

| Specifications | MBR-305GR | MBR-704GR | MBR-1405G/GR |
|-----------------------------------|--|---|--|
| Exterior dimensions (W x D x H)*1 | 600 x 680 x 1835 (mm) / 23.6 x 26.8 x 72.2 (inch) | 770 x 830 x 1955 (mm) / 30.3 x 32.7 x 77.0 (inch) | 1440 x 830 x 1950 (mm) / 56.7 x 32.7 x 76.8 (inch) |
| Interior dimensions (W x D x H) | 520 x 490 x 1150 (mm) / 20.5 x 19.3 x 45.3 (inch) | 650 x 697 x 1500 (mm) / 25.6 x 27.4 x 59.1 (inch) | 1320 x 710 x 1500 (mm) / 52.0 x 28.0 x 59.1 (inch) |
| Net weight | 147kg | 210kg | 276kg (G), 315kg (GR) |
| Effective capacity | 302 liters [10.7 cu.ft.] | 617 liters [21.8 cu.ft.] | 1301 liters [45.9 cu.ft.] |
| Storage capacity | 90 bags (450mℓ), with MBR-56B/120 bags (450mℓ), without baskets | 360 bags (450mℓ), without baskets | 720 bags (450mℓ), without baskets |
| Exterior cabinet | Galvanized steel with baked-on finish | | |
| Interior cabinet | Galvanized steel with baked-on finish | | |
| Cabinet insulation | Foamed-in-place rigid polyurethane | | |
| Outer door | Insulated steel frame with double-layer glass windows | | |
| Door lock | 1 | 1 | 2 |
| Inner door (acrylic) | 2 | 3 | 6 |
| Shelves | 5 coated hard steel wire shelves | — | 12 coated hard steel wire shelves |
| Drawers | 5 stainless steel roll-out drawers | 6 stainless steel roll-out drawers | 12 stainless steel roll-out drawers (GR) |
| Casters | 4 | | |
| Compressor | 150 W hermetically sealed | 220 W hermetically sealed | 250 W hermetically sealed |
| Refrigerant | HFC | | |
| Temperature | 4°C ±1.5°C (Ambient temperature 35°C) | 4°C ±1°C (Ambient temperature 35°C) | 4°C ±1.5°C (Ambient temperature 35°C) |
| Air circulation | Forced air circulation | | |
| Defrost | Fully automatic | | |
| Temperature control | Microprocessor control | | |
| Temperature alarm | High (6°C), Low (2°C), Audible and visual alarm | | |
| Power failure alarm | Audible and visual alarm (24 hours), Automatic rechargeable battery (Ni-MH) | | |
| Door alarm | Audible and visual alarm | | |
| Part replacement notification | Fan motor, Battery | — | Fan motor, Battery |
| Remote alarm contact | DC30V, 2A, Temperature alarm or power failure alarm | | |
| Temperature monitor | 2 bottles with thermistor sensor | | |
| Lighting | 15W fluorescent lamp | 20W fluorescent lamp | 40W fluorescent lamp |
| Access port | 1 | 2 | — |
| Accessories | 1/7/30-day circular recorder, Door lock key | | |
| Options | Recording paper (RP-G04-PW), Recording pen (PG-R-PW) | | |
| | Data acquisition system (MTR-5000-PW/MTR-L03-PW or MTR-480-PW), Baskets (MBR-55B-PW, 56B-PW) | — | Data acquisition system (MTR-5000-PW/MTR-L03-PW or MTR-480-PW) |

| | MBR-107D(H) | MBR-506D(H) |
|-----------------------------------|--|---|
| Exterior dimensions (W x D x H)*1 | 400 x 495 x 1515 (mm) / 15.7 x 19.5 x 59.6 (inch) | 800 x 832 x 1810 (mm) / 31.5 x 32.8 x 71.3 (inch) |
| Interior dimensions (W x D x H) | 320 x 350 x 710 (mm) / 12.6 x 13.8 x 28.0 (inch) | 640 x 550 x 1240 (mm) / 25.2 x 21.7 x 48.8 (inch) |
| Net weight | 70kg | 185kg |
| Effective capacity | 79 liters [2.8 cu.ft.] | 425 liters [15.0 cu.ft.] |
| Storage capacity | 32 bags (450mℓ), with MBR-16B | 120 bags (450mℓ), with MBR-56B |
| Exterior cabinet | Galvanized steel with baked-on finish | |
| Interior cabinet | Stainless steel | |
| Cabinet insulation | Foamed-in-place rigid polyurethane | |
| Outer door | Triple layer glass windows | |
| Door lock | 1 | — |
| Inner door (acrylic) | 2 | 5 |
| Shelves | 3 zinc-plated steel wire and 1 stainless steel | 5 coated hard steel wire shelves |
| Casters | — | 4 |
| Compressor | 110 W hermetically sealed | 160 W hermetically sealed |
| Refrigerant | HFC | |
| Temperature | 4°C ±1°C (Ambient temperature 35°C) | |
| Air circulation | Forced air circulation | |
| Defrost | Fully automatic | |
| Temperature control | Microprocessor | |
| Temperature alarm | High (6°C), Low (2°C), Audible and visual alarm | |
| Power failure alarm | Audible and visual alarm (9 hours), Automatic rechargeable battery (Ni-Cd) | |
| Door alarm | Visual alarm | |
| Remote alarm contact | DC30V, 1A | DC24V, 1A |
| | Temperature alarm or power failure alarm | |
| Lighting | 6 W fluorescent lamp | 15 W fluorescent lamp |
| Access port | 1 | |
| Accessories | 30-day recorder, Door lock key 1 set | |
| Options | Recording paper (RP-06-PW) | |
| | Basket (MBR-15B-PW) Max.8pcs/unit 220ml bags x 7pcs/basket | Basket (MBR-55B-PW) Max.20pcs/unit 220ml bags x 10pcs/basket |
| | Basket (MBR-16B-PW) Max.8pcs/unit 450ml bags x 4pcs/basket | Basket (MBR-56B-PW) Max.20pcs/unit 450ml bags x 6pcs/basket |

Voltage specification by destination

| | Model No. | Representative destination | Power supply |
|-------------|---------------|----------------------------|-----------------|
| MBR-305GR | MBR-305GR-PE | Europe | 230V, 50Hz (CE) |
| | MBR-305GR-PK | Korea | 220V, 60Hz |
| MBR-704GR | MBR-704GR-PE | Europe | 230V, 50Hz (CE) |
| | MBR-704GR-PK | Korea | 220V, 60Hz |
| MBR-1405GR | MBR-1405GR-PE | Europe | 230V, 50Hz (CE) |
| MBR-107D(H) | MBR-107DH-PE | Europe | 230V, 50Hz (CE) |
| | MBR-107DH-PK | Korea | 220V, 60Hz |
| MBR-506D(H) | MBR-506DH-PE | Europe | 230V, 50Hz (CE) |

Caution: Panasonic guarantees the product under certain warranty conditions. Panasonic in no way shall be responsible for any loss of content or damage to content.
 • Appearance and specifications are subject to change without notice.
 *1 Exterior dimensions of main cabinet only - see dimension drawings showing handles and other external projections.



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Blood Bank Refrigerators

Specially designed to provide precise and reliable temperature control that meets various criteria for whole blood and blood derivatives.



The Panasonic MBR Series provides two styles of storage systems: G-type (coated hard steel wire shelf) and GR-type (stainless steel roll-out drawers with card holder).

Designed to conform to AABB criteria, the series ensures stable and reliable temperature control utilizing Panasonic original technology. A special highly efficient compressor designed and developed by Panasonic provides rapid cooling and quiet performance for each model.

Stable Temperature Control

- Temperature is controlled by two sensors located in the liquid-loaded **monitor bottles**, which are in the shape of a blood bag.
- **Two thermistor sensors** constantly monitor the temperature in both the upper and the lower part of chamber.
- **Microprocessor control** ensures the most accurate temperature control available.
- **Multi air-flow plenum system** ensures excellent temperature uniformity in larger capacity models. (MBR-704GR, MBR-1405G/GR)
- **Temperature-maintained defrost** designed with thermal sensors and heaters on the evaporator, all under precise microprocessor control.

Temperature Variations Prevented

The Panasonic MBR Series is designed to minimize cold air loss even with frequent door openings.

- **Separated transparent inner doors** minimize the chamber air leakage during door openings.
- **Foamed-in-place insulation** in the walls and **magnetic sealed outer doors with double-pane glass window** prevent chamber air leakage and promote complete door closings.
- **Large air circulation fan** enables rapid temperature recovery after door openings. (Double fan for MBR-1405G/GR.)

User-Friendly Design

- **Selectable storage system** (G-type and GR-type) to suit user's needs.
- **Fluorescent interior lamp** with ON/OFF switch and a **large view window** in the outer door provide a clear view of stored items.
- **Digital display** is easy to see, and is calibratable through the control panel.



Easy-access front control panel (MBR-305GR, 1405G/GR)

- Filterless construction eliminates bothersome filter cleaning. (MBR-305GR)

Alarm and Safety Functions

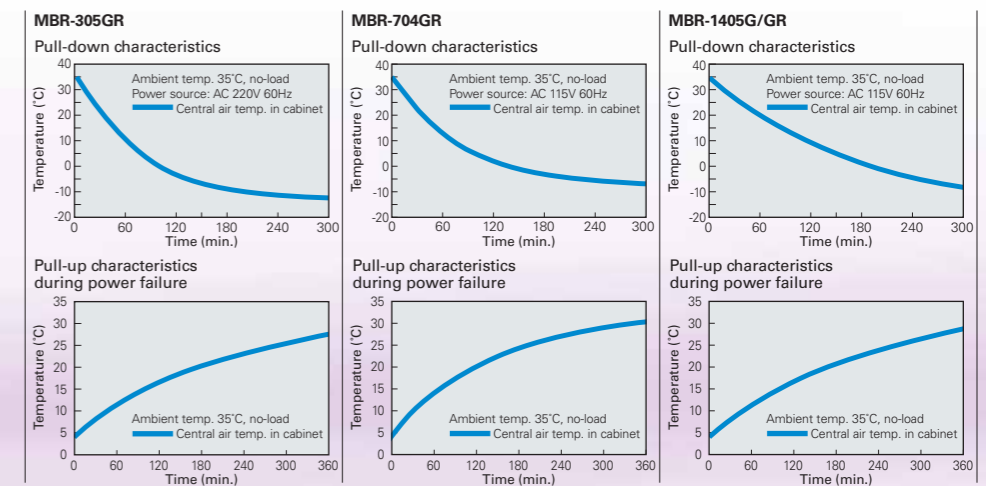
To ensure the safety of precious blood supply, the Panasonic MBR Series provides the following safety functions:

- **Audible and flashing LED visual alarms** with remote alarm contacts, in case of power failure, high or low temperature condition, or any thermal sensor abnormality.
- Door alarm and key lock are standard features.
- Re-activating buzzer, lamp and remote alarm contact. (30 min. after buzzer stops)
- Built-in temperature recorder.

Environmentally Friendly

Panasonic refrigerators feature commercially-available HCFC-free, HFC refrigerants and HCFC-free insulation.

Performance Data (Reference Data)



* A continuously operating compressor was used to obtain data for the upper three graphs.



MBR-305GR
 Temperature: **4°C ±1.5°C**
 (Ambient temp. 35°C)
 Effective capacity
302 liters
 (10.7 cu.ft.)
120 bags/
 450ml blood bag
 (without baskets)

MBR-704GR
 Temperature: **4°C ±1°C**
 (Ambient temp. 35°C)
 Effective capacity
617 liters
 (21.8 cu.ft.)
360 bags/
 450ml blood bag
 (without baskets)

MBR-1405G/GR
 Temperature: **4°C ±1.5°C**
 (Ambient temp. 35°C)
 Effective capacity
1301 liters
 (45.9 cu.ft.)
720 bags/
 450ml blood bag
 (without baskets)

MBR-107D(H)
MBR-506D(H)
 Temperature: **4°C ±1°C**
 (Ambient temp. 35°C)
 Effective capacity
79 liters
 (2.8 cu.ft.) MBR-107D(H)
32 bags/
 450ml blood bag (with baskets)
425 liters
 (15.0 cu.ft.) MBR-506D(H)
120 bags/
 450ml blood bag (with baskets)

* Descriptions in this catalog are based on the models 305GR, 704GR and 1405G/GR.
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