

# Biobank Series for Large Scale Storage



## Scope of Application

Biobank series for large scale storage is designed to ensure the maximum storage capacity with the minimum consumption of liquid nitrogen to lower the overall cost of operation.

## Innovative Design

- 5 Year Vacuum Warranty
- Liquid Phase Storage
- LN<sub>2</sub> Splashproof
- Hot Gas Bypass
- Lockable Lid
- From 13,000 to 94,875 Cryovials
- One-touch Defogging
- Vapour Phase Storage
- Self-diagnostics
- Data Logging

## Key Features



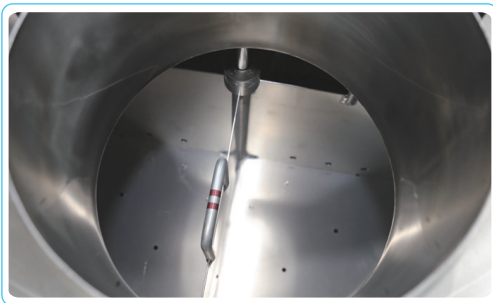
- Massive capacity between 13,000 to 94,875\*2ml Vials
- Vapour phase storage is the only guaranteed method to prevent cross-contamination
- Vapour phase storage at -190°C
- 5-Year vacuum warranty
- One-touch defogging for easier access
- LN<sub>2</sub> splash proof ensures a safer operation
- Can be used to store all kinds of biological sample

## Product Advantages



### Optimal Use of Storage Space

Racks are stored on the rotating tray with an appropriate distance from the wall of the chamber. Liquid nitrogen or supercooled nitrogen vapour is filled in the space between the tray and the wall to maintain temperature uniformity. Storage space is equally divided into four or six fan-shaped storage areas which are clearly labelled. Each storage room is easily rotated to the opening of the tank for convenient sample access.



### Cryosmart Level Monitoring System ZJY-800N

Haier Biomedical's Liquid Nitrogen Storage System Biobank series for large scale storage feature the Cryosmart system for complete monitoring and control. High-precision temperature and liquid level sensors are used to ensure accuracy. All data and samples are protected by a secure access control system.



### Designed for Both Liquid and Vapor Phase Storages

Each model from the Biobank series for large scale storage is designed for both liquid and vapor phase storage. For the vapor phase storage operation process, samples are located away from the liquid nitrogen at a uniform temperature close to that of liquid nitrogen.

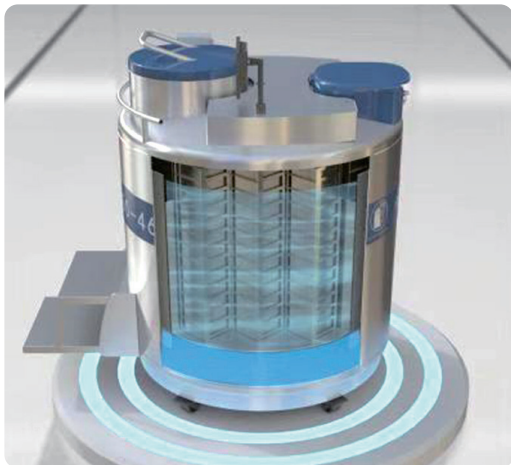
### Advanced Vacuum Technology and Superinsulation Technology

Haier Biomedical's Liquid Nitrogen Storage System Biobank series for large scale storage applies advanced vacuum technology and superinsulation technology to ensure storage safety and temperature uniformity while reducing the consumption of liquid nitrogen. The temperature difference of the entire storage area does not exceed 10°C, even during the vapor phase storage process, the temperature near the top of the shelf is as low as -190°C.

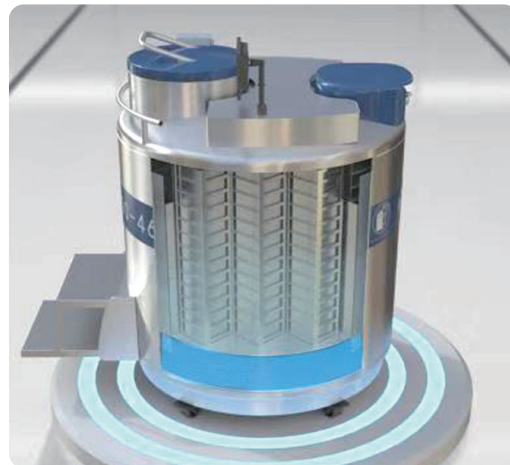
## Liquid and Gas Phase



Liquid Phase



Gas Phase



Top of the Container

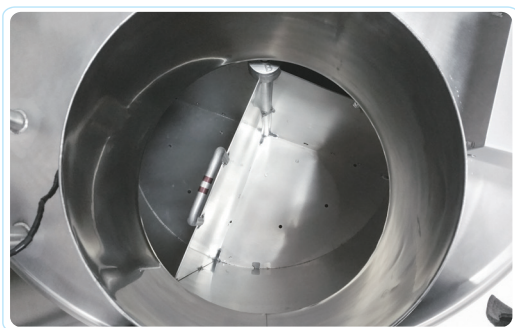


Liquid Feed System

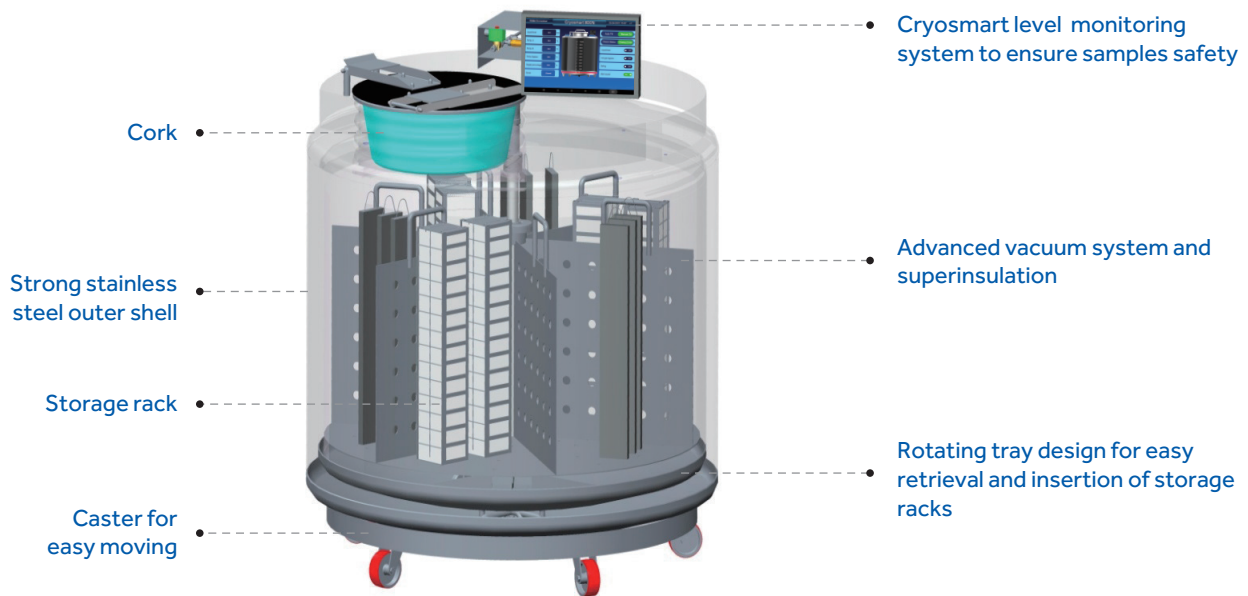


The unique design can reduce the amount of water vapor solidification on the outer surface of the neck, the container is reinforced at liquid nitrogen temperature to extend the physical service life of the container.

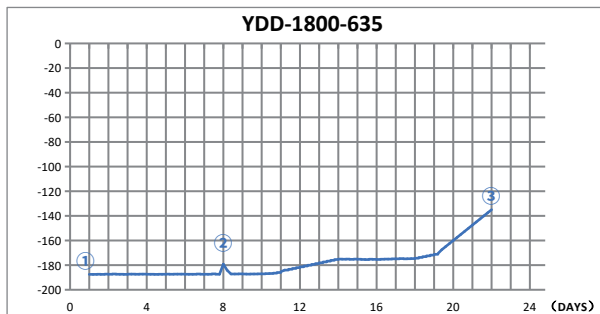
The large-caliber stainless steel liquid nitrogen biological container is matched with a self-pressurizing replenishment tank, which is suitable for scientific research institutions with a small sample storage capacity.



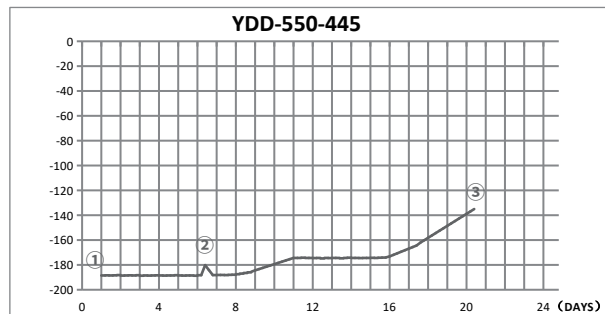
## Product Parts



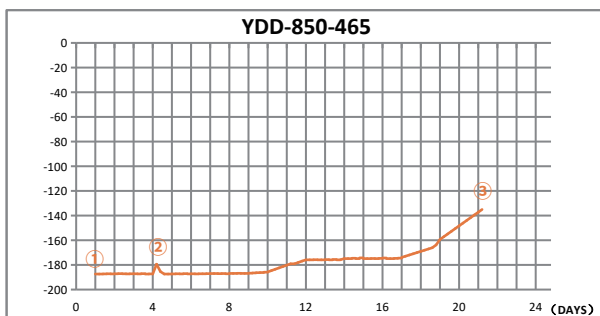
## Temperature Test Graph



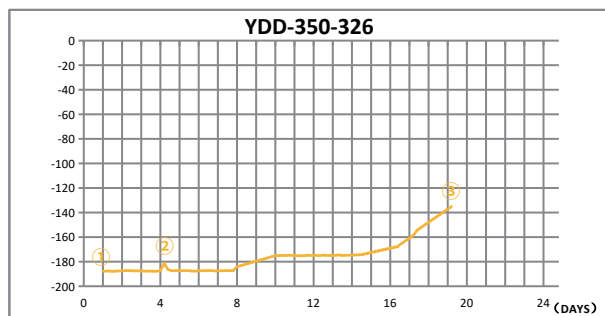
- ① Precooling stage when freezer filled to high level
- ② Lid open test, -179.2°C max
- ③ With no liquid nitrogen supply, the temperature maintained below -135°C for 22 days



- ① Precooling stage when freezer filled to high level
- ② Lid open test, -180.2°C max
- ③ With no liquid nitrogen supply, the temperature maintained below -135°C for 20 days



- ① Precooling stage when freezer filled to high level
- ② Lid open test, -179.4°C max
- ③ With no liquid nitrogen supply, the temperature maintained below -135°C for 21 days



- ① Precooling stage when freezer filled to high level
- ② Lid open test, -181.4°C max
- ③ With no liquid nitrogen supply, the temperature maintained below -135°C for 19 days

Temp Test indicates typical performance of Haier Biobank freezer with factory recommended level settings. Actual performance may vary with atmospheric conditions and usage.

## Technical Parameters



| Model                                        | YDD-350-326 | YDD-370-326 | YDD-450-326 | YDD-550-445 | YDD-750-445 | YDD-850-465 |
|----------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 2ml Volume                                   | 13K         | 16K         | 21K         | 27K         | 38K         | 43K         |
| <b>Maximum Storage Capacity</b>              |             |             |             |             |             |             |
| 2 ml Vials (Internal Thread)                 | 13000       | 15600       | 21000       | 27000       | 37800       | 42900       |
| Freeze Rack (100 wells)                      | 12          | 12          | 14          | 24          | 24          | 32          |
| Freeze Rack (25 wells)                       | 4           | 4           | 4           | 12          | 12          | 4           |
| Layers of each Rack                          | 10          | 12          | 14          | 10          | 14          | 13          |
| 5 ml Vials (Internal Thread)                 | 5360        | 6232        | 8638        | 11220       | 17952       | 18844       |
| Freeze Rack (81 wells)                       | 12          | 12          | 14          | 24          | 24          | 32          |
| Freeze Rack (25 wells)                       | 4           | 4           | 4           | 12          | 12          | 4           |
| Layers of each Rack                          | 5           | 6           | 7           | 5           | 8           | 7           |
| <b>Performance</b>                           |             |             |             |             |             |             |
| Volume of LN <sub>2</sub> (L)                | 350         | 370         | 460         | 587         | 783         | 890         |
| Volume of LN <sub>2</sub> under the Tray (L) | 55          | 55          | 55          | 80          | 80          | 135         |
| <b>Dimensions</b>                            |             |             |             |             |             |             |
| Inside Neck Diameter (mm)                    | 326         | 326         | 326         | 445         | 445         | 465         |
| Effective Internal Height (mm)               | 600         | 704         | 828         | 600         | 828         | 773         |
| Height (mm)                                  | 1263        | 1370        | 1495        | 1266        | 1486        | 1499        |
| Operating Height (mm)                        | 1263        | 1096        | 1212        | 970         | 995         | 980         |
| Outside Diameter (mm)                        | 875         | 875         | 875         | 1104        | 1104        | 1190        |
| Door Width Requirement (mm)                  | 895         | 895         | 895         | 1124        | 1124        | 1210        |
| Empty Weight (kg)                            | 219         | 230         | 277         | 328         | 372         | 441         |
| Full Weight (kg)                             | 502         | 529         | 649         | 802         | 1005        | 1160        |
| Shipping Weight (kg)                         | 358         | 438         | 470         | 520         | 616         | 702         |

## Blood Bag Capacity

| Model              | YDD-350-326       |             |              | YDD-370-326       |             |              | YDD-450-326       |             |              | YDD-550-445       |             |              | YDD-750-445       |             |              | YDD-850-465       |             |              |
|--------------------|-------------------|-------------|--------------|-------------------|-------------|--------------|-------------------|-------------|--------------|-------------------|-------------|--------------|-------------------|-------------|--------------|-------------------|-------------|--------------|
| Bag Specifications | Total No. of Bags | Rack Layers | No. of Racks | Total No. of Bags | Rack Layers | No. of Racks | Total No. of Bags | Rack Layers | No. of Racks | Total No. of Bags | Rack Layers | No. of Racks | Total No. of Bags | Rack Layers | No. of Racks | Total No. of Bags | Rack Layers | No. of Racks |
| 25 ml (791 OS/U)   | 1176              | 6           | 196          | 1372              | 7           | 196          | 1608              | 8           | 201          | 2208              | 6           | 368          | 2944              | 8           | 368          | 2996              | 7           | 428          |
| 50 ml (4R9951)     | 720               | 6           | 120          | 840               | 7           | 120          | 1024              | 8           | 128          | 1392              | 6           | 232          | 1856              | 8           | 232          | 1904              | 7           | 272          |
| 250 ml (DF - 200)  | 264               | 3           | 88           | 352               | 4           | 88           | 475               | 5           | 95           | 516               | 3           | 172          | 860               | 5           | 172          | 832               | 4           | 208          |
| 500ml (4R9953)     | 168               | 3           | 56           | 168               | 3           | 56           | 305               | 5           | 61           | 336               | 3           | 112          | 560               | 5           | 112          | 544               | 4           | 136          |
| 500 ml (4R9955)    | 144               | 3           | 48           | 192               | 4           | 48           | 280               | 5           | 56           | 288               | 3           | 96           | 480               | 5           | 96           | 464               | 4           | 116          |
| 700 ml (DF - 700)  | 96                | 3           | 32           | 96                | 3           | 32           | 152               | 4           | 38           | 204               | 3           | 68           | 272               | 4           | 68           | 320               | 4           | 80           |

## Technical Parameters



| Model                                        | YDD-1000-465 | YDD-1300-635 | YDD-1600-635 | YDD-1800-635 |
|----------------------------------------------|--------------|--------------|--------------|--------------|
| 2ml Volume                                   | 51K          | 59K          | 76K          | 95K          |
| <b>Maximum Storage Capacity</b>              |              |              |              |              |
| 2 ml Vials (Internal Thread)                 | 51000        | 58500        | 76050        | 94875        |
| Freeze Rack (100 wells)                      | 30           | 54           | 54           | 60           |
| Freeze Rack (25 wells)                       | 16           | 18           | 18           | 13           |
| Layers of each Rack                          | 15           | 10           | 13           | 15           |
| 5 ml Vials (Internal Thread)                 | 22640        | 28944        | 33768        | 46665        |
| Freeze Rack (81 wells)                       | 30           | 54           | 54           | 60           |
| Freeze Rack (25 wells)                       | 16           | 18           | 18           | 13           |
| Layers of each Rack                          | 8            | 6            | 7            | 9            |
| <b>Performance</b>                           |              |              |              |              |
| Volume of LN <sub>2</sub> (L)                | 1014         | 1340         | 1660         | 1880         |
| Volume of LN <sub>2</sub> under the Tray (L) | 135          | 265          | 300          | 320          |
| <b>Dimensions</b>                            |              |              |              |              |
| Inside Neck Diameter (mm)                    | 465          | 635          | 635          | 635          |
| Effective Internal Height (mm)               | 900          | 620          | 791          | 900          |
| Height (mm)                                  | 1619         | 1342         | 1534         | 1662         |
| Operating Height (mm)                        | 1090         | 997          | 967          | 1097         |
| Outside Diameter (mm)                        | 1190         | 1565         | 1565         | 1565         |
| Door Width Requirement (mm)                  | 1210         | 1585         | 1585         | 1585         |
| Empty Weight (kg)                            | 495          | 851          | 914          | 985          |
| Full Weight (kg)                             | 1314         | 1934         | 2255         | 2504         |
| Shipping Weight (kg)                         | 926          | 1168         | 1426         | 1520         |

## Blood Bag Capacity



| Model              | YDD-1000-465      |             |              | YDD-1300-635      |             |              | YDD-1600-635      |             |              | YDD-1800-635      |             |              |
|--------------------|-------------------|-------------|--------------|-------------------|-------------|--------------|-------------------|-------------|--------------|-------------------|-------------|--------------|
| Bag Specifications | Total No. of Bags | Rack Layers | No. of Racks | Total No. of Bags | Rack Layers | No. of Racks | Total No. of Bags | Rack Layers | No. of Racks | Total No. of Bags | Rack Layers | No. of Racks |
| 25 ml (791 OS/U)   | 3852              | 9           | 428          | 4536              | 6           | 956          | 5292              | 7           | 756          | 7218              | 9           | 802          |
| 50 ml (4R9951)     | 2394              | 9           | 266          | 2808              | 6           | 468          | 3276              | 7           | 468          | 4446              | 9           | 494          |
| 250 ml (DF - 200)  | 1020              | 5           | 204          | 1062              | 3           | 354          | 1770              | 5           | 354          | 1940              | 5           | 388          |
| 500 ml (4R9953)    | 670               | 5           | 134          | 666               | 3           | 222          | 888               | 4           | 222          | 1290              | 5           | 258          |
| 500 ml (4R9955)    | 520               | 5           | 104          | 654               | 3           | 218          | 792               | 4           | 198          | 1090              | 5           | 218          |
| 700 ml (DF - 700)  | 400               | 5           | 80           | 396               | 3           | 132          | 528               | 4           | 132          | 775               | 5           | 155          |

## Racks (vertical type) and Blood Bag Racks



|                              | Racks (vertical type) | 25 ml<br>Blood bag racks | 50 ml<br>Blood bag racks |
|------------------------------|-----------------------|--------------------------|--------------------------|
| YDD-350-326<br>YDD-370-326   |                       |                          |                          |
| YDD-450-326                  |                       |                          |                          |
| YDD-550-445<br>YDD-750-445   |                       |                          |                          |
| YDD-850-465                  |                       |                          |                          |
| YDD-1000-465                 |                       |                          |                          |
| YDD-1300-635<br>YDD-1600-635 |                       |                          |                          |
| YDD-1800-635                 |                       |                          |                          |

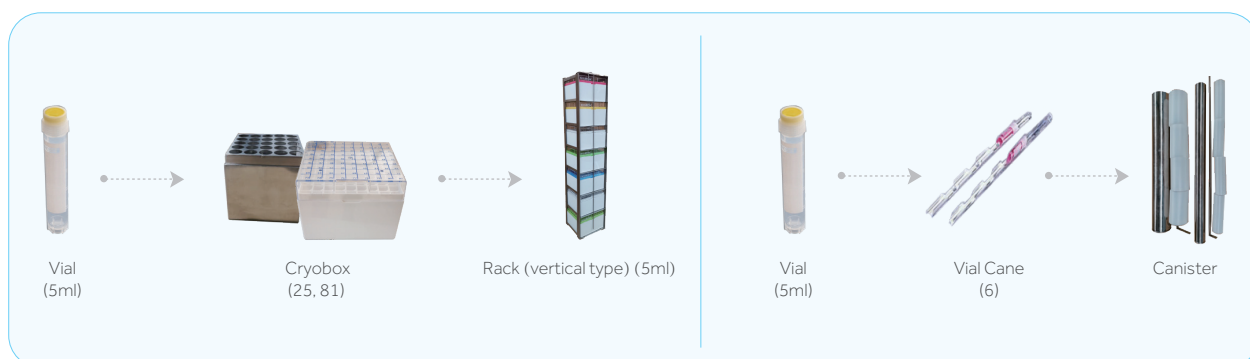
## Biological Sample Bank-YDD Series



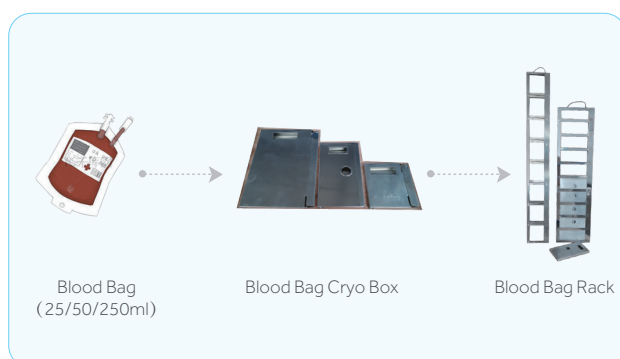
### Storage Example of 2ml Internally Threaded Vial



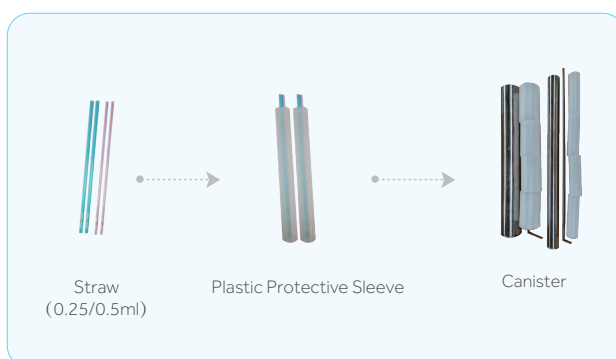
### Storage Example of Tall 5ml Cryovials



### Blood Bag Storage Example



### Straw Storage Example



## Product List



| Model       | Product                           | Model                                      | Description and Accessories                                                                                                                                                                                                           |
|-------------|-----------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| YDD-350-326 | Biobank Freezer (Smart type)      | YDD-350-326                                | Includes vacuum isolated hose (GRG-DN10/2.0), 4pcs of 10-tier rack (5*5), 12 pcs of 10-tier rack (9*9), 40pcs of cryo boxes for 2ml vial (5*5), 120pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system) |
|             | Biobank Freezer                   | YDD-350-326                                | Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional                                                                                                                               |
|             | Rack (vertical type)              | FDCJ-25-10                                 | Used to store 2ml cryoboxes (5*5), ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)                                                                                                                           |
|             | Rack (vertical type)              | FDCJ-81-10                                 | Used to store 2ml cryoboxes (9*9), Ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)                                                                                                                           |
|             | Blood bag Rack                    | DCJ-25-6                                   | Rack used to store 25ml blood bag, 6 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                        |
|             | Blood bag Rack                    | DCJ-50-6                                   | Rack used to store 50ml blood bag, 6 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                        |
|             | Blood bag Rack                    | DCJ-250-3                                  | Rack used to store 250ml blood bag, 3 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                       |
|             | Plastic cryo box                  | 5×5 (2.0)                                  | Used to store 1.8ml/2ml vial (25 holes)                                                                                                                                                                                               |
|             | Plastic cryo box                  | 9×9 (2.0)                                  | Used to store 1.8ml/2ml vial (81 holes)                                                                                                                                                                                               |
|             | Plastic cryo box                  | 10×10 (2.0)                                | Used to store 1.8ml/2ml vial (internally threaded, 100 holes)                                                                                                                                                                         |
|             | Cryosmart Level Monitoring System | Cryosmart Level Monitoring System ZJY-800N | Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module                                                                |
| YDD-370-326 | Biobank Freezer (Smart type)      | YDD-370-326                                | Includes vacuum isolated hose (GRG-DN10/2.0), 4pcs of 12-tier rack (5*5), 12 pcs of 12-tier rack (9*9), 48pcs of cryo boxes for 2ml vial (5*5), 144pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system) |
|             | Biobank Freezer                   | YDD-370-326                                | Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional                                                                                                                               |
|             | Rack (vertical type)              | FDCJ-25-12                                 | Used to store 2ml cryoboxes (5*5), Twelve layers in total, suitable for YDD-370 (excluding cryoboxes)                                                                                                                                 |
|             | Rack (vertical type)              | FDCJ-81-12                                 | Used to store 2ml cryoboxes (9*9), Twelve layers in total, suitable for YDD-370 (excluding cryoboxes)                                                                                                                                 |
|             | Blood bag Rack                    | DCJ-25-7                                   | Rack used to store 25ml blood bag, 7 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850/1600                                                                        |
|             | Blood bag Rack                    | DCJ-50-7                                   | Rack used to store 50ml blood bag, 7 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850/1600                                                                        |
|             | Blood bag Rack                    | DCJ-250-4                                  | Rack used to store 250ml blood bag, 4 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850                                                                            |
|             | Plastic cryo box                  | 5×5 (2.0)                                  | Used to store 1.8ml/2ml vial (25 holes)                                                                                                                                                                                               |
|             | Plastic cryo box                  | 9×9 (2.0)                                  | Used to store 1.8ml/2ml vial (81 holes)                                                                                                                                                                                               |
|             | Plastic cryo box                  | 10×10 (2.0)                                | Used to store 1.8ml/2ml vial (internally threaded, 100 holes)                                                                                                                                                                         |
|             | Cryosmart Level Monitoring System | Cryosmart Level Monitoring System ZJY-800N | Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module                                                                |
| YDD-450-326 | Biobank Freezer (Smart type)      | YDD-450-326                                | Includes vacuum isolated hose (GRG-DN10/2.0), 4pcs of 14-tier rack (5*5), 14 pcs of 14-tier rack (9*9), 56pcs of cryo boxes for 2ml vial (5*5), 196pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system) |
|             | Biobank Freezer                   | YDD-450-326                                | Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional                                                                                                                               |
|             | Rack (vertical type)              | FDCJ-25-14                                 | Used to store 2ml cryoboxes (5*5), Fourteen layers in total, suitable for YDD-450/750 (excluding cryoboxes)                                                                                                                           |
|             | Rack (vertical type)              | FDCJ-81-14                                 | Used to store 2ml cryoboxes (9*9), Fourteen layers in total, suitable for YDD-450/750 (excluding cryoboxes)                                                                                                                           |
|             | Blood bag Rack                    | DCJ-25-8                                   | Rack used to store 25ml blood bag, 8 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750                                                                             |
|             | Blood bag Rack                    | DCJ-50-8                                   | Rack used to store 50ml blood bag, 8 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750                                                                             |
|             | Blood bag Rack                    | DCJ-250-5                                  | Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800                                                             |
|             | Plastic cryo box                  | 5×5 (2.0)                                  | Used to store 1.8ml/2ml vial (25 holes)                                                                                                                                                                                               |
|             | Plastic cryo box                  | 9×9 (2.0)                                  | Used to store 1.8ml/2ml vial (81 holes)                                                                                                                                                                                               |
|             | Plastic cryo box                  | 10×10 (2.0)                                | Used to store 1.8ml/2ml vial (internally threaded, 100 holes)                                                                                                                                                                         |
|             | Cryosmart Level Monitoring System | Cryosmart Level Monitoring System ZJY-800N | Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module                                                                |

## Product List



| Model       | Product                           | Model                                      | Description and Accessories                                                                                                                                                                                                             |
|-------------|-----------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| YDD-550-445 | Biobank Freezer (Smart type)      | YDD-550-445                                | Includes vacuum isolated hose (GRG-DN10/2.0), 12pcs of 10-tier rack (5*5), 24 pcs of 10-tier rack (9*9), 120pcs of cryo boxes for 2ml vial (5*5), 240pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system) |
|             | Biobank Freezer                   | YDD-550-445                                | Includes vacuum isolated hose (GRG-DN10/2.0). Rack and intelligent level monitoring system are optional                                                                                                                                 |
|             | Rack (vertical type)              | FDCJ-25-10                                 | Used to store 2ml cryoboxes (5*5), ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)                                                                                                                             |
|             | Rack (vertical type)              | FDCJ-81-10                                 | Used to store 2ml cryoboxes (9*9), Ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)                                                                                                                             |
|             | Blood bag Rack                    | DCJ-25-6                                   | Rack used to store 25ml blood bag, 6 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                          |
|             | Blood bag Rack                    | DCJ-50-6                                   | Rack used to store 50ml blood bag, 6 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                          |
|             | Blood bag Rack                    | DCJ-250-3                                  | Rack used to store 250ml blood bag, 3 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                         |
|             | Plastic cryo box                  | 5×5 (2.0)                                  | Used to store 1.8ml/2ml vial (25 holes)                                                                                                                                                                                                 |
|             | Plastic cryo box                  | 9×9 (2.0)                                  | Used to store 1.8ml/2ml vial (81 holes)                                                                                                                                                                                                 |
|             | Plastic cryo box                  | 10×10 (2.0)                                | Used to store 1.8ml/2ml vial (internally threaded,100 holes)                                                                                                                                                                            |
|             | Cryosmart Level Monitoring System | Cryosmart Level Monitoring System ZJY-800N | Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module                                                                  |
| YDD-750-445 | Biobank Freezer (Smart type)      | YDD-750-445                                | Includes vacuum isolated hose (GRG-DN10/2.0), 12pcs of 14-tier rack (5*5), 24 pcs of 14-tier rack (9*9), 168pcs of cryo boxes for 2ml vial (5*5), 336pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system) |
|             | Biobank Freezer                   | YDD-750-445                                | Includes vacuum isolated hose (GRG-DN10/2.0). Rack and intelligent level monitoring system are optional                                                                                                                                 |
|             | Rack (vertical type)              | FDCJ-25-14                                 | Used to store 2ml cryoboxes (5*5), Fourteen layers in total, suitable for YDD-450/750 (excluding cryoboxes)                                                                                                                             |
|             | Rack (vertical type)              | FDCJ-81-14                                 | Used to store 2ml cryoboxes (9*9), Fourteen layers in total, suitable for YDD-450/750 (excluding cryoboxes)                                                                                                                             |
|             | Blood bag Rack                    | DCJ-25-8                                   | Rack used to store 25ml blood bag, 8 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750                                                                               |
|             | Blood bag Rack                    | DCJ-50-8                                   | Rack used to store 50ml blood bag, 8 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750                                                                               |
|             | Blood bag Rack                    | DCJ-250-5                                  | Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800                                                               |
|             | Plastic cryo box                  | 5×5 (2.0)                                  | Used to store 1.8ml/2ml vial (25 holes)                                                                                                                                                                                                 |
|             | Plastic cryo box                  | 9×9 (2.0)                                  | Used to store 1.8ml/2ml vial (81 holes)                                                                                                                                                                                                 |
|             | Plastic cryo box                  | 10×10 (2.0)                                | Used to store 1.8ml/2ml vial (internally threaded,100 holes)                                                                                                                                                                            |
|             | Cryosmart Level Monitoring System | Cryosmart Level Monitoring System ZJY-800N | Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module                                                                  |
| YDD-850-465 | Biobank Freezer (Smart type)      | YDD-850-465                                | Includes vacuum isolated hose (GRG-DN10/2.0), 4 pcs of 13-tier rack (5*5), 32 pcs of 13-tier rack (9*9), 52pcs of cryo boxes (5*5) for 2ml vial, 416pcs of cryo boxes (9*9) for 2ml vial, 1 set of cryosmart (level monitoring system)  |
|             | Biobank Freezer                   | YDD-850-465                                | Includes vacuum isolated hose (GRG-DN10/2.0). Rack and intelligent level monitoring system are optional                                                                                                                                 |
|             | Rack (vertical type)              | FDCJ-25-13                                 | Used to store 2ml cryoboxes (5*5), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)                                                                                                                            |
|             | Rack (vertical type)              | FDCJ-81-13                                 | Used to store 2ml cryoboxes (9*9), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)                                                                                                                            |
|             | Blood bag Rack                    | DCJ-25-7                                   | Rack used to store 25ml blood bag, 7 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850/1600                                                                          |
|             | Blood bag Rack                    | DCJ-50-7                                   | Rack used to store 50ml blood bag, 7 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850/1600                                                                          |
|             | Blood bag Rack                    | DCJ-250-4                                  | Rack used to store 250ml blood bag, 4 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850                                                                              |
|             | Plastic cryo box                  | 5×5 (2.0)                                  | Used to store 1.8ml/2ml vial (25 holes)                                                                                                                                                                                                 |
|             | Plastic cryo box                  | 9×9 (2.0)                                  | Used to store 1.8ml/2ml vial (81 holes)                                                                                                                                                                                                 |
|             | Plastic cryo box                  | 10×10 (2.0)                                | Used to store 1.8ml/2ml vial (internally threaded,100 holes)                                                                                                                                                                            |
|             | Cryosmart Level Monitoring System | Cryosmart Level Monitoring System ZJY-800N | Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module                                                                  |

## Product List



| Model        | Product                           | Model                                      | Description and Accessories                                                                                                                                                                                                              |
|--------------|-----------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| YDD-1000-465 | Biobank Freezer (Smart type)      | YDD-1000-465                               | Includes vacuum isolated hose (GRG-DN10/2.0), 16 pcs of 15-tier rack (5*5), 30 pcs of 15-tier rack (9*9), 240pcs of cryo boxes (5*5) for 2ml vial, 450pcs of cryo boxes (9*9) for 2ml vial, 1 set of cryosmart (level monitoring system) |
|              | Biobank Freezer                   | YDD-1000-465                               | Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional                                                                                                                                  |
|              | Rack (vertical type)              | FDCJ-25-15                                 | Used to store 2ml cryoboxes (5*5), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)                                                                                                                             |
|              | Rack (vertical type)              | FDCJ-81-15                                 | Used to store 2ml cryoboxes (9*9), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)                                                                                                                             |
|              | Blood bag Rack                    | DCJ-25-9                                   | Rack used to store 25ml blood bag, 9 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-1000/1800                                                                              |
|              | Blood bag Rack                    | DCJ-50-9                                   | Rack used to store 50ml blood bag, 9 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-1000/1800                                                                              |
|              | Blood bag Rack                    | DCJ-250-5                                  | Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800                                                                |
|              | Plastic cryo box                  | 5×5 (2.0)                                  | Used to store 1.8ml/2ml vial (25 holes)                                                                                                                                                                                                  |
|              | Plastic cryo box                  | 9×9 (2.0)                                  | Used to store 1.8ml/2ml vial (81 holes)                                                                                                                                                                                                  |
|              | Plastic cryo box                  | 10×10 (2.0)                                | Used to store 1.8ml/2ml vial (internally threaded, 100 holes)                                                                                                                                                                            |
|              | Cryosmart Level Monitoring System | Cryosmart Level Monitoring System ZJY-800N | Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module                                                                   |
| YDD-1300-635 | Biobank Freezer (Smart type)      | YDD-1300-635                               | Includes vacuum isolated hose (GRG-DN10/2.0), 120 pcs of round rack, 240 pcs of ϕ 97mm canister (2 goblets included for each), 1 set of cryosmart (level monitoring system)                                                              |
|              | Biobank Freezer                   | YDD-1300-635                               | Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional                                                                                                                                  |
|              | Rack (vertical type)              | FDCJ-25-10                                 | Used to store 2ml cryoboxes (5*5), ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)                                                                                                                              |
|              | Rack (vertical type)              | FDCJ-81-10                                 | Used to store 2ml cryoboxes (9*9), Ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)                                                                                                                              |
|              | Blood bag Rack                    | DCJ-25-6                                   | Rack used to store 25ml blood bag, 6 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                           |
|              | Blood bag Rack                    | DCJ-50-6                                   | Rack used to store 50ml blood bag, 6 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                           |
|              | Blood bag Rack                    | DCJ-250-3                                  | Rack used to store 250ml blood bag, 3 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                          |
|              | Plastic cryo box                  | 5×5 (2.0)                                  | Used to store 1.8ml/2ml vial (25 holes)                                                                                                                                                                                                  |
|              | Plastic cryo box                  | 9×9 (2.0)                                  | Used to store 1.8ml/2ml vial (81 holes)                                                                                                                                                                                                  |
|              | Plastic cryo box                  | 10×10 (2.0)                                | Used to store 1.8ml/2ml vial (internally threaded, 100 holes)                                                                                                                                                                            |
|              | Cryosmart Level Monitoring System | Cryosmart Level Monitoring System ZJY-800N | Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module                                                                   |
| YDD-1600-635 | Biobank Freezer (Smart type)      | YDD-1600-635                               | Includes vacuum isolated hose (GRG-DN10/2.0), 468pcs of 7-tier blood bag rack for 50ml, 3276 pcs of 50ml blood bag cryo box (4R9951), 1 set of cryosmart (level monitoring system)                                                       |
|              | Biobank Freezer                   | YDD-1600-635                               | Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional                                                                                                                                  |
|              | Rack (vertical type)              | FDCJ-25-13                                 | Used to store 2ml cryoboxes (5*5), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)                                                                                                                             |
|              | Rack (vertical type)              | FDCJ-81-13                                 | Used to store 2ml cryoboxes (9*9), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)                                                                                                                             |
|              | Blood bag Rack                    | DCJ-25-7                                   | Rack used to store 25ml blood bag, 7 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850/1600                                                                           |
|              | Blood bag Rack                    | DCJ-50-7                                   | Rack used to store 50ml blood bag, 7 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850/1600                                                                           |
|              | Blood bag Rack                    | DCJ-250-5                                  | Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800                                                                |
|              | Plastic cryo box                  | 5×5 (2.0)                                  | Used to store 1.8ml/2ml vial (25 holes)                                                                                                                                                                                                  |
|              | Plastic cryo box                  | 9×9 (2.0)                                  | Used to store 1.8ml/2ml vial (81 holes)                                                                                                                                                                                                  |
|              | Plastic cryo box                  | 10×10 (2.0)                                | Used to store 1.8ml/2ml vial (internally threaded, 100 holes)                                                                                                                                                                            |
|              | Cryosmart Level Monitoring System | Cryosmart Level Monitoring System ZJY-800N | Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module                                                                   |

## Product List



| Model        | Product                           | Model                                      | Description and Accessories                                                                                                                                                                                                         |
|--------------|-----------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| YDD-1800-635 | Biobank Freezer (Smart type)      | YDD-1800-635                               | Includes vacuum isolated hose (GRG-DN10/2.0), 13 pcs of 15-tier rack(5*5), 60 pcs of 15-tier rack(9*9), 195pcs of cryo boxes(5*5) for 2ml vial, 900pcs of cryo boxes(9*9) for 2ml vial, 1 set of cryosmart(level monitoring system) |
|              | Biobank Freezer                   | YDD-1800-635                               | Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional                                                                                                                             |
|              | Rack (vertical type)              | FDCJ-25-15                                 | Used to store 2ml cryoboxes (5*5), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)                                                                                                                        |
|              | Rack (vertical type)              | FDCJ-81-15                                 | Used to store 2ml cryoboxes (9*9), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)                                                                                                                        |
|              | Blood bag Rack                    | DCJ-25-9                                   | Rack used to store 25ml blood bag, 9 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-1000/1800                                                                         |
|              | Blood bag Rack                    | DCJ-50-9                                   | Rack used to store 50ml blood bag, 9 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-1000/1800                                                                         |
|              | Blood bag Rack                    | DCJ-250-5                                  | Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800                                                           |
|              | Plastic cryo box                  | 5*5 (2.0)                                  | Used to store 1.8ml/2ml vial (25 holes)                                                                                                                                                                                             |
|              | Plastic cryo box                  | 9*9 (2.0)                                  | Used to store 1.8ml/2ml vial (81 holes)                                                                                                                                                                                             |
|              | Plastic cryo box                  | 10*10 (2.0)                                | Used to store 1.8ml/2ml vial (internally threaded, 100 holes)                                                                                                                                                                       |
|              | Cryosmart Level Monitoring System | Cryosmart Level Monitoring System ZJY-800N | Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module                                                              |
| Other Racks  | Blood bag Rack                    | DCJ-250-3                                  | Rack used to store 250ml blood bag, 3 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                     |
|              | Blood bag Rack                    | DCJ-250-4                                  | Rack used to store 250ml blood bag, 4 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850                                                                          |
|              | Blood bag Rack                    | DCJ-250-5                                  | Rack used to store 250ml blood bag, 5 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750/1000/1600/1800                                                           |
|              | Blood bag Rack                    | DCJ-25-6                                   | Rack used to store 25ml blood bag, 6 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                      |
|              | Blood bag Rack                    | DCJ-25-7                                   | Rack used to store 25ml blood bag, 7 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850/1600                                                                      |
|              | Blood bag Rack                    | DCJ-25-8                                   | Rack used to store 25ml blood bag, 8 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750                                                                           |
|              | Blood bag Rack                    | DCJ-25-9                                   | Rack used to store 25ml blood bag, 9 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-1000/1800                                                                         |
|              | Blood bag Rack                    | DCJ-50-6                                   | Rack used to store 50ml blood bag, 6 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-350/550/1300                                                                      |
|              | Blood bag Rack                    | DCJ-50-7                                   | Rack used to store 50ml blood bag, 7 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-370/850/1600                                                                      |
|              | Blood bag Rack                    | DCJ-50-8                                   | Rack used to store 50ml blood bag, 8 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-450/750                                                                           |
|              | Blood bag Rack                    | DCJ-50-9                                   | Rack used to store 50ml blood bag, 9 layers in total with each layer storing one blood bag; including blood bag cryogenic boxes, suitable for YDD-1000/1800                                                                         |
|              | Rack (vertical type)              | FDCJ-25-5(5.0)                             | Used to store 5ml cryoboxes (5*5), five layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)                                                                                                                        |
|              | Rack (vertical type)              | FDCJ-25-7(5.0)                             | Used to store 5ml cryoboxes (5*5), seven layers in total, suitable for YDD-450/750/850/1600 (excluding cryoboxes)                                                                                                                   |
|              | Rack (vertical type)              | FDCJ-25-8(5.0)                             | Used to store 5ml cryoboxes (5*5), Eight layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)                                                                                                                          |
|              | Rack (vertical type)              | FDCJ-81-5(5.0)                             | Used to store 5ml cryoboxes (9*9), Five layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)                                                                                                                        |
|              | Rack (vertical type)              | FDCJ-81-7(5.0)                             | Used to store 5ml cryoboxes (9*9), Seven layers in total, suitable for YDD-450/750/850/1600 (excluding cryoboxes)                                                                                                                   |
|              | Rack (vertical type)              | FDCJ-81-8(5.0)                             | Used to store 5ml cryoboxes (9*9), Eight layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)                                                                                                                          |
|              | Rack (vertical type)              | XDCJ-8-12                                  | Used to store 2ml Aluminium cryoboxes (8 holes), Twelve layers in total, suitable for YDD-450/750/850/1600 (including aluminium cryoboxes)                                                                                          |
|              | Rack (vertical type)              | XDCJ-8-9                                   | Used to store 2ml Aluminium cryoboxes (8 holes), Nine layers in total, suitable for YDD-350/550/1300 (including aluminium cryoboxes)                                                                                                |
|              | Round Rack                        | YDCJ-97-2                                  | Includes 2 canisters (TT97-2C), 4 plastic goblets and 1 pick up hook for goblets in total, the storage capacity for 0.5ml straw is 3016, suitable for YDD-1300                                                                      |

Product appearance and specifications are subject to change without notice



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The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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