



MDF-DU900VC-PA

VIP® Series

-86°C Ultra-Low Temperature Upright Freezer

29.8 cu.ft. | 845 L



The Panasonic model MDF-DU900VC-PA is a high performance ultra-low temperature freezer designed for safe, reliable storage of biologicals in biorepositories or other facilities where bulk consolidation of valuable samples is preferred. This freezer has an efficient volume-to-footprint ratio that makes maximum use of available floor space while still passing through a standard 36" wide (91 cm) doorway.

Reliability You Can Count On

The robust refrigeration system is powered by Panasonic engineered compressors. This system provides dependable cooling by balancing temperature performance and energy management. Reserve refrigeration power assures exceptional temperature recovery following door openings. VIP freezers have demonstrated superior reliability with excellent performance history.

High Capacity Storage, Minimal Footprint

The upright cabinet design employs a patented VIP Plus insulation composite that offers space efficiency. This allows the large freezer cabinet to maximize storage space, holding up to 672 2" boxes or 448 3" boxes within a 10.79 ft² (1 m²) footprint.

Ergonomic Design

The computer designed EZlatch (patent pending) is central to an overall freezer access system. This is comprised of the outer door and inner doors, door gaskets, positive inner and outer door latches and a vacuum relief port. These individual components all function in unison to assure comfortable operation, sample security, temperature integrity and control of frost build-up.



Microprocessor Controller

Freezer operation is managed by a microprocessor-based controller that combines security, monitoring, predictive performance and data logging functions into a single, eye level display.



Large Volume Efficiency

As sample volumes in biorepositories and biobanks increase exponentially, the high capacity storage chamber offers space for expansion and overflow from crowded smaller freezers.



EZlatch Design

The EZlatch is engineered to tolerate frequent door openings, simplify one-handed access and control frost associated with extreme temperature differentials.

VIP -86°C ULT Upright Freezer



VIP Plus Insulated Panels

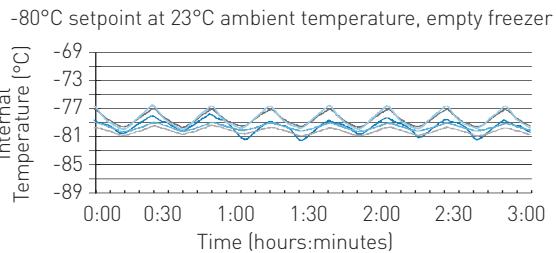
Inside-out engineering starts with a patented VIP Plus insulation composite which results in an efficient, thin-wall cabinet. Insulated inner doors improve temperature uniformity and cold air loss during door openings and extend warm-up times during power outages.

Model MDF-DU900VC-PA is shown empty in the image.

Touchscreen Display

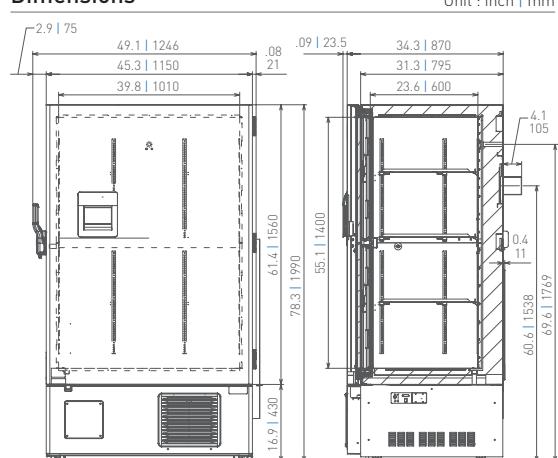
The high contrast color LCD touchscreen is easy to view from a distance. A USB port is standard and can enhance the gathering, storage and transfer of the freezer operating data. Ideal for quality processes and GxP regulated facilities.

MDF-DU900VC-PA Temperature Uniformity Data



As interior air temperature stabilizes at the desired setpoint, large mass storage volume sustains tight temperature uniformity of the load inside the insulated cabinet.

Dimensions



Panasonic®

Panasonic Healthcare Corporation of North America
1300 Michael Drive, Suite A, Wood Dale, IL 60191
Toll Free USA (800) 858-8442, Fax (630) 238-0074
www.panasonic-healthcare.com/us/biomedical

MDF-DU900VC-PA

Model Number		MDF-DU900VC-PA
External Dimensions (W x D x H) ¹⁾	inches mm	45.3 x 34.3 x 78.3 1150 x 870 x 1990
Internal Dimensions (W x D x H)	inches mm	39.8 x 23.6 x 55.1 1010 x 600 x 1400
Volume	cu.ft. liters	29.8 845
Net Weight	lbs. kg	842 382
Capacity (2" boxes)	qty	672
Capacity (3" boxes)	qty	448
Inventory Racks (2" boxes)	qty	28
Inventory Racks (3" boxes)	qty	28
Performance		
Warranty	Panasonic Five Year Warranty ²⁾	
Cooling Performance ³⁾	°C	-86
Temperature Setting Range	°C	-50 to -90 in 1°C increments
Temperature Control Range ³⁾	°C	-50 to -86 in 1°C increments
Control		
Controller	Microprocessor, touchscreen data entry, password protected	
Display	LCD color touchscreen	
Temperature Sensor	Pt-1000	
Refrigeration		
Refrigeration System	Cascade	
Compressors	W	(1) 1000 High-Stage and (1) 1100 Low-Stage
Refrigerant	CFC-free R-404A and R-508A	
Insulation Material	Rigid polyurethane foam (PUF) + VIP Plus	
Construction		
Exterior & Interior Material	Painted steel	
Outer Door	qty	1
Outer Door Lock	Standard	
Inner Doors	qty	2 insulated, ABS, with stainless steel frame and positive latches
Shelves	qty	3
Shelf Dimensions (W x D)	inches mm	38.9 x 20.9 988 x 533
Max. Load - per Shelf	lbs kg	110 50
Max. Load - Total Freezer	lbs kg	440 200
Vacuum Release Port	Standard	
Access Ports	qty	2
Access Port Position	Back wall and chamber floor	
Access Port Diameter	inches mm	0.6 17
Casters	qty	4 (2 leveling feet)
Alarms		
Power Failure	(V = Visual Alarm, B = Buzzer Alarm, R = Remote Alarm)	
High Temperature	V-B-R	
Low Temperature	V-B-R	
Filter	V-B	
Door Open	V-B	
Electrical and Noise Level		
Power Supply		208-220V, 1Ø, NEMA 6-15P requires NEMA 6-15R receptacle
Frequency	Hz	60
Noise Level ⁴⁾	dB (A)	52
Options		
Small Inner Door Kit	set of 2 (total of 4 inner doors)	MDF-9ID-PW [max 2] ⁵⁾
Liquid CO ₂ Back-up System	MDF-UB6B-PW	
Temperature Recorders		
Circular Type	6", 7 day circular	MTR-C954 ⁶⁾
Chart Paper	52 charts per box	C7100386REV
Ink Pen	pack of 6	R252
Optional Communication System		
Wireless, cloud-based, automatic data management	LabAlert® Monitoring System	

¹⁾ Exterior dimensions of main cabinet only, excluding handle and other external projections

²⁾ Current warranty offered at time of printing and may be subject to change

³⁾ Air temperature measured at freezer center, ambient temperature +30°C, no load

⁴⁾ Nominal value - Background noise 20dB(A)

⁵⁾ Installation of small inner door kit may affect usable storage capacity

⁶⁾ Requires sensor cover MTR-DU700SF-PW