MDF-DU702VX-PE

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TwinGuard

-86°C Upright Freezer

729 L

DUAL cooling system | VIP PLUS vacuum insulation | EZlatch door handle | MDD medical device directive

The most secure ultra-low temperature freezers for the storage of high value samples

TwinGuard Ultra Low Temperature Freezers with Dual Cooling Technology offer the highest level of security for high-value samples. Alongside exceptional ease-of-use and data monitoring, the Dual Cooling System provides the highest level of protection.

Ultimate Sample Protection

The Dual Cooling System offers high levels of protection through the use of two independent refrigeration systems. If one system unexpectedly fails the other can maintain the freezer in the -70°C range.

Efficient Sample Storage

The combination of VIP PLUS vacuum insulation and an enhanced cabinet design with insulated outer door, ensures optimum temperature uniformity, while the reduced wall thickness maximizes storage capacity up to 576 2" boxes.

Intelligent Interface

The EZlatch makes access to stored samples even easier.
A colour LCD touch panel allows full user control, even with gloved hands, while the USB port makes transferring logged data to a PC convenient.

Valuable Sample Storage

Securely store valuable and irreplaceable samples with the upmost confidence that they won't be lost in the case of compressor failure.

Flexible Shelf Layout

Multiple shelf configurations allow a variety of storage options. Organize your samples by transferring your current inventory racks.

Restricted Access Laboratories

Significantly extended time to react to any sudden mechanical failures and data logging are ideal for high security applications such as pathogenic research.

TwinGuard -86°C Upright Freezer

Dual Cooling System

The Dual Cooling System offers ultimate sample protection. The two independent refrigeration systems provide a reliable and exceptionally stable -86°C ultra low temperature environment. If one system unexpectedly fails, the other can maintain the freezer in the -70°C range until service can be arranged.

Intelligent Eco Mode Operation

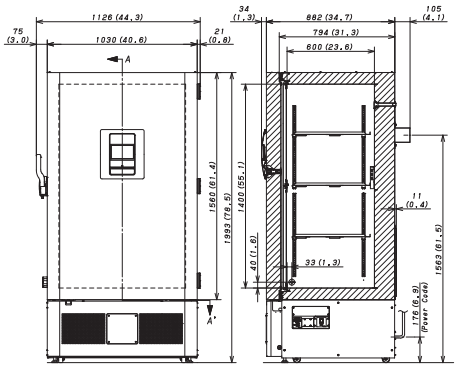
When set to ECO mode, the microprocessor controller will establish an overlapping cycle of the two refrigeration systems based on the load status of the freezer, significantly reducing energy consumption.

Filterless Design

The filterless construction of the freezers reduces routine maintenance time by eliminating the need for regular cleaning of filters.

Innovative Cabinet Design

The enhanced cabinet design with chamfered edges reduces footprint for use in multi freezer laboratories.



MDF-DU702VX-PE

EEA, Switzerland and Turkey only

CE 0123 **For medical use**
The MDF-DU702VX-PE is certified as a Class IIa Medical Device (93/42/EEC and 2007/47/EC). Applicable countries: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Ireland, Italy, Liechtenstein, Luxembourg, Malta, the Netherlands, Spain, Switzerland and the United Kingdom only

CE **For laboratory use**
Applicable countries: EEA countries, Switzerland and Turkey

Model Number		MDF-DU702VX-PE
External dimensions (W x D x H)[1]	mm	1030 x 882 x 1993
Internal dimensions (W x D x H)	mm	870 x 600 x 1400
Volume	litres	729
Net weight	kg	328
Capacity	2" boxes	576
Performance		
Cooling performance [2]	°C	-86
Temperature setting range	°C	-50 to -90
Temperature control range [2]	°C	-50 to -86
Control		
Controller		Microprocessor, non-volatile memory
Display		LCD Touch Screen
Temperature sensor		Pt-1000
Refrigeration		
Refrigeration system*		Independent Dual-Cooling
Compressors	W	2 x 1100
Refrigerant		MU-N702
Refrigerant weight in each cooling circuit	g	555
GWP of refrigerant for each cooling circuit		5695
Total Refrigerant weight (CO_2 equivalent)	t	6.322
Insulation material		PUF / VIP Plus
Insulation thickness	mm	80
Construction		
Exterior material		Painted Steel
Interior material		Painted steel
Outer doors	qty	1
Outer door lock		Y
Inner doors		2
Shelves	qty	3 (stainless steel)
Max. load - per shelf	kg	50
Max. load - total [3]	kg	515
Vacuum release port		2 (1 automatic, 1 manual)
Access port	qty	3
- position		back x 1, bottom x 2
- diameter	Ø mm	17
Casters	qty	4 (2 leveling feet)
Alarms		**(R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm)**
Power failure		V-B-R
High temperature		V-B-R
Low temperature		V-B-R
Filter		Filterless design
Door open		V-B
Electrical and noise level		
Power supply	V	230
Frequency	Hz	50
Noise level[4]	dB [A]	52
Options		
Small inner door kit	set of 5	MDF-7ID5-PW [5]
Small inner door kit	set of 4	MDF-7ID4-PW
Liquid CO_2 back-up		MDF-UB7-PW
Temperature recorders		
- Circular type		MTR-G85C-PE [6]
- Chart paper		RP-G85-PW
- Ink pen		PG-R-PW
- Continuous strip type		MTR-85H-PW [6]
- Chart paper		RP-85-PW
- Ink pen		RP-85-PW
- Recorder housing		MDF-S3085-PW

Appearance and specifications are subject to change without notice.

[1] Exterior dimensions of main cabinet only, excluding handle and other external projections
[2] Air temperature measured at freezer centre, ambient temperature +30°C, no load
[3] Max. load is the total of the load distributed over all shelves (3) and chamber bottom surface. The weight is the maximum load for chamber inside and does not account for maximum load on casters equipped with product.
[4] Nominal value - Background noise 20dB[A]
[5] Usable storage capacity will be 480 x 2" boxes with installation of MDF-7ID4-PW and additional shelf
[6] Requires sensor cover MTR-DU700SF-PW
* Complies with Art. 11, Annex III of F-Gas Regulation (EU) No 517/2014. Contains fluorinated greenhouse gases in hermetically sealed equipment.

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