

Vital Protection for Your Valuable Plasma Products



You know how critical it is to have reliable, energy-efficient storage for your temperature-sensitive products. Each Terumo Blood and Cell Technologies deep freezer model undergoes five stringent quality tests so you can be assured they are designed to provide the long-lasting protection you can depend on.

Ordering Details

Model Number	Ordering Code
DF80U 300L	DF80UA0000
DF80U 400L	DF80U400A0

Reliable Temperature Control

Your freezer doors are opened and closed frequently, putting temperature consistency and the quality of your stored plasma at risk. Our plasma freezers include important features to minimize temperature variations, including:

- Chlorofluorocarbon (CFC)-free polyurethane (PU) foam insulation 125 mm thick in the exterior walls and the door to help maintain temperatures and reduce power consumption
- Multiple rubber gaskets sealing the door to keep cold air in and high temperatures and humidity out
- Multiple interior compartments featuring four inner doors with magnetic latches to reduce cold air loss during opening and closing
- Heating around cabinet front edges to prevent condensation
- Audible alarms to alert you if the temperature is too high or too low or if the door is open
- Temperature recording unit with 24-hour backup battery for uninterrupted temperature recording

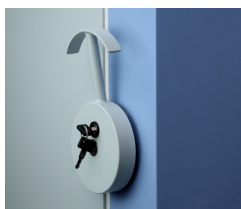
Energy-Efficient Operation

Each Terumo Blood and Cell Technologies deep freezer is developed based on rigorous research, using high-quality components and unique expansion valve technology to stay within temperatures of -50°C to -80°C while operating efficiently.

- Automatically regulated compressor adjusts according to the freezer load for efficient operation
- Low temperature of the compressor shell augments performance
- CFC-free refrigerants reduce harm to the environment

Solid Construction

Terumo Blood and Cell Technologies deep freezers are designed to last. The heavy-gauge steel exterior is powder-coated to avoid corrosion and cosmetic wear and tear, while the interior is stainless steel to minimize the possibility of contamination and to simplify cleaning. The interior stainless steel trays are adjustable, providing maximum storage space and flexibility for multiple uses. The 5 kVA external stabilizer delivers a constant output to the compressor to protect against short circuits and high temperatures.



The DF80U 300 L includes several operator convenience features:

- Ergonomic door handle with a self-pushing mechanism that helps the door close tight
- Handy storage rack to hold inventory control records, chart paper, operator's manual and more
- Display of temperature recording and control unit around eye level

The DF80U 400 L helps protect your blood and blood component products.

To learn more about our deep freezers, contact your Terumo Blood and Cell Technologies representative.

Specifications

Specification Type	DF80U 300 L	DF80U 400 L
Type	Vertical	Vertical
Voltage	230 V ± 10%, 50 Hz, single-phase AC (without stabilizer)	230 V ± 10%, 50 Hz, single-phase AC
Power consumption	3000 W maximum	3000 W maximum
Voltage stabilizer	5 kVA external stabilizer (input: 170 to 270 V, 50 Hz, single-phase AC)	5 kVA external stabilizer (input: 170 to 270 V, 50 Hz, single-phase AC)
Chamber temperature range	−50 °C to −80 °C (at 22 °C to 30 °C ambient temperature)	−50 °C to −80 °C (at 22 °C to 30 °C ambient temperature)
External dimensions (W × D × H)	805 × 825 × 1940 mm with casters	800 × 962 × 1917 mm with casters
Internal dimensions (W × D × H)	550 × 500 × 1190 mm	550 × 662 × 1100 mm
Weight	360 kg	380 kg
Inner chamber volume	300 L	400 L
Total storage capacity	320 bags (250 mL)	400 bags (250 mL)
Storage capacity per compartment	80 bags	80 bags
Number of trays	3 adjustable stainless steel	4 adjustable stainless steel
Number of compartments	4	5
Inner doors	4 made of stainless steel	4 made of stainless steel
Door insulation	125-mm-thick PU foam; rubber gasket seal around door	125-mm-thick PU foam; rubber gasket seal around door
Cabinet insulation	125-mm-thick PU foam	125-mm-thick PU foam
Heating near the door opening	Using the compressor discharge line	Using the compressor discharge line
Outer cabinet	1.5 mm powder-coated steel	1.2 mm powder-coated steel
Inner chamber	1.2 mm stainless steel	1 mm stainless steel
Portability	2 lockable casters in the front 2 non-lockable casters in the rear	2 lockable casters in the front 2 non-lockable casters in the rear
Refrigerant	Primary R404a (CFC-free) Secondary R508b (CFC-free)	Primary R404a (CFC-free) Secondary R508b (CFC-free)
Compressors	2 hermetically sealed	2 hermetically sealed
Insulation of the suction line	PU tubing	PU tubing
Temperature sensing method	Resistance temperature detector (RTD)	Resistance temperature detector (RTD)
Temperature sensor	PT100 RTD	PT100 RTD
Chart range	−100 °C to +50 °C	−100 °C to +50 °C
Alarms and indicators Primary compressor on Secondary compressor on High/low temperature Door open Battery low Power on Power fail	Visible Visible Audible/visible Audible/visible Visible Visible Visible	Visible Visible Audible/visible Audible/visible Visible Visible Visible
Chart duration	7 days	7 days
Controller display interval	0.1 °C	0.1 °C
Chart interval	3 °C	3 °C
Temperature recording	Ink pen on paper chart or pressure-sensitive pen on pressure-sensitive chart (optional)	Ink pen on paper chart or pressure-sensitive pen on pressure-sensitive chart (optional)
High temperature alarm	Set value +10 °C	Set value +10 °C
Low temperature alarm	Set value −10 °C	Set value −10 °C
Data retrieval	Not available	RS-232 interface to connect to computer (optional)
Quality standards	ISO 9001:2015, ISO 13485:2016	ISO 9001:2015, ISO 13485:2016
Standards and approval	CE, EU RoHS	CE, EU RoHS
Medical device classification	Class IIa; Directive 93/42/ECC Annex IX, Rule 2	Class IIa; Directive 93/42/ECC Annex IX, Rule 2

TERUMO PENPOL PRIVATE LIMITED

Bhadra Towers, TC 29/2923, Cotton Hill Road,

Vazhuthacaud, Thycaud P.O.,

Thiruvananthapuram, Kerala - 695014, India.

Phone: +91 471-3015500 / 501

E-Mail: Penpol.info@terumobct.com

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Terumo Blood and Cell Technologies is a medical technology company. Our products, software and services enable customers to collect and prepare blood and cells to help treat challenging diseases and conditions. Our employees around the world believe in the potential of blood and cells to do even more for patients than they do today. TerumoBCT.com

Terumo BCT, Inc.
Lakewood, CO, USA
+1.303.231.4357

Terumo BCT Europe N.V.
Zaventem, Belgium
+32.2.715.0590

Terumo BCT Asia Pte. Ltd.
Singapore
+65.6715.3778

Terumo BCT Latin America S.A.
Buenos Aires, Argentina
+54.11.5530.5200

Terumo BCT Japan, Inc.
Tokyo, Japan
+81.3.6743.7890