieces.



### User friendly design

- Built-in door latch for each door.
- Easy calibration through the control panel.


### Visual and audible alarm system

- High & Low temperature alarm.
- Power failure alarm with non-volatile memory back up.
- Self-diagnostic system.

### Sample security

- Remote alarm contact.
- Re-activating buzzer, lamp and remote alarm contact (30min. after buzzer is silenced).
- Standard door lock allows a padlock to be fitted for extra security.
- Remote monitoring by Data acquisition system. (Option)
- 1/7/30 days circular recorder. (Option)
- An access port allows external temperature monitoring with the use of a probe.



Biomedical Pro Series		
<b>Characteristics</b>		
PUF = Rigid polyurethane foamed insulation V = Visual alarm B = Buzzer alarm R = Remote alarm		
<b>MODEL</b>		<b>MDF-U5412-PE</b>
<b>Dimensions</b>		
External dimensions (W x D x H) <sup>2)</sup>	mm	804 x 772 x 1802
Internal dimensions (W x D x H)	mm	658 x 607 x 1272
Volume	litres	482
Net weight (approx)	kg	134
<b>Performance</b>		
Cooling performance <sup>1)</sup>	°C	-40
- at ambient temperature	°C	30
Temperature setting range	°C	-18 ~ -45
Temperature control range <sup>1)</sup>	°C	-20 ~ -40
<b>Control</b>		
Controller		Microprocessor
Display		LED
Temperature sensor		Thermistor
<b>Refrigeration</b>		
Cooling method		Direct
Compressor	W	400
Refrigerant		HFC
Insulation material		PUF
Insulation thickness	mm	70
<b>Alarms</b>		
Power failure		V-B-R
High temperature		V-B-R
Low temperature		V-B-R
<b>Construction</b>		
Exterior material		Painted steel
Interior material		Styrol resin
Outer door/lid	qty	2
Outer door/lid lock		Y
Shelves		Fixed
Containers / baskets	qty	4/6/0
Max. load - per shelf/basket	kg	U:30/L:30
Max. load - total	kg	100
Access port	qty	1
- position		back
- diameter	Ø mm	30
Casters	qty	4 (2 leveling feet)
<b>Electrical and Noise Level</b>		
Power supply		230V 50Hz Single phase
Noise level <sup>3)</sup>	dB	42
<b>Options</b>		
Temperature recorders		
- Circular type (-100°C to +40°C)		MTR-G85C-PE
- Chart paper		RP-G85-PW
- Ink pen		PG-R-PW
- Recorder housing		MPR-S7-PW
- Continuous strip type (-40°C to +14°C)		MTR-4015LH-PE
- Chart paper		RP-40-PW
- Recorder housing		MPR-S30-PW
RS485 Interface Module		MTR-480-PW

notes: <sup>1)</sup> Air temperature measured at centre of unit, specified ambient temperature, no load  
<sup>2)</sup> Exterior dimensions of main cabinet only - see dimension drawings showing handles and other external projections  
<sup>3)</sup> Nominal Value

Appearance and specification are subject to change without notice.