



# LIQUID NITROGEN STORAGE SOLUTIONS



Your Haier Biomedical Partner

**Qingdao Haier Biomedical Co., Ltd.**

No.280 Feng Yuan Road, High-tech Zone,  
Qingdao, 266111, P.R. China  
E-mail: [inquiry@haierbiomedical.com](mailto:inquiry@haierbiomedical.com)  
Website: [www.haiermedical.com](http://www.haiermedical.com)



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Note: If a slight difference occurs between pictures and actual products, please refer to actual products. Our company reserves the right of final interpretation of this brochure, please contact us for any further information if required.  
The models, parameters and performance in the brochure are subject to change due to product upgrades without prior notice.

Apr. 2025

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## Company Profile

Haier Biomedical Technology(Chengdu) Co., Ltd., is a holding subsidiary of Qingdao Haier Biomedical Co., Ltd. (Stock Code: 688139) and based in Chengdu. As a global cryogenic product manufacturing base, the facility specializes in the research, development, and production of liquid nitrogen containers and liquid nitrogen related equipment.



Haier Biomedical Liquid Nitrogen Storage Solutions



Haier Biomedical products and solutions are widely used across various fields, such as medical treatment, animal husbandry, scientific research, military industry, food, and industrial. Haier Biomedical have obtained ISO9001 and EU MDD (Medical Device Directive) certification.

4

The company has four invention patents.

5

The company has five software copyrights and appearance patents.

40

The company has obtained more than 40 utility model patents.

The chief R&D scientist is Professor Li Zongji, the former chief technology officer of Chart Industries in US, who has 40 years of experience in the development and manufacturing of liquid nitrogen tanks. Eight industry experts make up the consulting team which supports technical development and product optimization development and product optimization.

From its inception the business has been committed to the R&D and manufacture of liquid nitrogen related equipment. Our broad range of products include:

- Liquid nitrogen supply system
- (liquid nitrogen tower and cryogenic tube)
- Liquid nitrogen biological container
- Sample transfer equipment
- Monitoring management and software system
- Liquid nitrogen freezing technology for food (ice cream, seafood etc.)
- Liquid nitrogen thermostat technology





# Haier Biomedical Liquid Nitrogen Storage Solutions

05/06

## Key Members



Board Chairman:  
**Dr Liu Zhanjie**

Dr Liu Zhanjie is the Founder and General Manager of Haier Biomedical Co., Ltd., and former General Manager and Chief Engineer of Qingdao Haier Medical and Laboratory Products Co., Ltd.

Dr Liu received his doctoral degree in refrigeration and cryogenic engineering from the University of Shanghai for Science and Technology in 2001. Dr Liu has won multiple accolades and made significant contributions to the world of science and technology innovation.



General Manager:  
**Mr Tang Wenming**

Tang Wenming, graduated from Chengdu University of Technology, founded Chengdu Shengjie Cryogenic Equipment Co., Ltd in 2011 and served as the general manager. Following Haier Biomedical's financing in 2017, Mr. Tang established a new company, Sichuan Haishengjie Cryogenic Technology Co., Ltd. During his tenure, Mr. Tang has developed innovative solutions, directed and acquired multiple patents. At the same time, Mr. Tang also signed a cooperation agreement with the CNNC as a qualified professional supplier with the China Aerospace First Academy.



Chief Technology Officer:  
**Mr Li Zongji**

Li Zongji was the founder and general manager of Chengdu Jinfeng Liquid Nitrogen Container Co., Ltd. He began his career within the liquid nitrogen container industry in 1976, and his company was the first Chinese manufacturer liquid nitrogen containers. During his term of office, he led the drafting of three national standards of the People's Republic of China-GBT 5458-2012, Liquid Nitrogen Biological Container, GBT 14174-2012, Large Caliber Liquid Nitrogen Container, and GBT 16774-2012, Self-pressurized Liquid Nitrogen Container.

## Scientific Research Projects

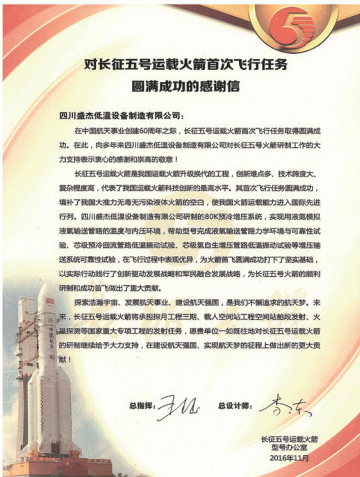
### Chengdu Science and Technology Control Haze

In 2017, the business participated in the Chengdu Technology Control of Haze Project to explore the method of utilizing ultra-low temperature liquid nitrogen technology to control haze. Such efforts were aimed to find an effective way to improve local atmospheric diffusion conditions and air quality.



### Long March 5 Launch Vehicle Project

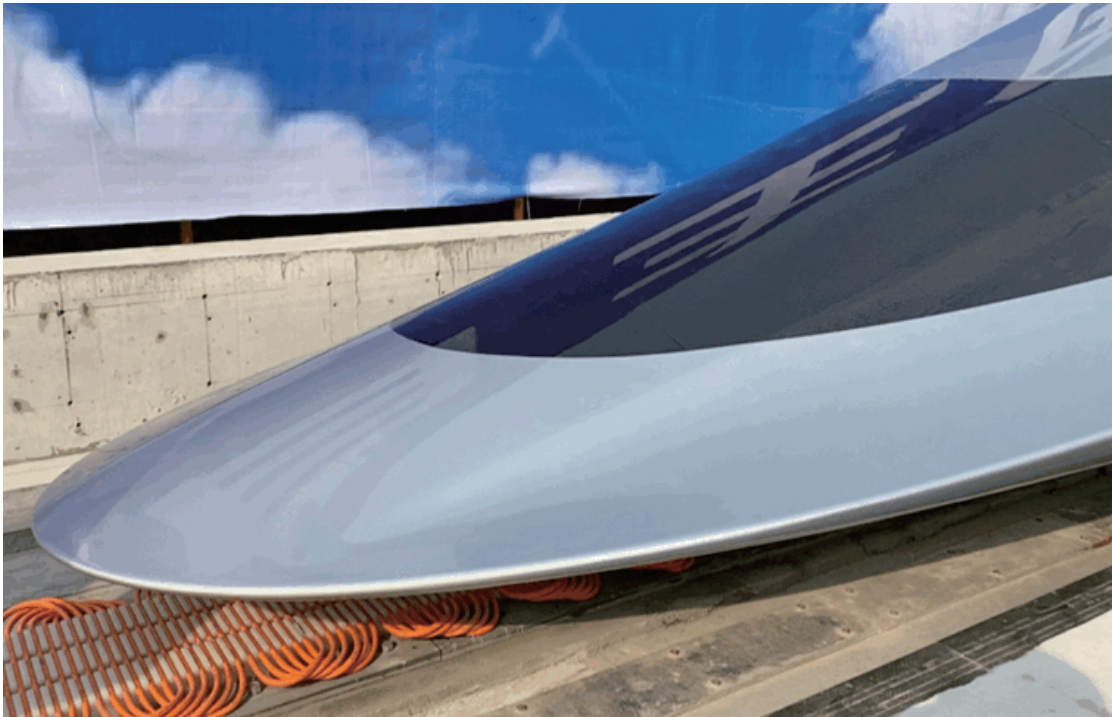
The company has developed the 80K pre-cooling and pressurization system in partnership with the Long March 5 Orbital Launch Vehicle Model Office, this collaboration was to achieve the temperature's liquid nitrogen simulation and internal pressure environment for the liquid oxygen transport pipeline. The project was a success with the products perform mance in flight achieving all technical requirements.



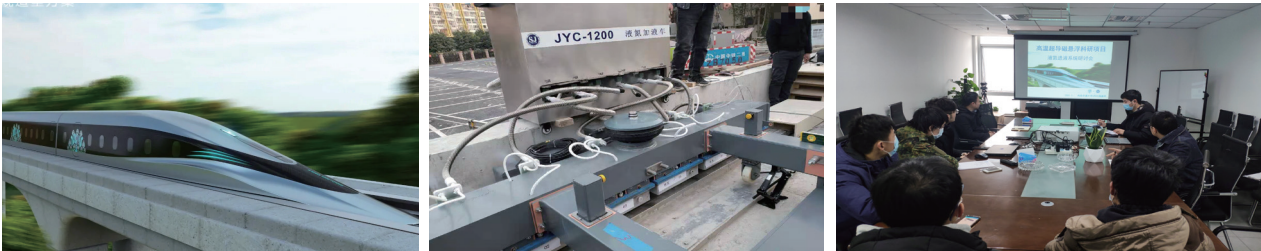


# Haier Biomedical Liquid Nitrogen Storage Solutions

## Superconducting Maglev Project

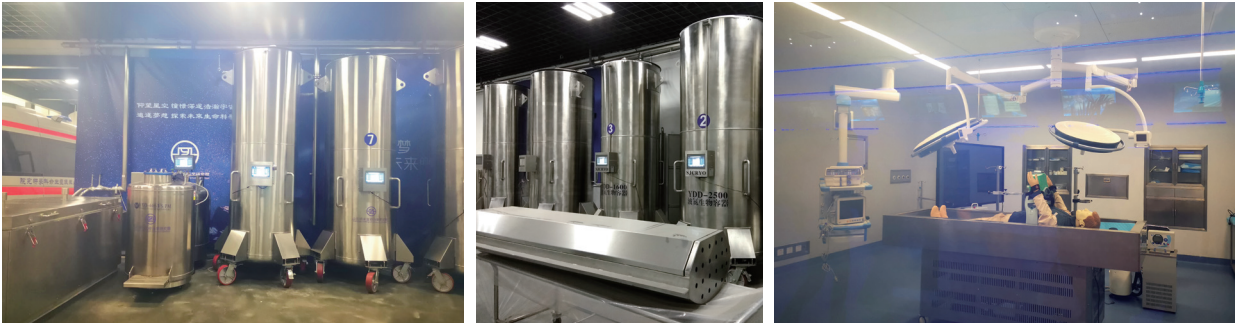


For this project, the team conducted an experiment that represented cutting-edge technology that resulted in industry leading outcomes in the field of high-temperature superconducting maglev research in China, a project jointly achieved in partnership with the Southwest Jiaotong University. Under ideal conditions, the super high-speed vacuum tube high-temperature superconducting maglev vehicle can drive at the ultimate speed of more than 1000 kilometers per hour with low energy consumption and no noise pollution.



## Human Body Cryopreserving Project

We cooperated with Yinfeng Research Institute on China's first human body cryopreserving project. The research produced the latest cryonics technology in China that allowed the human body to be stored in a -196°C environment.



## Seafood Liquid Nitrogen Freezing Project

We conducted a research project jointly with several large fishery enterprises. Based on the research results, we can achieve the rapid freezing of the seafood within five minutes to maintain the original colors, tastes, and nutrients. Such a freezing method has received unanimous praise from users relying on its fast freezing, long preservation time, and low operating costs.



# Haier Biomedical Liquid Nitrogen Storage Solutions

## Smart IoT Liquid Nitrogen Tank



Liquid detection systems have proven problematic over the years, the existing liquid level detection methods have a low degree of intelligence and are not conducive to LN<sub>2</sub> management. To solve the above problems, we have developed smart IoT liquid nitrogen tanks, which improves the accuracy of the liquid level detection without polluting the stored samples.

0.1℃

temperature measurement accuracy up to ±0.1℃

±5mm

liquid level measurement error down to ±5mm

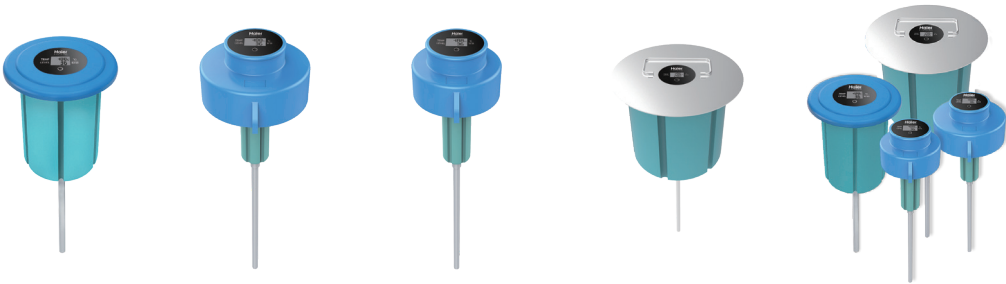
## Scientific and Technological Innovations

As society today develops rapidly toward intelligence, traditional liquid nitrogen tanks have gradually become unable to meet the market's needs. In response, we launched intelligent liquid nitrogen tanks and smart caps in 2019. These products have combined advanced intelligent monitoring technologies and IoT technologies to realize remote data monitoring, scientific and intelligent management, and intuitive display of users' sample storage situations. Such efficient sample management ensures the accuracy of sampling and improves the quality control of biological samples. Our liquid nitrogen tanks can store not only blood but also human biological samples, such as cord blood, cells, and sperm, to provide the best protection for them.

Low Temperature Transport Trolley



Haier Smart Cap



YDD Series





# Biobank Series for Large Scale Storage

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 .

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



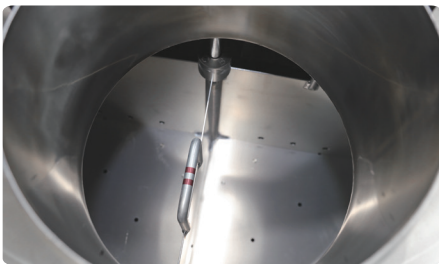
## Key Features

- 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
- One-touch defogging for easier access
- LN<sub>2</sub> splash proof ensures a safer operation
- Suitable for wide variety of sample storage
- 5-Year vacuum warranty

## 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.



### 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

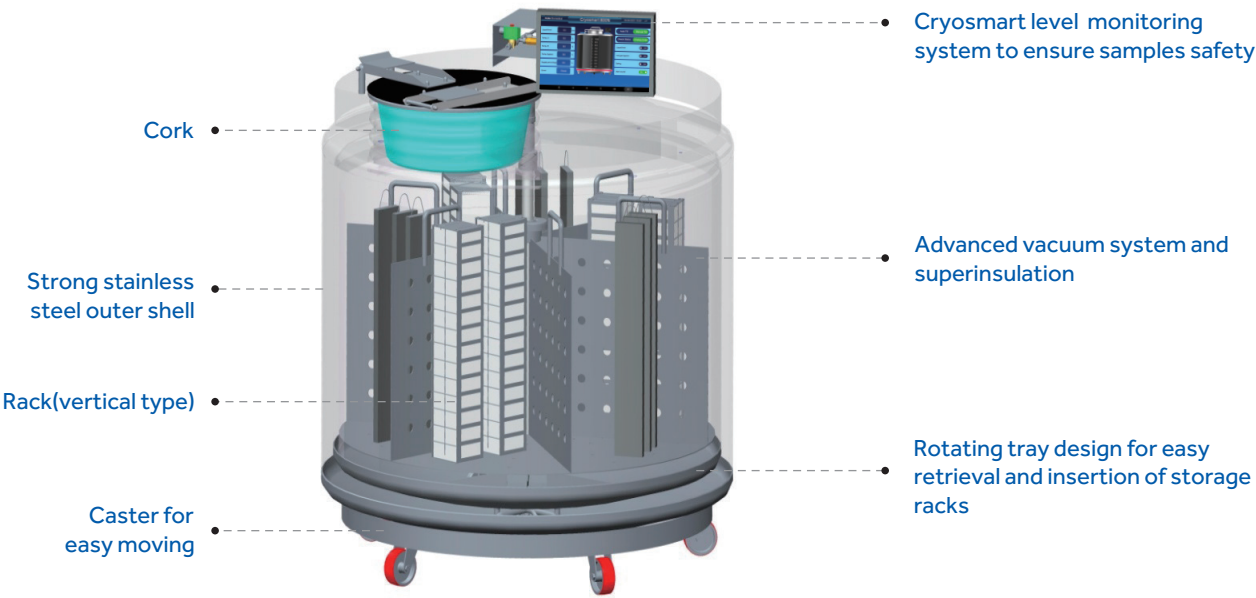
Haier Biomedical's Liquid Nitrogen Storage System Biobank series for large scale storage applies advanced vacuum technology and superinsulation technology to ensure storage safety and temperature uniformity while reducing the consumption of liquid nitrogen. The temperature difference of the entire storage 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.



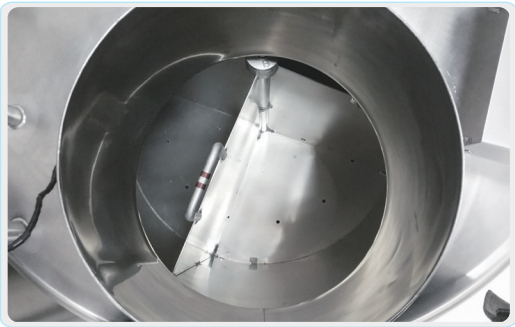
### Cryosmart Level Monitoring System ITC-800N201(N4.1)

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.

Biobank Series for Large Scale Storage



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.

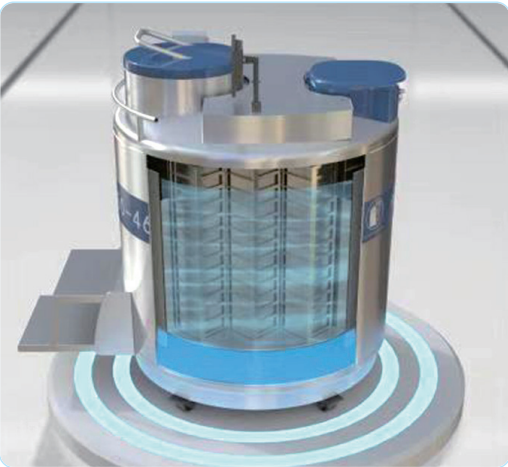


The large-caliber stainless steel liquid nitrogen biological container is matched with a self pressurizing replenishment tank, which is suitable for scientific research institutions with a small sample storage capacity.

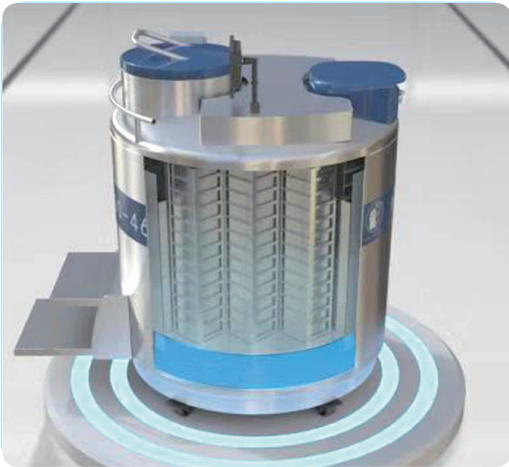


Liquid and Gas Phase

Liquid Phase



Gas Phase



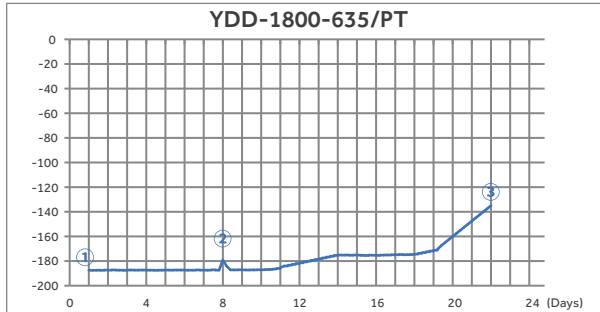
Top of the Container



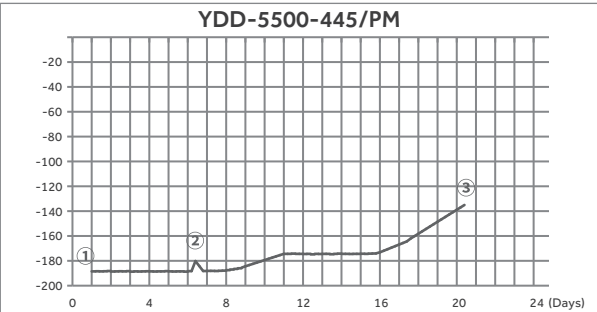
Liquid Feed System



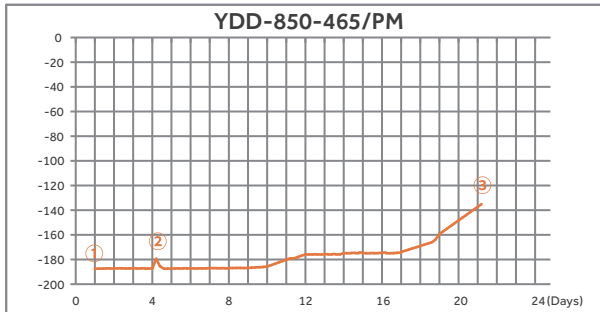
Temperature Test Graph



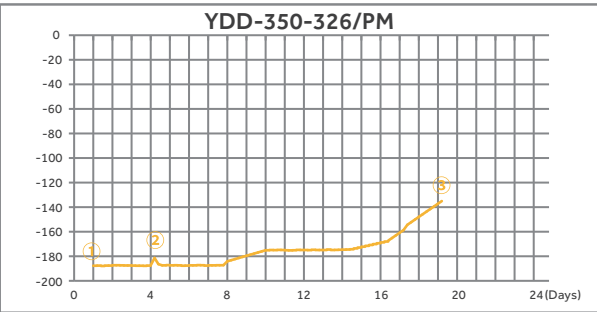
- ① Precooling stage when freezer filled to high level
- ② Lid open test, -179.2°C max
- ③ With no liquid nitrogen supply, the temperature maintained below -135°C for 22 days



- 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.



Biobank Series for Large Scale Storage

Technical Parameters



Model	YDD-350-326/PM	YDD-370-326/PM	YDD-450-326/PT	YDD-550-445/PM	YDD-750-445/PM
2ml Volume	13K	16K	21K	27K	38K
Maximum Storage Capacity					
2 ml Vials (Internal Thread)	13000	15600	21000	27000	37800
Freeze Rack (100 wells)	12	12	12	24	24
Freeze Rack (25 wells)	4	4	8	12	12
Layers of each Rack	10	12	15	10	14
5 ml Vials (Internal Thread)	5360	6432	10548	11220	17952
Freeze Rack (81 wells)	12	12	12	24	24
Freeze Rack (25 wells)	4	4	8	12	12
Layers of each Rack	5	6	9	5	8
Performance					
Volume of LN <sub>2</sub> (L)	350	370	480	587	783
Volume of LN <sub>2</sub> under the Tray (L)	55	55	55	80	80
Dimensions					
Inside Neck Diameter (mm)	326	326	326	445	445
Effective Internal Height (mm)	600	704	900	600	828
Height (mm)	1263	1370	1570	1266	1486
Operating Height (mm)	1263	1096	1060	1266	995
Outside Diameter (mm)	875	875	875	1104	1104
Door Width Requirement(mm)	895	895	895	1124	1124
Empty Weight (kg)	245	283	308	328	372
Full Weight (kg)	528	582	696	802	1005
Shipping Weight (kg)	384	536	501	520	616

Blood Bag Capacity

Model	YDD-350-326/PM			YDD-370-326/PM			YDD-450-326/PT			YDD-550-445/PM			YDD-750-445/PM		
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
25 ml (791 OS/U)	1176	6	196	1372	7	196	1602	9	178	2208	6	368	2944	8	368
50 ml (4R9951)	720	6	120	840	7	120	990	9	110	1392	6	232	1856	8	232
250 ml (DF-200)	264	3	88	352	4	88	450	5	90	516	3	172	860	5	172
500 ml (4R9953)	168	3	56	168	3	56	270	5	54	336	3	112	560	5	112
500 ml (4R9955)	144	3	48	192	4	48	370	5	74	288	3	96	480	5	96
700 ml (DF - 700)	96	3	32	96	3	32	260	5	52	204	3	68	272	4	68

Technical Parameters



Model	YDD-850-465/PM	YDD-1000-465/PT	YDD-1300-635/PM	YDD-1600-635/PM	YDD-1800-635/PT
2ml Volume	43K	51K	59K	76K	95K
Maximum Storage Capacity					
2 ml Vials (Internal Thread)	42900	51000	58500	76050	94875
Freeze Rack (100 wells)	32	30	54	54	60
Freeze Rack (25 wells)	4	16	18	18	13
Layers of each Rack	13	15	10	13	15
5 ml Vials (Internal Thread)	18844	25470	28944	33768	46665
Freeze Rack (81 wells)	32	30	54	54	60
Freeze Rack (25 wells)	4	16	18	18	13
Layers of each Rack	7	9	6	7	9
Performance					
Volume of LN <sub>2</sub> (L)	890	1014	1340	1660	1880
Volume of LN <sub>2</sub> under the Tray (L)	135	135	265	300	320
Dimensions					
Inside Neck Diameter (mm)	465	465	635	635	635
Effective Internal Height (mm)	773	900	620	791	900
Height (mm)	1499	1619	1341	1534	1661
Operating Height (mm)	980	1090	997	967	1097
Outside Diameter (mm)	1190	1190	1565	1565	1565
Door Width Requirement(mm)	1210	1210	1585	1585	1585
Empty Weight (kg)	441	495	851	914	985
Full Weight (kg)	1160	1314	1934	2255	2504
Shipping Weight (kg)	702	926	1168	1426	1520

Blood Bag Capacity

Model	YDD-850-465/PM			YDD-1000-465/PT			YDD-1300-635/PM			YDD-1600-635/PM			YDD-1800-635/PT		
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
25 ml (791 OS/U)	2996	7	428	3852	9	428	4536	6	756	5292	7	756	7218	9	802
50 ml (4R9951)	1904	7	272	2394	9	266	2808	6	468	3276	7	468	4446	9	494
250 ml (DF-200)	832	4	208	1020	5	204	1062	3	354	1770	5	354	1940	5	388
500 ml (4R9953)	544	4	136	670	5	134	666	3	222	888	4	222	1290	5	258
500 ml (4R9955)	464	4	116	520	5	104	594	3	198	792	4	198	1090	5	218
700 ml (DF - 700)	320	4	80	400	5	80	396	3	132	528	4	132	775	5	155

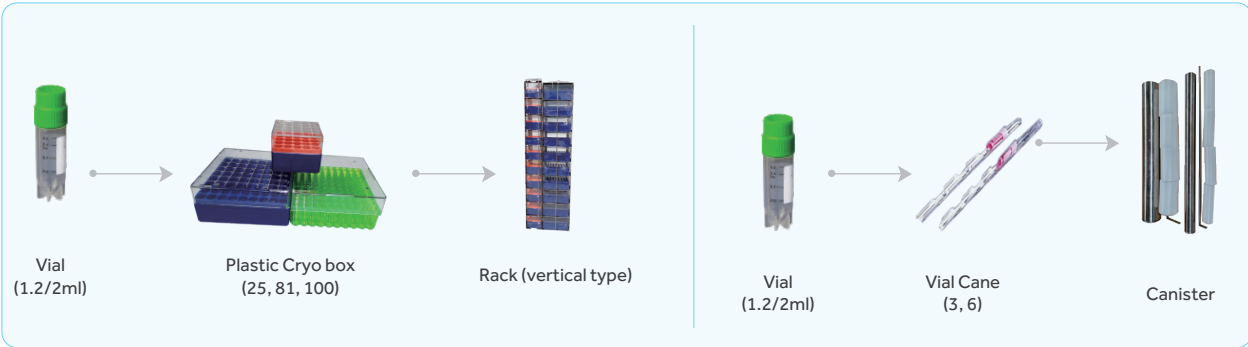
Biobank Series for Large Scale Storage

Racks (vertical type) and Blood bag Frame

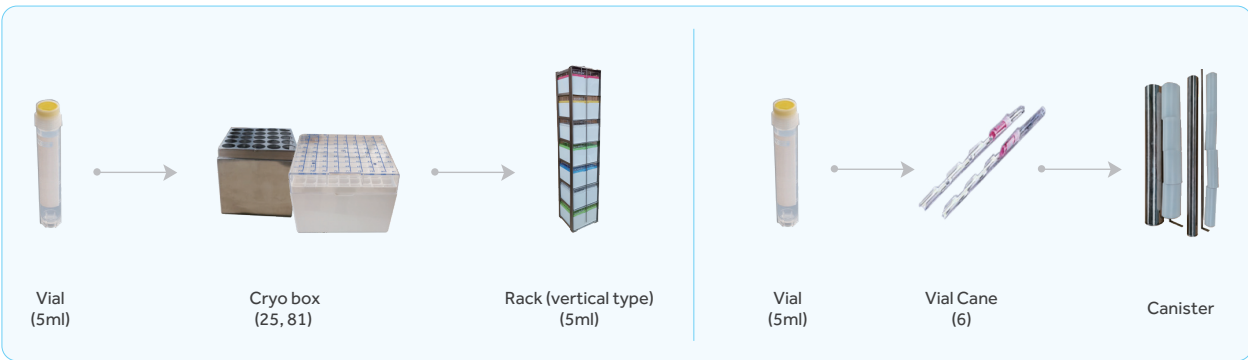
	Racks (vertical type)	25 ml Blood bag Frame	50 ml Blood bag frame
YDD-350-326/PM YDD-370-326/PM			
YDD-450-326/PT			
YDD-550-445/PM YDD-750-445/PM			
YDD-850-465/PM			
YDD-1000-465/PT			
YDD-1300-635/PM YDD-1600-635/PM			
YDD-1800-635/PT			

Biological Sample Bank-YDD Series

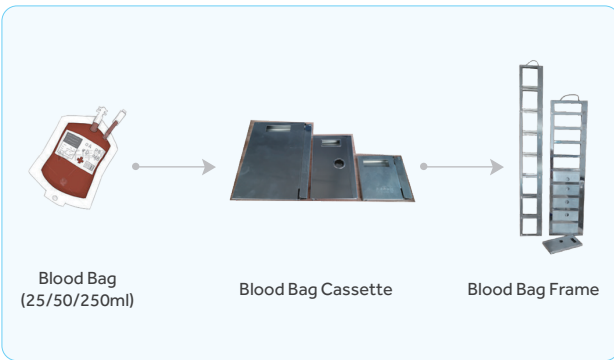
Storage Example of 2ml Internally Threaded Vial



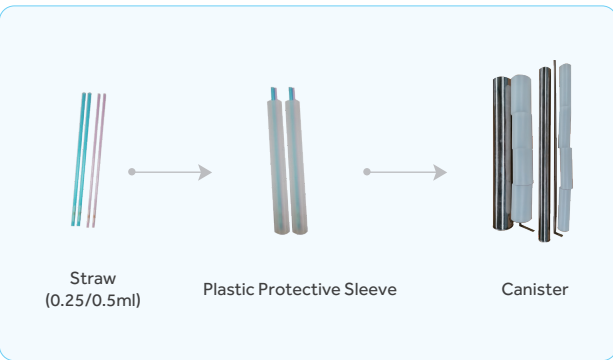
Storage Example of Tall 5ml Cryovials



Blood Bag Storage Example



Straw Storage Example





Biobank Series for Large Scale Storage

Product List

Model	Product	Product Model	Description and Accessories
YDD-350-326/ PM(13K)	Biobank freezer (Smart type)	YDD-350-326/PM	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 cryo smart (level monitoring system)
	Biobank freezer	YDD-350-326/PM	Includes vacuum isolated hose (GRG-DN10/2.0). Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-10	Used for storing 5*5 cryoboxes (2ml), ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-10	Used for storing 9*9 cryoboxes (2ml). Ten layers in total. Suitable for YDD-350/550/1300 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (internally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-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/ PM(16K)	Biobank freezer (Smart type)	YDD-370-326/PM	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/PM	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-12	Used for storing 5*5 cryoboxes (2ml), Twelve layers in total. suitable for YDD-370 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-12	Used for storing 9*9 cryoboxes (2ml), Twelve layers in total, suitable for YDD-370 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (internally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-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/ PT(21K)	Biobank freezer (Smart type)	YDD-450-326/PT	Includes vacuum isolated hose (GRG-DN10/2.0). 8pcs of 15-tier rack (5*5). 12 pcs of 15-tier rack (9*9), 120pcs of cryo boxes for 2ml vial (5*5), 180pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system)
	Biobank freezer	YDD-450-326/PT	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-15	Used for storing 5*5 cryoboxes (2ml), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-15	Used for storing 9*9 cryoboxes (2ml), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (internally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-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	Product Model	Description and Accessories
YDD-550-445/ PM(27K)	Biobank freezer (Smart type)	YDD-550-445/PM	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/PM	Includes vacuum isolated hose (GRG-DN10/2.0). Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-10	Used for storing 5*5 cryoboxes (2ml), ten layers in total. suitable for YDD-350/550/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-10	Used for storing 9*9 cryoboxes (2ml), Ten layers in total, Suitable for YDD-350/550/1300 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (internally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-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/ PM(38K)	Biobank freezer (Smart type)	YDD-750-445/PM	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/PM	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-14	Used for storing 5*5 cryoboxes (2ml), Fourteen layers in total. suitable for YDD-450/750 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-14	Used for storing 9*9 cryoboxes (2ml), Fourteen layers in total, suitable for YDD-450/750 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (internally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-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/ PM(43K)	Biobank freezer (Smart type)	YDD-850-465/PM	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/PM	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-13	Used for storing 5*5 cryoboxes (2ml), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-13	Used for storing 9*9 cryoboxes (2ml), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (internally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module

Biobank Series for Large Scale Storage

Product List

Model	Product	Product Model	Description and Accessories
YDD-1000-465/PT(51K)	Biobank freezer (Smart type)	YDD-1000-465/PT	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/PT	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-15	Used for storing 5*5 cryoboxes (2ml), Fifteen layers in total. suitable for YDD-1000/1800 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-15	Used for storing 9*9 cryoboxes (2ml), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-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/PM(59K)	Biobank freezer (Smart type)	YDD-1300-635/PM	Includes vacuum isolated hose(GRG-DN10/2.0), 18pcs of 10-tier rack(5*5), 54 pcs of 10-tier rack(9*9), 180pcs of cryo boxes for 2ml vial(5*5), 540pcs of cryo boxes for 2ml vial(9*9), 1 set of cryosmart(level monitoring system)
	Biobank freezer	YDD-1300-635/PM	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-10	Used for storing 5*5 cryoboxes (2ml), ten layers in total. suitable for YDD-350/550/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-10	Used for storing 9*9 cryoboxes (2ml), Ten layers in total. Suitable for YDD-350/550/1300 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-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/PM(76K)	Biobank freezer (Smart type)	YDD-1600-635/PM	Includes vacuum isolated hose(GRG-DN10/2.0), 18pcs of 13-tier rack(5*5), 54 pcs of 13-tier rack(9*9), 234pcs of cryo boxes for 2ml vial(5*5), 702pcs of cryo boxes for 2ml vial(9*9), 1 set of cryosmart(level monitoring system)
	Biobank freezer	YDD-1600-635/PM	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-13	Used for storing 5*5 cryoboxes (2ml), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-13	Used for storing 9*9 cryoboxes (2ml). Thirteen layers in total, suitable for YDD-850/1600 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-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	Product Model	Description and Accessories
YDD-1800-635/PT(95K)	Biobank freezer (Smart type)	YDD-1800-635/PT	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/PT	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-15	Used for storing 5*5 cryoboxes (2ml). Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-15	Used for storing 9*9 cryoboxes (2ml), Fifteen layers in total, suitable for YDD-1000/1800 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
	Data Repeater	RP-400	Data transmitted to cloud platform through GPRS, with SIM card included, suitable for all YDD products of Haier
Other Racks	Blood bag frame	DCJ-250-3	3 layers frame used for storing 250ml blood bag, each layer storing one blood bag, with blood bag cassettes included. SuitableforYDD-350/550/1300
	Blood bag frame	DCJ-250-4	4 layers frame used for storing 250ml blood bag, each layer storing one blood bag, with blood bag cassettes included. Suitable for YDD-850
	Blood bag frame	DCJ-250-5H	5 layers frame used for storing 250ml blood bag, each layer storing one blood bag, with blood bag cassettes included. Suitable for YDD-450/750/1000/1800
	Blood bag frame	DCJ-25-6	6 layers frame used for storing 25ml blood bag, each layer storing one blood bag, with blood bag cassettes included. suitable for YDD-350/550/1300
	Blood bag frame	DCJ-25-7H	7 layers frame used for storing 25ml blood bag, each layer storing one blood bag, with blood bag cassettes included. suitable for YDD-850/1600
	Blood bag frame	DCJ-25-8H	8 layers frame used for storing 25ml blood bag, each layer storing one blood bag, with blood bag cassettes included. suitable for YDD-450/750
	Blood bag frame	DCJ-25-9H	9 layers frame used for storing 25ml blood bag, each layer storing one blood bag, with blood bag cassettes included. suitable for YDD-450-326/PT, YDD-1000-465/PM, YDD-1800-625/PT
	Blood bag frame	DCJ-50-6H	6 layers frame used for storing 50ml blood bag, each layer storing one blood bag, with blood bag cassettes included. suitable for YDD-350/550/1300
	Blood bag frame	DCJ-50-7H	7 layers frame used for storing 50ml blood bag, each layer storing one blood bag, with blood bag cassettes included. suitable for YDD-850/1600
	Blood bag frame	DCJ-50-8H	8 layers frame used for storing 50ml blood bag, each layer storing one blood bag, with blood bag cassettes included. suitable for YDD-450/750
	Blood bag frame	DCJ-50-9H	9 layers frame used for storing 50ml blood bag, each layer storing one blood bag, with blood bag cassettes included. suitable for YDD-1000/1800
	Rack (vertical type)	FDCJ-25-5/5.0	Used for storing 5*5 cryoboxes (5ml), five layers in total. suitable for YDD-350/550/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-25-7/5.0	Used for storing 5*5 cryoboxes (5ml), seven layers in total, suitable for YDD-850/1600 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-25-9/5.0	Used for storing 5*5 cryoboxes(5ml), nine layers in total, suitable for YDD-450\750\1000\1800(excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-5/5.0	Used for storing 9*9 cryoboxes (5ml). Five layers in total. suitable for YDD-350/550 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-6/5.0	Used for storing 9*9 cryo boxes (5ml), 7 layers in total. suitable for YDD-370/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-7/5.0	Used for storing 9*9 cryoboxes (5ml), Seven layers in total. suitable for YDD-850/1600 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-9/5.0	Used for storing 9*9 cryoboxes (5ml), nine layers in total. suitable for YDD-450/750/1000/1800 (excluding cryoboxes)
	Rack (vertical type)	XDCJ-8-12	Used for storing 8 holes aluminium cryoboxes (2ml), Twelve layers in total. with aluminium cryoboxes included. suitable for YDD-450/750/850/1600
	Rack (vertical type)	XDCJ-8-9	Used for storing 8 holes aluminium cryoboxes (2ml). Nine layers in total. with aluminium cryoboxes included. suitableforYDD-350/550/1300
	Round Rack	YDCJ-97-2	With 2 stainless steel canisters (φ97/276mm), 4 plastic goblets SNT-97 and 2 pick up lifter for goblets in total, the storage capacity for 0.5ml straw is 3016, suitable for YDD-350YDD-550YDD-1300



CryoBio Biobank Series Liquid Nitrogen Container

Innovative design with advanced CryoSmart Pro control system for optimal sample security.It is ideal storage equipment for storing cord blood, tissue cells, biomaterials and so on to keep the activity of cell samples.



CryoBio 13

CryoBio 43

•Ten-inch LCD touch screen

10-inch LCD touch screen, easy to operate. The storage life of charts and digital data records is up to 5 years.

•Safe and secure

Cryosmart Level Monitoring System ZJY-800N Pro, which supports fingerprint and NFC access.providing multiple safeguards for sample safety.

•Innovative frost-free design

Unique exhaust structure to avoid frost on the neck. Brand-new drainage structure to avoid internal water accumulation.

•Auto-fill function

Manual and automatic liquid nitrogen filling modes available. With hot gas bypass function, the unit effectively reduces the temperature fluctuation in the tank when liquid nitrogen is filled, improving sample security.

Ergonomic Design

Designed for both liquid and vapor phase storages

Vapour phase storage can reach -190°C

Real-time run monitoring for sample protection

Real-time level, temperature monitoring Remote alarm can also be made through APP, SMS, email, etc

User-friendly design

Universal casters, easy to move, and equipped with brakes The newly designed one-button pedal (CryoBio 43) and hydraulic opening cover make it easier to pick and place samples



Product Parameters

Model	2ml Vials (Internal Thread)	Freeze Rack (100 Wells)	Freeze Rack (25 Wells)	Layers of Each Rack	5ml Vials (Internal Thread)	Freeze Rack (81 Wells)	Freeze Rack (25 Wells)	Layers of Each Rack	Volume of LN <sub>2</sub> (L)
CryoBio 13	13000	12	4	10	5360	12	4	5	350
Volume of LN <sub>2</sub> Under the Tray (L)	Operating Height (mm)	Usable Interna Height (mm)	Inside Neck Diameter (mm)	Height (mm)	Outside Diameter (mm)	Door Width Requirements (mm)	Empty Weight (kg)	Full Weight (kg)	
55	990	600	326	1505	910	930	290	575	

Model	1.2ml/1.8ml2ml Vials (Internal Thread)	Freeze Rack (100 Wells)	Freeze Rack (25 Wells)	Layers of Each Rack	Volume of LN <sub>2</sub> (L)	Volume of LN <sub>2</sub> Under the tray (L)			
CryoBio 43	42900	32	4	13	890	135			
Operating Height (mm)	Usable Interna Height (mm)	Inside Neck Diameter (mm)	Height (mm)	Outside Diameter (mm)	Empty Weight (kg)	Full Weight (kg)	Door Width Requirements (mm)		
1000	773	465	1810	1240	567	1262	1260		

Blood Bag Capacity

Model	CryoBio 13			CryoBio 43		
Bag Specifications	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks
25ml (791 OS/U)	1176	6	196	2944	8	368
50ml (4R9951)	720	6	120	1856	8	232
250ml (4R9953)	264	3	88	860	5	172
500ml (DF-200)	168	3	56	560	5	112
500ml (4R9955)	144	3	48	480	5	96
700ml (DF - 700)	96	3	3	272	4	68

Product List

Model	Product	Product Model	Description and Accessories
CryoBio 13 (13K)	Biobank Freezer (Smart type)	CryoBio 13	Includes vacuum isolated hose (GRG-DN10/2.0). 4 pcs of 10-tier rack (5*5). 12 pcs of 10-tier rack (9*9). 40pcs of cryo boxes (5*5) for 2ml vial, 120pcs of cryo boxes (9*9) for ml vial, 1 set of cryosmart (level monitoring sys em)
	Biobank freezer	CryoBio 13	Includes vacuum isolated hose (GRG-DN10/2.0) and 1 set of cryosmart (level monitoring system)
	Rack (vertical type)	FDCJ-25-10	Used for storing 5*5 cryoboxes (2ml), ten layers in total, suitable for YDD-350/550/1300 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-10	Used for storing 9*9 cryoboxes (2ml). ten layers in total. Suitable for YDD-350/550/1300 (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (internally threaded, 100 holes)
CryoBio 43 (43K)	Biobank Freezer (Smart type)	CryoBio 43	Includes vacuum isolated hose (GRG-DN10/2.0). 4 pcs of 12-tier rack (5*5). 32 pcs of 12-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 cryo smart (level monitoring system)
	Biobank Freezer	CryoBio 43	Includes vacuum isolated hose (GRG-DN10/2.0). 1 set of cryosmart (level monitoring system)
	Rack (vertical type)	FDCJ-25-13	Used for storing 5*5 cryo boxes (2ml), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryo boxes)
	Rack (vertical type)	FDCJ-81-13	Used for storing 9*9 cryo boxes (2ml), Thirteen layers in total, suitable for YDD-850/1600 (excluding cryo boxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic crvo box	FH-100	Used for storing 1.8ml/2ml vial (internally threaded, 100 holes)

Biobank Series Liquid Nitrogen Container

Safe, Secure and Stable Cryogenic Storage Solutions for Biobanking.

The main purpose is suitable for scientific research institutes, pharmaceuticals laboratories, blood stations, hospitals, centers for disease control and prevention. It is an ideal storage equipment for storing umbilical cord blood, tissue cells, biological materials, providing enhanced sample security, and real-time data retrieval.



CryoBio 27

CryoBio 95

Core Features



Intelligent Control

- Intelligent Cockpit
- 10 inch LCD Touchscreen
- Effortless operation



Built-In Protection

- Smart LN<sub>2</sub> level monitoring
- Secure access via fingerprint and NFC card
- Autofill function



Built-In Stability

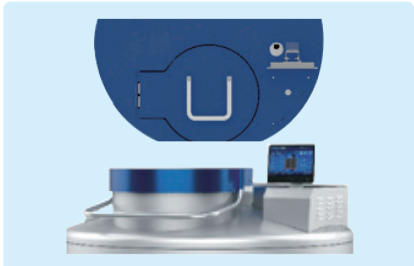
- High-efficiency design
- Designed for gas or liquid phase
- Low evaporation rates



Built-In Connectivity

- LN<sub>2</sub> Supply level monitoring if connected to YDZ tank
- Manual and automatic LN<sub>2</sub> filling modes
- IoT connectivity for realtime temperature and level monitoring

Ergonomic Design



Modular

- The structural design meets the use of gas and liquid phases.
- When used in the gas phase, the temperature at the top of the freezing storage rack can reach -190 °C.
- Integrated circuit design, without any extra wires exposed.



Comfortable  
CryoBio 27

- Split-step ladder, comfortable operating height.
  - Universal casters, easy to move, and with built-in brakes.
  - The hinge cover of the liquid inlet system opens with ease, saving you both time and effort.
- CryoBio 95
- With special technology enabling easy opening, it saves you time and effort.
  - Integrated step ladder, comfortable operating height.
  - Universal casters, easy to move, and with built-in brakes.



Innovative

- Real-time and accurate monitoring of temperature and liquid level.
- New look design with unique exhaust.



Biobank Series Liquid Nitrogen Container

Intelligent Control: The CryoSmart Touchscreen – Beyond Temperature and LN<sub>2</sub> Monitoring, Total Control at Your Fingertips

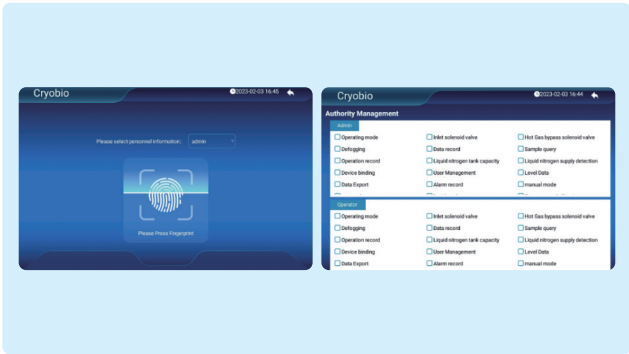


10" High-Visibility Touchscreen

Engineered for biobank environments, the Cryobio 27 features a crystal-clear 10-inch touchscreen. Its bold display allows technicians to check system status and alarms at a glance—even from across the lab. The intuitive interface ensures quick, responsive control in even the most demanding workflows.

Secure Access for Critical Samples

With CryoSmart, you control who accesses your LN<sub>2</sub> storage. Biometric fingerprint login, optional swipe card access, and customizable user profiles protect your samples from unauthorized handling. Password-protected settings and authority management tools make security effortless-without slowing down your team.



Android-Powered Control for Total Oversight

Powered by an advanced Android-based system, the Cryobio 27 offers a user-friendly interface for seamless operation and precise control. The intuitive layout enables easy navigation, real-time tracking, and quick access to features. With enhanced customization and responsive controls, it streamlines compliance and ensures reliable performance in demanding lab environments.

Future-Proof with Free Software Upgrades

Enjoy free standard software upgrades throughout the life of the biobank, ensuring your LN<sub>2</sub> storage container stays up-to-date with the latest features. Customers can easily upgrade themselves via USB, keeping processes efficient and minimizing downtime.

Specifications

Model		CryoBio 27	CryoBio 95
Maximum Storage Capacity	2ml Vials (Internal Thread)	27000	94875
	Freezer Rack (100 Wells)	24	60
	Freezer Rack (25 Wells)	12	13
	Layers of Each Rack	10	15
	5ml Vials (Internal Thread)	11220	46665
	Freeze Rack (81 Wells)	24	60
	Freeze Rack (25 Wells)	12	13
Performance	Volume of LN <sub>2</sub> (L)	587	1880
	Volume of LN <sub>2</sub> Under the Tray (L)	80	320
Dimensions	Operating Height (mm)	1070	1097
	Usable Internal Height (mm)	600	900
	Inside Neck Diameter (mm)	445	635
	Height (mm)	1588	1950
	Outside Diameter (mm)	1140	1565
	Door Width Requirements (mm)	1160	1625
	Empty Weight (kg)	420	909
	Full Weight (kg)	895	2428
Others	Certification	CE	CE

Intelligent Liquid Nitrogen Biological Container

Get total ease of access with Haier Biomedical's wide neck container with integral control and monitoring system, suitable for cryogenic storage of samples, plasma, cell tissue samples and other materials.

•Easier access

With the full opening hydraulic lid design, users can access and remove their samples with ease.

•Brand new intelligent monitoring system

It's equipped with the brand-new intelligent monitoring system and matched with our IoT module which can connect with Haier's big data cloud platform. Integrating three screens, it can alert alarm status via the APP, email or our website enabled devices. With USB interface, it supports data export. With larger battery capacity, it can still be used after power failure.

•Reduce frosting and freezing

The brand-new cover and interlayer exhaust structure can effectively reduce the frosting and freezing at exhaust port.



Product Parameters

Model	CryoBio 11Z		CryoBio 20Z		CryoBio 34Z	
	Vapor Phase	Liquid Phase	Vapor Phase	Liquid Phase	Vapor Phase	Liquid Phase
1.2ml, 1.8m, 2ml Vials (Internal Thread)	11000	13000	20350	24050	33550	42900
5*5Rack (vertical type)	-	-	10	10	10	8
10*10Rack (vertical type)	10	10	16	16	28	31
5*5Freezer Box	-	-	110	130	110	104
10*10Freezer Box	110	130	176	208	308	403
Layers of Vertical Type Rack	11	13	11	13	11	13
Volume of LN (L)	200		340		550	
Exterior Dimensions (W*D*H)(mm)	730*1035*1190		910*1170*1190		1100*1410*1190	
Usable Internal Height (mm)	790		790		790	
Static Evapouration (L/Day)	7		10		12	
Empty Weight (kg)	209		301.5		400	
Inside Neck Diameter (mm)	610		790		1000	
Full Weight (kg)	357		543		821	

Product List

Model	Product	Product Model	Description and Accessories
CryoBio 11Z (11K)	Zhiling Liquid Nitrogen Container (Smart type)	CryoBio 11Z	Includes vacuum isolated hose (GRG-DN10/2.0). 1 set of cryosmart (level monitoring system). 10pcs of 11-tier rack (9*9). 110pcs of cryo boxes (9*9) for 2ml vial
	Zhiling Liquid Nitrogen Container	CryoBio 11Z	Includes vacuum isolated hose (GRG-DN10/2.0) and intelligent monitoring system, rack is optional
	Rack (vertical type)	FDCJ-81-11	Used for storing 9*9 cryoboxes (2ml), eleven layers in total, suitable for CryoBio 11Z/CryoBio 20Z/CryoBio 34Z (excluding cryoboxes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (internally threaded,100 holes)
CryoBio 20Z (20K)	Zhiling Liquid Nitrogen Container (Smart type)	CryoBio 20Z	Includes vacuum isolated hose (GRG-DN10/2.0). 1 set of cryosmart (level monitoring system). 10 pcs of 11-tier rack (5*5). 16pcs of 11-tierrack (9*9). 110 pcs of cryo boxes (5*5) for 2ml vial. 176pcs of cryo boxes (9*9) for 2ml vial
	Zhiling Liquid Nitrogen Container	CryoBio 20Z	Includes vacuum isolated hose (GRG-DN10/2.0) and intelligent monitoring system, rack is optional
	Rack (vertical type)	FDCJ-25-11	Used for storing 5*5 cryoboxes (2ml), eleven layers in total. suitable for CryoBio 11Z/CryoBio 20Z/CryoBio 34Z (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-11	Used for storing 9*9 cryoboxes (2ml), eleven layers in total. suitable for CryoBio 11Z/CryoBio 20Z/CryoBio 34Z (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
CryoBio 34Z (34K)	Zhiling Liquid Nitrogen Container	CryoBio 34Z	Includes vacuum isolated hose (GRG-DN10/2.0). 1 set of cryosmart (level monitoring system). 10 pcs of 11-tier rack (5*5). 28pcs of 11-tier rack (9*9). 110pcs of cryo boxes (5*5) for 2ml vial. 308pcs of cryo boxes (9*9) for 2ml vial
	Zhiling Liquid Nitrogen Container (Smart type)	CryoBio 34Z	Includes vacuum isolated hose (GRG-DN10/2.0) and intelligent monitoring system. Rack is optional
	Rack (vertical type)	FDCJ-25-11	Used for storing 5*5 cryoboxes (2ml), eleven layers in total. suitable for CryoBio 11Z/CryoBio 20Z/CryoBio 34Z (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-11	Used for storing 9*9 cryoboxes (2ml), Eleven layers in total, suitable for CryoBio 11Z/CryoBio 20Z/CryoBio 34Z (excluding cryoboxes)
	Plastic cryo box	FH-25	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	FH-81	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	FH-100	Used for storing 1.8ml/2ml vial (internally threaded, 100 holes)

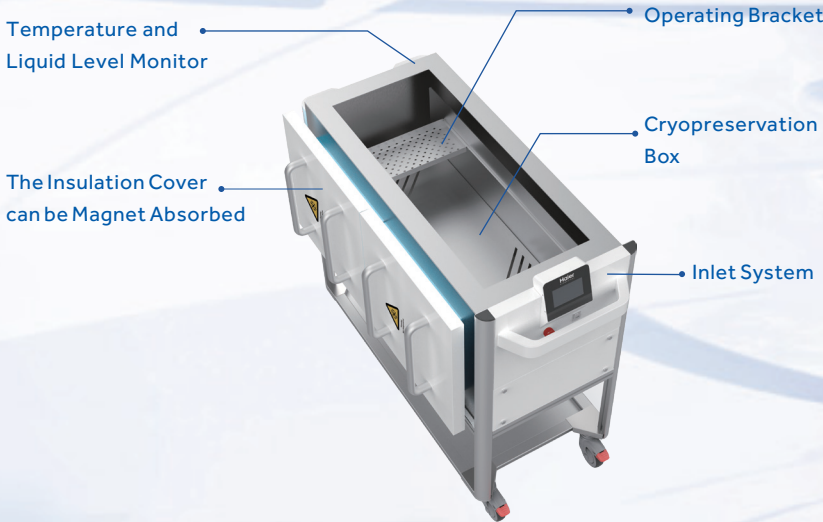
Blood Bag Capacity

Model	Cryobio 11Z			Cryobio 20Z			Cryobio 20Z		
	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
Vapor Phase									
25ml	864	6	144	1500	6	250	2412	6	402
50ml	528	6	88	942	6	154	1512	6	252
250ml	272	4	68	480	4	120	808	4	202
Liquid Phase									
25ml	1152	8	144	2000	8	250	3216	8	402
50ml	704	8	88	1232	8	154	2016	8	252
250ml	340	5	68	600	5	120	1010	5	202



# CryoStation Mobile Vapour Storage Trolley

The unit can be used to preserve plasma and biomaterials during transportation. It is suitable for deep hypothermia operation and transportation of samples in hospitals, various biobanks and laboratories. High quality stainless steel in combination with the thermal insulation layer ensures the effectiveness and durability of the low temperature transport trolley.



## Product Advantages

### Touch Screen

LCD touch operation



### USB Data Export

It has its own USB interface and supports USB data export.



### Real Time Monitoring

The instrument monitors the temperature and liquid level in real time and displays the expected remaining service time. Continuous working hours up to 24 hours.



## User Friendly Design



### Durable Construction

Ideal for the laboratory environment, stain-resistant.



### Caster Design

Integrated design, universal caster at the bottom, easy to move.



### Polymer Materials

The new type of environmentally-friendly polymer material is used inside the cover plate, which is more appealing, more environment-friendly and more advanced than the commonly used pearl foam and polyurethane materials.



### Magnetic Lid

Convenient lid storage solution by the use of magnets. Adhers to side when not in use.

## Technical Parameters

Product Model	Dimensions (L*W*H)(mm)	Frozen Storage Space (L*W*H)(mm)	Shelf Space (L*W*H)(mm)	Liquid Nitrogen Under Tray (L)	Empty Weight (kg)
YDC-3000H	1295*523*1095	900*335*163	950*440*220	33	150

Maximum Storage				
5*5 Freezing Boxes (ea)	10*10 Freezing Boxes (ea)	50ml Blood Bag Boxes (ea)	200ml Blood Bag Boxes (ea)	2ml Cryopreservation Tube (ea)
65	30	105	50	50

## Bio-2T Cryovial Transfer Flask

Bio-2T is suitable for short-distance sample transportation in small batches in experimental units or hospitals. Lightweight, portable design, easy to take.

•Lightweight design

Lightweight design of the product, the total empty weight is only 3kg

•Temperature visualization

Visual real-time temperature monitoring, and the instrument part is dustproof and waterproof

•Multi-specification compatibility

Compatible with 1.2m, 1.5m, 1.8m, 2.0m and 5.0ml sample storage tubes

•High thermal insulation performance

Vacuum structure, thickened thermal insulation material, ensuring the working temperature in the tank -135°C~-196°C, and ultra-long low-temperature storage period



## Humanization Design

Condensate water inflow prevention structure

The specially designed upper cover can prevent condensate from flowing into the container and ensure the container cover to open smoothly.



Liquid nitrogen splash prevention structure

Ensure that liquid nitrogen is not sprayed during transportation after the container is filled with liquid nitrogen, and it is safe to use.



Ultra-low temperature adsorption function

With liquid nitrogen adsorption layer at the bottom, even if the container falls down during dry storage, there will be no liquid nitrogen overflow, which ensures the safety of samples and personnel.



## Product Parameters

O.D. (mm)	I.D. (mm)	Depth (mm)	Height (mm)	Total Empty Weight of Tank (kg)	Liquid Nitrogen Volume (L)	Storage Time of Liquid Phase (h)	Storage Time of Gas Phase (h)	Internal Freezing Tube Capacity (2ml)(pcs)	Working Temperature (°C)	Working Environment (°C)
156	125	190	262	3	2	8	6	54	-135~-196	20~40



## BioT Air Cryovial Transfer Flask

BioT Air is suitable for small batch and short distance sample transportation in experimental units or hospitals. Lightweight, portable design, easy to easy to take.

•Lightweight design

Lightweight design, the total empty weight is only 2.8KG.

•Multi-specification compatibility

Compatible with 1.2ml, 1.5ml, 1.8ml, 2.0ml and 5.0ml sample cryopreservation tubes, and can also hold a 5×5-2ML cryopreservation box.

•High thermal insulation performance

Vacuum structure ensures the working temperature in the tank-135 C ~~196 C, and the ultra-long low-temperature storage period.

•No liquid nitrogen overflow

There is a liquid nitrogen adsorption layer at the bottom, and even if the container is dumped during dry storage, there will be no liquid nitrogen overflow, thus ensuring the safety of samples and personnel.



## Humanization Design

Condensate water inflow prevention structure

The specially designed upper cover can prevent condensate from flowing into the container and ensure the container cover to open smoothly.



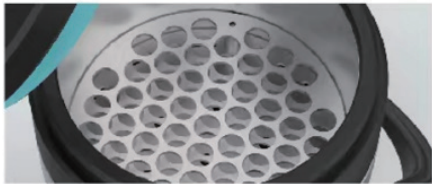
Liquid nitrogen splash prevention structure

Ensures the liquid nitrogen will be contained during transportation.



Ultra-low temperature adsorption function

With liquid nitrogen adsorption layer at the bottom, even if the container falls down during dry storage, there will be no liquid nitrogen overflow, which ensures the safety of samples and personnel.



## Product Parameters

O.D. (mm)	I.D. (mm)	Depth (mm)	Height (mm)	Total Empty Weight of Tank (kg)	Liquid Nitrogen Volume (L)	Storage Time of Liquid Phase (h)	Storage Time of Gas Phase (h)	Internal Freezing Tube Capacity (2ml)(pcs)	Working Temperature (°C)	Working Environment (°C)
156	125	190	235	2.8	2	8	6	55	-135~-196	-20~40

## Smart Liquid Nitrogen Container with Autorefill

This storage vessel minimises the need for and risks associated with manual filling. Applications include the storage of cord blood, stem cells, car-T cells, tissues and other biomaterials within academia, pharma and clinical labs. Stores up to 6,000 2ml cryovials (internally-threaded).

•Auto fill design

The auto-fill function can eliminate the need for manual filling and associated health safety risks.

•Accurate real-time monitoring

Equipped with a brand-new intelligent monitor, it detects and records in real-time both temperature and liquid level, and automatically saves data, including re-fill and alarm notifications for up to 5 years.

•Low liquid nitrogen consumption 1.5L/day

Advanced vacuum and heat preservation technologies ensure an industry-leading low consumption of liquid nitrogen in the container and the stability of temperature in the sample freezing space, to maximize efficiency and reduce operating costs. The temperature at the top of the freezing rack can reach -190°C, and the average consumption of liquid nitrogen is only 1.5L.



## Ergonomic Design

- Designed for both liquid and vapor phase storage
- The one-button defogging function makes it easier to find samples
- Automatic data saving and USB data (temperature, liquid level, alarm records and other data) export are supported
- Sealed centralized exhaust system minimizes frost build up
- A battery-back up as standard, the controller can function for up to 8 hours without mains power
- 1 year parts warranty; 5 years vacuum warranty
- The multi-lock structure makes the sample storage safer
- With hot gas bypass function, reduces the temperature fluctuation in the tank when liquid nitrogen is filled, enhancing sample security
- A complete data recording system allows users to check the temperature, liquid level, and alarm records at any time
- With multiple alarm functions such as high and low temperature, high and low liquid level, and real-time audio/visual alarms

## Product Parameters

Model	Volume of LN <sub>2</sub> (L)	Inside Neck Diameter (mm)	Height (mm)	Outside Diameter (mm)	Empty Weight (kg)
CryoBio 6S	175	216	1490	681	78

Working Evaporation (L/Day)	Static Evaporation (L/Day)	2ml Vials (Internal Thraed)	Square Rack	Layer of Square Rack
1.5	0.95	6000	6	10

## Product List

Model	Product	Product Model	Description and Accessories
CryoBio 6S	Biobank Freezer	CryoBio 6S	CryoBio 6S tank, includes 6 racks with 10 layers, 9*9 cryoboxes, lockable cap and controller. No Pu bag. 5 wheels roller base, transfer hose GRG-DN10/2.0 and one tier step are also included.
	Biobank Freezer	CryoBio 6S	CryoBio 6S tank, with lockable cap and controller. no pu bag. no racks or cryoboxes. 5 wheels roller base, transfer hose GRG-DN10/2.0 and one tier step are included.
	Rack	FTT-81-10H	Used for storing 9*9 cryo boxes (2ml). 10 layers in total. with 9*9 cryo boxes included, suitable for YDS-175-216, CryoBio 6S
	Rack	FTT-81-5/5.0H	Used for storing 9*9 cryo boxes (5ml), 5 layers in total, with 9*9 cryo boxes included, suitable for YDS-175-216. CryoBio 6S
	175	One step ladder	One tier step, suitable for CryoBio 6S
	Roller Base	YSC-685-5W	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels



## Smart Series (Square Racks)

The smart, IoT and cloud management system monitors temperature and liquid levels simultaneously to provide accurate and real-time information on the critical parameters to ensure ultimate sample safety.

- IoT and Cloud Management
- Multiple Level of Protections
- Low Energy Consumption
- Temperature and Level Display
- Updated Design
- High Performance Stability
- New Lock Design



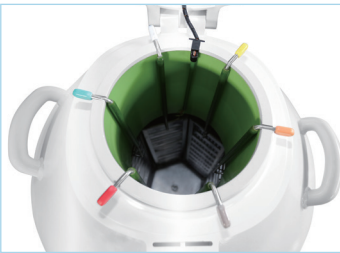
### Key Features

- 5 models from 2,400 to 6,000 cryovial capacity
- 5 years vacuum warranty
- Durable aluminium construction
- Real time monitor of temperature and level
- Cloud data storage for traceability
- Low consumption rate and high performance stability
- New lock design

### Product Advantages

#### Colour identification for Rack handles

Rack handles are colour-coded for ease of separating storage zones and managing samples.



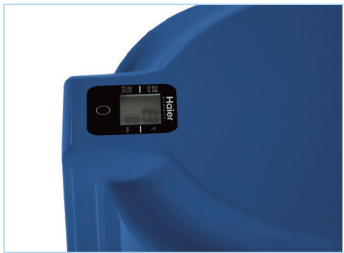
#### Double lock and double control design

The new double lock and double control design requires two people to open at the same time to ensure sample safety.



#### Dual monitoring respectively for temperature and liquid level

Storage temperature and liquid level are automatically monitored by a high precision controller. Accurate and real-time information ensures samples safety.



#### Multilayer protection for ultimate safety

Temperature and level are monitored in real time to safeguard the storage environment. Alarms can be transmitted through email, IM and wechat.

#### Low consumption rate and high performance stability

Automated manufacture ensures build quality and reliable vacuum which delivers stable and uniform temperature performance as well as low LN<sub>2</sub> consumption rates.



### Accessories

Rack








Roller Base



Smart Series (Square Racks)

Medium Sized Storage Series (Square Racks)

Technical Parameters

Model	YDS-65-216	YDS-95-216	YDS-115-216	YDS-145-216	YDS-175-216
Picture					
Authentication	CE	CE	CE	CE	CE
Maximum Storage Volume					
No. of canister	6	6	6	6	6
2ml Storage Vials (100/box)	2400	3000	3600	4800	6000
Layers in Rack	4	5	6	8	10
5ml Storage Vials (81/box)	972	972	1458	1944	2430
Layers in Rack	2	2	3	4	5
Function					
Liquid Nitrogen Volume (L)	65	95	115	145	175
Static Evaporation* (L/Day)	0.78	0.94	0.94	0.94	0.95
Static Holding Time** (Day)	83	101	122	154	184
Dimensions					
Neck Opening (mm)	216	216	216	216	216
Overall Height (mm)	760	825	895	995	1110
Overall Diameter (mm)	681	681	681	681	681
Empty Weight (kg)	41	44	48	53	58
Full Weight (kg)	108	121	141	171	199.5
Shipping Weight (kg)	65.5	69.2	75.9	85.2	94.5

\*Static Evaporation: The amount of liquid nitrogen lost by natural evaporation within 24 hours after the container is allowed to reach thermal equilibrium under the specified filling rate, which is converted into the evaporation value under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C).

\*\*Static Holding Time: under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C), the container is filled with liquid nitrogen pre-cooled and reaches thermal equilibrium, and the liquid nitrogen filling rate reaches 100%, the number of days when the liquid nitrogen is completely evaporated on standing.

Product List

Model	Product	Product Model	Description and Accessories
YDS-65-216	Smart Liquid Nitrogen Container (Smart Series)	YDS-65-216	Includes 6 racks(4-tier), cryoboxes(9*9), lockable cap, roller base is optional
YDS-95-216	Smart Liquid Nitrogen Container (Smart Series)	YDS-95-216	Includes 6 racks(5-tier), cryoboxes(9*9), lockable cap, roller base is optional
YDS-115-216	Smart Liquid Nitrogen Container (Smart Series)	YDS-115-216	Includes 6 racks(6-tier), cryoboxes(9*9), lockable cap, roller base is optional
YDS-145-216	Smart Liquid Nitrogen Container (Smart Series)	YDS-145-216	Includes 6 racks(8-tier), cryoboxes(9*9), lockable cap, roller base is optional
YDS-175-216	Smart Liquid Nitrogen Container (Smart Series)	YDS-175-216	Includes 6 racks(10-tier), cryoboxes(9*9), lockable cap, roller base is optional
	Roller Base	YSC-685-5W	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels

Medium Sized Storage Series (Square Racks) features low LN<sub>2</sub> consumption and relatively small footprint for medium capacity sample storage.

- 5 Year Vacuum Warranty
  - Cryobox Storage
  - High Thermal Efficiency
- Durable
  - Secure
  - Liquid and Vapour Storage





Medium Sized Storage Series (Square Racks)

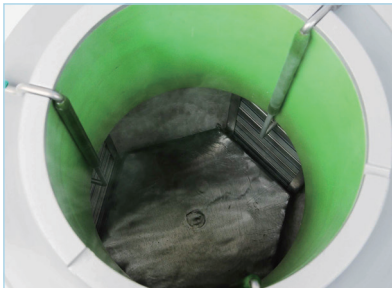
Key Features

- Heavy duty lockable enclosure offers excellent security
  - Compatible with all major cryobox brands
  - Durable aluminium construction
  - Temperature monitoring available
- Liquid or vapour phase option available
  - High thermal efficiency
  - 5 year vacuum warranty
  - Ultra-low evaporation loss

Product Advantages

ULT Storage with Extremely Low LN<sub>2</sub> Evaporation Loss

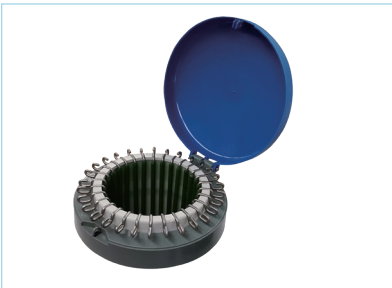
Freezer racks are in the ultra-low temperature environment with extremely low LN<sub>2</sub> evaporation. Even stored in vapour phase, the temperature will be below -190°C for a long time.



Advanced Vacuum Technology Compatible for Blood Bag Storage and Superinsulation Technology

Advanced vacuum and insulation technologies ensure cryopreservation for up to four months.

Suitable for blood bag applications, the racks can be adapted to provide temporary blood bag storage before transferring bags to larger LN<sub>2</sub> storage tanks.



Liquid Nitrogen Temperature Detector

The temperature monitor provides continuous and reliable monitoring of the temperature in the container. It is the ideal choice for long-term monitoring of sample storage temperature and reminding users to add liquid nitrogen.

The temperature monitor ZTC-100A has real-time temperature display function, and can also provide the following alarms:

- \* Over temperature alarm
- \* Sensor error acousto-optic alarm



ZTC-100A

Technical Parameters

Model	YDS-65-216	YDS-95-216	YDS-115-216	YDS-145-216	YDS-175-216
Picture					
Authentication	CE	CE	CE	CE	CE
Maximum Storage Capacity					
No. of Rack	6	6	6	6	6
No. 2.0 ml Cryovials (100 / Box)	2400	3000	3600	4800	6000
No. of Boxes in (2ml each Rack)	4	5	6	8	10
No. 5.0 ml Cryovials (81/Box)	972	972	1458	1944	2430
No. of Boxes in (5ml each Rack)	2	2	3	4	5
Performance					
Volume of LN <sub>2</sub> (L)	65	95	115	145	175
Static Evaporation* (L/Day)	0.78	0.94	0.94	0.94	0.95
Static Holding Time** (Day)	83	101	122	154	184
Dimensions					
Neck Opening Diameter (mm)	216	216	216	216	216
Height (mm)	735	800	870	970	1085
Outer Diameter (mm)	681	681	681	681	681
Empty Weight (kg)	40	43	47	52	57
Full Weight (kg)	107	120	140	170	198.5
Shipping Weight (kg)	63.5	67.6	77.6	83.2	92.4

\*Static Evaporation: The amount of liquid nitrogen lost by natural evaporation within 24 hours after the container is allowed to reach thermal equilibrium under the specified filling rate, which is converted into the evaporation value under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C).

\*\*Static Holding Time: under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C), the container is filled with liquid nitrogen pre-cooled and reaches thermal equilibrium, and the liquid nitrogen filling rate reaches 100%, the number of days when the liquid nitrogen is completely evaporated on standing.

Accessories

Roller Base

Plastic Cryo Box

(SG-216)

Rack (5ml)

5 ml Customized Cryogenic Box

Smart Cap

Rack

Medium Sized Storage Series (Square Racks)

Product List

Model	Product	Product Model	Description and Accessories
YDS-65-216	Liquid Nitrogen container	YDS-65-216	Includes 6 racks(4 layers), 9*9 cryoboxes, lockable cap, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-65-216	Includes lockable cap, no rack, no PU bag
	Rack	FTT-81-4H	Used for storing 9*9 cryo boxes (2ml). 4 layers in total, with 9*9 cryo boxes included, suitable for YDS-65-216
	Roller Base	YSC-685-5W	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 530mm height. suitable for YDS-65-216
	Cork (216)	GS-216-220-7	Suitable for YDS-65-216/YDS-95-216/YDS-115-216/YDS-145-216/YDS-175-216/YDH-15-216/YDH-25-216
	Lockable cap	SG-216	Suitable for container with 216mm neck opening
YDS-95-216	Liquid Nitrogen container (5.0ml Vial)	YDS-95-216	Includes 6 racks for 5ml, 2 layers in total. 12pcs of 5ml 9*9 cryo boxes and lockable cap included, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-95-216	Includes 6 racks(5 layers). 9*9 cryoboxes, lockable cap, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-95-216S	Includes lockable cap, no rack, no PU bag
	Rack	FTT-81-5	Used for storing 9*9 cryo boxes(2ml). 5 layers in total, with 9*9 cryo boxes included.suitable for YDS-95-216\YDH-25-216
	Rack	FTT-81-2 (5.0)	Used to store 5ml cryo boxes(9*9), 2 layers in total, 9*9 cryo boxes included, suitable for YDS-65-216\95-216 (Plastic cryo boxes included)
	Roller Base	YSC-685-5W	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 580mm height. suitable for YDS-95-216
	Cork (216)	GS-216-220-7	Suitable for YDS-65-216/YDS-95-216/YDS-115-216/YDS-145-216/YDS-175-216/YDH-15-216/YDH-25-216
	Lockable cap	SG-216	Suitable for container with 216mm neck opening
YDS-115-216	Liquid Nitrogen container (5.0ml Vial)	YDS-115-216	Includes 6 racks for 5ml, 3 layers in total, 18pcs of 5ml 9*9 cryo boxes and lockable cap included, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-115-216	Includes 6 racks(6 layers), 9*9 cryoboxes, lockable cap, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-115-216	Includes lockable cap, no rack, no PU bag
	Rack	FTT-81-6	Used for storing 9*9 cryo boxes (2mll, 6 layers in total. with 9*9 cryo boxes included, suitable for YDS-115-216
	Rack	FTT-81-3 (5.0)	Used for storing 9*9 cryo boxes (5ml), 3 layers in total. with 9*9 cryo boxes included, suitable for YDS-115-216
	Roller Base	YSC-685-5W	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 660mm height. suitable for YDS-115-216
	Cork(216)	GS-216-220-7	Suitable for YDS-65-216/YDS-95-216/YDS-115-216/YDS-145-216/YDS-175-216/YDH-15-216/YDH-25-216
	Lockable cap	SG-216	Suitable for container with 216mm neck opening
YDS-145-216	Liquid Nitrogen container (5.0ml Vial)	YDS-145-216	Includes 6 racks for 5ml, 4 layers in total. 24pcs of 5ml 9*9 cryo boxes and lockable cap included, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-145-216	Includes 6 racks(8 layers), 9*9 cryoboxes, lockable cap, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-145-216	Includes lockable cap, no rack, no PU bag
	Rack	FTT-81-8	Used for storing 9*9 cryo boxes(2ml). 8 layers in total, with 9*9 cryo boxes included.suitable for YDS-145-216
	Rack	FTT-81-4/5.0H	Used for storing 9*9 cryo boxes (5ml). 4 layers in total. with 9*9 cryo boxes included, suitable for YDS-145-216
	Roller Base	YSC-685-5W	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 770mm height. suitable for YDS-145-216
	Cork(216)	GS-216-220-7	Suitable for YDS-65-216/YDS-95-216/YDS-115-216/YDS-145-216/YDS-175-216/YDH-15-216/YDH-25-216
	Lockable cap	SG-216	Suitable for container with 216mm neck opening

Product List

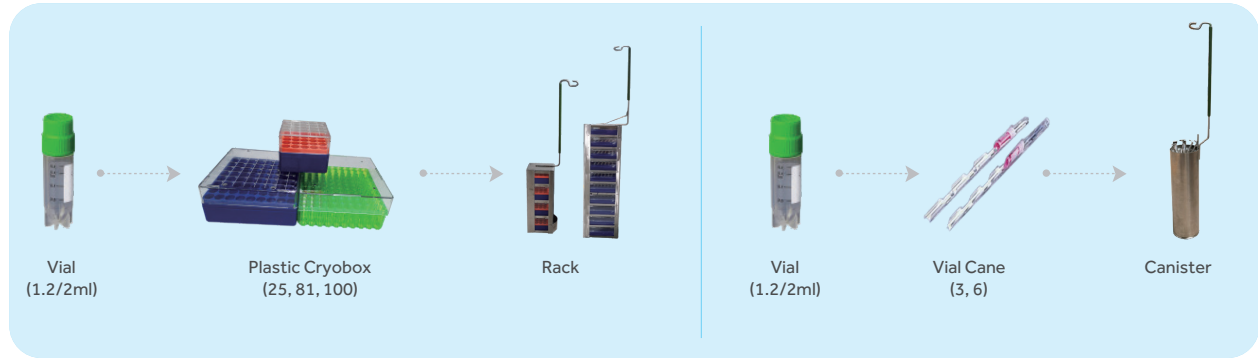
Model	Product	Product Model	Description and Accessories
YDS-175-216	Liquid Nitrogen container (5.0ml Vial)	YDS-175-216	Includes 6 racks for 5ml. 5 layers in total. 30pcs of 5ml 9*9 cryo boxes and lockable cap included, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-175-216	Includes 6 racks(10 layers), 9*9 cryoboxes, lockable cap, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-175-216	Includes lockable cap, no rack, no PU bag
	Rack	FTT-81-10	Used for storing 9*9 cryo boxes(2ml), 10 layers in total, with 9*9 cryo boxes included, suitable for YDS-175-216/CryoBio 6S
	Rack	FTT-81-5/5.0H	Used for storing 9*9 cryo boxes(5ml). 5 layers in total. with 9*9 cryo boxes included, suitable for YDS-175-216/CryoBio 6S
	Roller Base	YSC-685-5W	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 870mm height.suitable for YDS-175-216
	Cork (216)	GS-216-220-7	Suitable for YDS-65-216/YDS-95-216/YDS-115-216/YDS-145-216/YDS-175-216/YDH-15-216/YDH-25-216
Other Racks	Lockable cap	SG-216	Suitable for container with 216mm neck opening
	Blood bag rack	XTT-25-2F14/65H	Used for storing 25ml blood bag, 2 levels in total with each layer storing 14pcs of 25ml blood bag, with 28 cassettes included, suitable for YDS-65-216, 6 racks can be fitted.
	Blood bag rack	XTT-25-2F14/95H	Used for storing 25ml blood bag, 2 levels in total with each layer storing 14pcs of 25ml blood bag, with 28 cassettes included, suitable for YDS-95-216, 6 racks can be fitted.
	Blood bag rack	XTT-25-3F14/115H	Used for storing 25ml blood bag, 3 levels in total with each layer storing 14pcs of 25ml blood bag, with 42 cassettes included, suitable for YDS-115-216, 6 racks can be fitted.
	Blood bag rack	XTT-25-4F14/145H	Used for storing 25ml blood bag, 4 levels in total with each layer storing 14pcs of 25ml blood bag, with 56 cassettes included, suitable for YDS-145-216, 6 racks can be fitted.
	Blood bag rack	XTT-25-5F14/175H	Used for storing 25ml blood bag, 5 levels in total with each layer storing 14pcs of 25ml blood bag, with 70 cassettes included, suitable for YDS-175-216, 6 racks can be fitted.
	Blood bag rack	XTT-50-1F14/65H	Used for storing 50ml blood bag,1 level in total with each layer storing 14pcs of 50ml blood bag, with 14 cassettes included, suitable for YDS-65-216, 6 racks can be fitted.
	Blood bag rack	XTT-50-1F14/95H	Used for storing 50ml blood bag, 1 level in total with each layer storing 14pcs of 50ml blood bag, with 14 cassettes included, suitable for YDS-95-216, 6 racks can be fitted.
	Blood bag rack	XTT-50-2F14/115H	Used for storing 50ml blood bag, 2 levels in total with each layer storing 14pcs of 50ml blood bag, with 28 cassettes included, suitable for YDS-115-216, 6 racks can be fitted.
	Blood bag rack	XTT-50-2F14/145H	Used for storing 50ml blood bag, 2 levels in total with each layer storing 14pcs of 50ml blood bag, with 28 cassettes included, suitable for YDS-145-216, 6 racks can be fitted.
	Blood bag rack	XTT-50-3F14/175H	Used for storing 50ml blood bag, 3 levels in total with each layer storing 14pcs of 50ml blood bag, with 42 cassettes included, suitablefor YDS-175-216, 6 racks can be fitted.
	Blood bag rack	XTT-250-1F8/65H	Used for storing 250ml blood bag, 1 level in total with each layer storing 8pcs of 250ml blood bag, with 8 cassettes included, suitable for YDS-65-216, 6 racks can be fitted.
	Blood bag rack	XTT-250-1F8/95H	Used for storing 250ml blood bag, 1 level in total with each layer storing 8pcs of 250ml blood bag, with 8 cassettes included, suitable for YDS-95-216, 6 racks can be fitted.
	Blood bag rack	XTT-250-1F8/115H	Used for storing 250ml blood bag, 1 level in total with each layer storing 8pcs of 250ml blood bag, with 8 cassettes included, suitable for YDS-115-216, 6 racks can be fitted.
	Blood bag rack	XTT-250-1F8/145H	Used for storing 250ml blood bag, 1 levels in total with each layer storing 8pcs of 250ml blood bag, with 8 cassettes included, suitable for YDS-145-216, 6 racks can be fitted.
	Blood bag rack	XTT-250-2F8/175	Used for storing 250ml blood bag, 2 levels in total with each layer storing 8pcs of 250ml blood bag, with 16 cassettes included, suitable forYDS-145-216, 6 racks can be fitted.



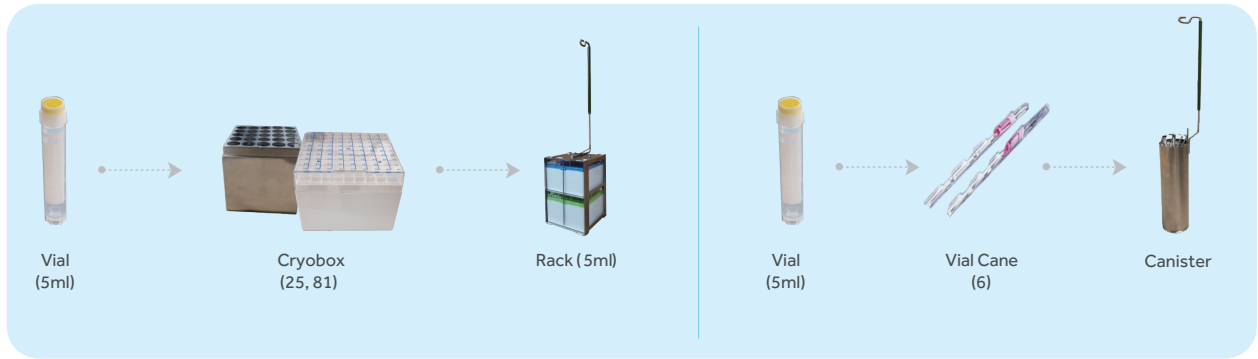
Medium Sized Storage Series (Square Racks)

Biological Sample Library-YDS Series

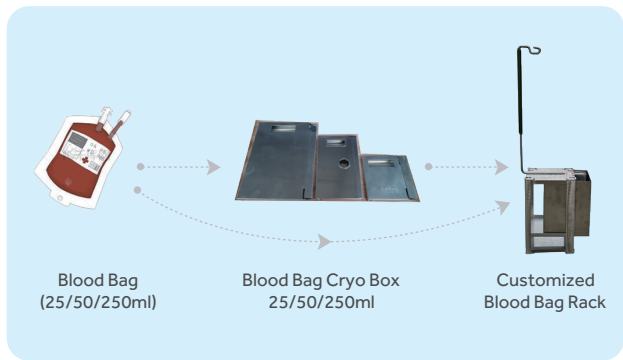
Storage Example of 2ml Internally Threaded Vial



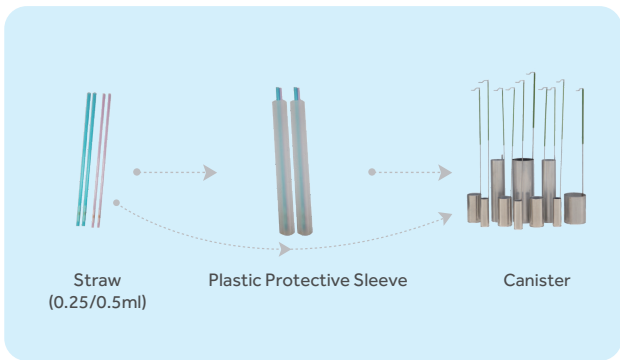
Storage Example of Tall 5ml Cryovials



Blood Bag Storage Example



Straw Storage Example



Small Sized Storage Series (Square Racks)

Widely used within many laboratories, this small-sized storage series features low LN<sub>2</sub> consumption and dual handle design. Stores between 100 and 1100 vials in square racks and cryo boxes.

- 5 Year Vacuum Warranty
- High Thermal Efficiency
- Lightweight
- 10 Litre to 50 Litre Capacity
- Durable
- Secure
- Super-Insulation
- Ideal for Lab Applications



Small Sized Storage Series (Square Racks)

Key Features

- Heavy duty lockable enclosure offers excellent security
  - Strong, lightweight aluminium construction
  - Dual handles
  - Temperature monitoring available
- Roller bases available
  - High thermal efficiency
  - 5 year vacuum warranty
  - Ultra-low LN<sub>2</sub> evaporation loss

Product Advantages

Low LN<sub>2</sub> Consumption and Maximum Storage Efficiency

Haier Biomedical’s Small Sized Storage Series (Square Racks) Liquid Nitrogen Storage System features low LN<sub>2</sub> consumption and small storage capacity for laboratory applications. The lightweight containers have a smaller footprint whilst providing maximum efficiency of cryogenic storage capacity.

Advanced Vacuum Technology and Super-insulation Technology

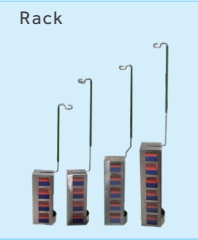
Advanced vacuum and insulation technologies provide ultra-low liquid nitrogen evaporation loss and ensure up to three months cryogenic storage.

Five Models Available

Small Sized Storage Series (Square Racks) offers Five models with different capacity from 100, 600, 750, 900 to 1100 standard 2 ml cryovials. All models are supplied with stainless steel racks and cryogenic boxes.



Accessories



Technical Parameters

Model	YDS-10-125	YDS-30-125	YDS-35-125	YDS-47-127	YDS-50B-125
Picture					
Authentication	CE	CE	CE	CE	CE
Maximum Storage Capacity					
No. of Rack	1	6	6	6 (37 per box)	6
1.2&2 ml Cryovials (25 per box)	100	600	750	1110	900
No. of Boxes in (Rack)	4	4	5	5	6
Performance					
Volume of LN <sub>2</sub> (L)	10	30	35	47	50
Static Evaporation* (L/Day)	0.42	0.35	0.36	0.36	0.45
Static Holding Time** (Day)	24	90	97	130	110
Dimensions	125	125	125	127	125
Opening Diameter (mm)	625	725	765	740	830
Height (mm)					
Overall Diameter (mm)	300	462	462	508	462
Empty Weight (kg)	6.3	13	14.5	18.2	17.3
Full Weight (kg)	15.1	38.9	43.2	60.9	62.4
Shipping Weight (kg)	9.6	19.3	21.9	30.7	30.3

\*Static Evaporation: The amount of liquid nitrogen lost by natural evaporation within 24 hours after the container is allowed to reach thermal equilibrium under the specified filling rate, which is converted into the evaporation value under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C).

\*\*Static Holding Time: under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C), the container is filled with liquid nitrogen pre-cooled and reaches thermal equilibrium, and the liquid nitrogen filling rate reaches 100%, the number of days when the liquid nitrogen is completely evaporated on standing.

Product List

Model	Product	Product Model	Description and Accessories
YDS-10-125	Liquid Nitrogen container	YDS-10-125	Include 1 square rack with 4 layers. 5*5 cryobox, lockable cap and PU bag.
	Liquid Nitrogen container	YDS-10-125	Includes PU bag only; No canister; no lockable cap
	Rack	FTT-25-4H	Used for storing 5*5 cryo boxes(2ml), 4 layers in total. with 5*5 cryo boxes included, suitable for YDS-30-125/YDS-10-125
	Canister	TTH10-125	φ97,120mm single tier canister, No goblet. suitable for YDH-10-125
	SmartCap	T-125	Used for monitoring real time temperature for containers with 125mm neck opening, 6 grooves and 180mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-10-125/YDS-10-125
	Cork (125)	GS-125-180	Suitable for YDS-10-125/YDH-10-125/YDS-50B-125
	Lockable cap	SG-125	Suitable for container with 125mm and 127mm neck opening
YDS-30-125	Liquid Nitrogen container	YDS-30-125	Includes 6 racks with 4 layers, 5*5 cryoboxes, lockable cap and PU bag, roller base is optional.
	Liquid Nitrogen container	YDS-30-125	Includes PU bag only, roller base is optional
	Rack	FTT-25-4H	Used for storing 5*5 cryo boxes(2ml), 4 layers in total. with 5*5 cryo boxes included, suitable for YDS-30-125/YDS-10-125
	Canister	TT30-125	φ97, 120mm single tier canister, No goblet. suitable for YDS-30-125
	Roller Base	YSC-465-5W	Suitable for tanks with diameter less than φ465. Can be used for 30L, 35L and 50L tank, equipped with 5 universal wheels.
	SmartCap	LT-125	Used for monitoring real time level and temperature for containers with 80mm neck opening, 6 grooves and 540mm height suitable for YDS-20-125/YDS-30-125
	Cork (125)	GS-125-210	Suitable for YDS-30-125/YDS-35-125/YDS-47-127 /YDS-35B-125
	Lockable cap	SG-125	Suitable for container with 125mm and 127mm neck opening



Small Sized Storage Series (Square Racks)

Model	Product	Product Model	Description and Accessories
YDS-35-125	Liquid Nitrogen container	YDS-35-125	Includes 6 canisters (Height 276mm), lockable cap and PU bag. roller base is optional
	Liquid Nitrogen container	YDS-35-125	Includes 6 racks with 5 layers, 5*5 cryoboxes, lockable cap and PU bag, roller base is optional.
	Liquid Nitrogen container	YDS-35-125	Includes PU bag only, roller base is optional
	Rack	FTT-25-5	Used for storing 5*5 cryo boxes (2ml), 5 layers in total. with 5*5 cryo boxes included, suitable for YDS-35-125
	Canister	TT35-125	φ97, 120mm single tier canister, No goblet, suitable for YDS-35-125
	Canister	TTS35-125	φ97, 276mm double-tier canister, 2 goblets included. Suitable forYDS-35-125
	Roller Base	YSC-465-5W	Suitable for tanks with diameter less than φ465. Can be used for 30L, 35L and 50L tank, equipped with 5 universal wheels.
	Smart Cap	LT-125	Used for monitoring real time level and temperature for containers with 125mm neck opening, 6 grooves and 575mm height. suitable for YDS-25-125/YDS-35-125/YDS-35-125
	Cork (125)	GS-125-210	Suitable for YDS-30-125/YDS-35-125/YDS-47-127 /YDS-35B-125
	Lockable cap	SG-125	Suitable for container with 125mm and 127mm neck opening
YDS-47-127	Liquid Nitrogen container	YDS-47-127	Includes 6 round rack with 5 layers (37 holes), lockable cap and PU bag; Roller base is optional
	Liquid Nitrogen container	YDS-47-127-10	Includes 10 canisters( φ72/276mm), lockable cap and PU bag. roller base is optional
	Round Rack (Y98-37)	YTT-37-5	φ98 round rack used for storing 37 holes cryobox (2ml). 5 tiers in total, suitable for YDS-47-127-T37
	Canister	TTS47-127-10	φ72, 276mm double-tier canister, 2 goblets included. Suitable for YDS-47-127-10T
	Roller Base	YSC-525-5W	Suitable for tanks with diameter less than φ525. Can be used for 47L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-127	Used for monitoring real time level and temperature for containers with 127mm neck opening, 10 grooves and 570mm height. Suitable for YDS-47-127-10T/MVE-XC47/11-10
	Smart Cap	LT-127	Used for monitoring real time level and temperature for containers with 127mm neck opening, 6 grooves and 570mm height. suitable for YDS-47-127-6Y/YDS-47-127/MVE XC-47/11-6
	Cork (125)	GS-125-210	Suitable for YDS-30-125/YDS-35-125/YDS-47-127 /YDS-35B-125
	Cork (125)	GS-127-210-10 (L)	Suitable for YDS-47-127-10T
YDS-50B-125	Liquid Nitrogen container	YDS-50B-125	Includes 6 racks with 6 layers, 5*5 cryoboxes, lockable cap and PU bag, roller base is optional.
	Liquid Nitrogen container	YDS-50B-125	Includes 6 canisters ( φ97/276mm), lockable cap and PU bag. roller base is optional
	Liquid Nitrogen container	YDS-50B-125	Includes PU bag only, roller base is optional
	Rack	FTT-25-6H	Used for storing 5*5 cryo boxes (2ml), 6 layers in total. with 5*5 cryo boxes included, suitable for YDS-50B-125
	Canister	TT50-125	φ97, 120mm single tier canister, No goblet. suitable for YDS-50B-125
	Canister	TTS50-125	φ97,276mm double-tier canister, 2 goblets included. Suitable for YDS-50B-125
	Roller Base	YSC-465-5W	Suitable for tanks with diameter less than φ465. Can be used for 30L, 35L and 50L tank, equipped with 5 universal wheels.
	Smart Cap	LT-125	Used for monitoring real time level and temperature for containers with 125mm neck opening, 6 grooves and 670mm height. suitable for YDS-50B-125
	Cork (125)	GS-125-180	Suitable for YDS-10-125/YDH-10-125/YDS-50B-125
	Lockable cap	SG-125	Suitable for container with 125mm and 127mm neck opening

Smart Level & Temp Monitoring

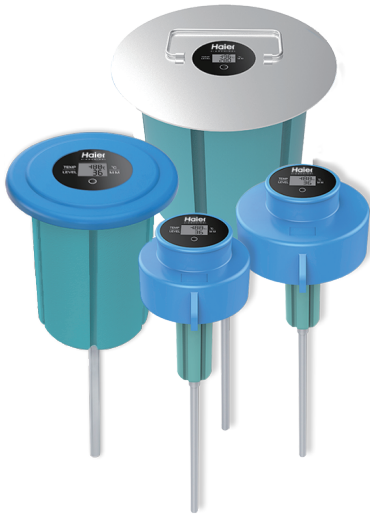
Product Description

Smart Cap is a low energy consumption IoT-based module that can monitor liquid nitrogen level and temperature in a liquid nitrogen tank. It is suitable for aluminium alloy liquid nitrogen tanks with opening port size of 50 mm, 80 mm, 125 mm, 216 mm. The built-in high efficiency lithium battery can operate the device for more than two years.



Smart Cap

Product Characteristics



Independent, high accuracy measuring system for liquid level and temperature



Real time display of level and temperature



Built-in high efficiency lithium battery for longevity

Small Sized Storage Series (Square Racks)

Product List

Model	Product	Product Model	Description and Accessories
Smart Cap	Smart Cap	LT-50	Used for monitoring real time level and temperature for containers with 50mm neck opening, 6 grooves and 360mm height. data can be transmitted to cloud platform, suitable for YDS-3/YDS-6
	Smart Cap	LT-50	Used for monitoring real time level and temperature for containers with 50mm neck opening, 6 grooves and 420mm height. suitable for YDS-10/YDS-15
	Smart Cap	LT-50	Used for monitoring real time level and temperature for containers with 50mm neck opening, 6 grooves and 540mm height suitable for YDS-20/YDS-30
	Smart Cap	LT-50	Used for monitoring real time level and temperature for containers with 50mm neck opening, 6 grooves and 570mm height. suitable for YDS-25/YDS-35/YDS-35
	Smart Cap	LT-50	Used for monitoring real time level and temperature for containers with 50mm neck opening, 6 grooves and 640mm height. suitable for YDS-50
	Smart Cap	LT-80	Used for monitoring real time level and temperature for containers with 80mm neck opening, 6 grooves and 370mm height. suitable for YDS-6-80
	Smart Cap	LT-80	Used for monitoring real time level and temperature for containers with 80mm neck opening, 6 grooves and 430mm height. suitable for YDS-10-80/YDS-15-80
	SmartCap	LT-80	Used for monitoring real time level and temperature for containers with 80mm neck opening, 6 grooves and 530mm height. suitable for YDS-20-80/YDS-30-80
	Smart Cap	LT-80	Used for monitoring real time level and temperature for containers with 80mm neck opening, 6 grooves and 580mm height. suitable for YDS-25-80/YDS-35-80
	Smart Cap	LT-80	Used for monitoring real time level and temperature for containers with 80mm neck opening, 6 grooves and 640mm height. suitable for YDS-50-80
	SmartCap	LT-125	Used for monitoring real time level and temperature for containers with 125mm neck opening, 6 grooves and 445mm height. suitable for YDS-10-125/YDS-15-125
	Smart Cap	LT-125	Used for monitoring real time level and temperature for containers with 80mm neck opening, 6 grooves and 540mm height. suitable for YDS-20-125/YDS-30-125
	Smart Cap	LT-125	Used for monitoring real time level and temperature for containers with 125mm neck opening, 6 grooves and 575mm height suitable for YDS-25-125/YDS-35-125/YDS-35-125
	Smart Cap	LT-125	Used for monitoring real time level and temperature for containers with 125mm neck opening, 6 grooves and 670mm height. suitable for YDS-50B-125
	Smart Cap	LT-127	Used for monitoring real time level and temperature for containers with 127mm neck opening, 10 grooves and 570mm height. Suitable for YDS-47-127-10T/MVE-XC47/11-10
	Smart Cap	LT-127	Used for monitoring real time level and temperature for containers with 127mm neck opening, 6 grooves and 570mm height. suitable for YDS-47-127-6Y/YDS-47-127 /MVE XC-47/11-6
	Smart Cap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 530mm height. suitable for YDS-65-216
	Smart Cap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 4 grooves and 540mm height. suitable for Thermo-Locator Jr.plus (CY50925-70THERMO)/MVE Crosystem 2000
	Smart Cap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 580mm height.suitable for YDS-95-216
	Smart Cap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 660mm height. suitable for YDS-115-216
	Smart Cap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 770mm height.suitable for YDS-145-216
	Smart Cap	LT-216	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 870mm height.suitable for YDS-175-216
	Smart Cap	T-50	Used for monitoring real time temperature for containers with 50mm neck opening, 6 grooves and 180mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-3
	Smart Cap	T-80	Used for monitoring real time temperature for containers with 80mm neck opening, 6 grooves and 180mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-6-80
	Smart Cap	T-125	Used for monitoring real time temperature for containers with 125mm neck opening, 6 grooves and 180mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-10-125/YDS-10-125
	Smart Cap	T-216	Used for monitoring real time temperature for containers with 216mm neck opening, 6 grooves and 150mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-15-216
	Smart Cap	T-216	Used for monitoring real time temperature for containers with 216mm neck opening, 6 grooves and 210mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-25-216/YDS-65-216/YDS-95-216/YDS-115-216/YDS-145-216/YDS-175-216
	Data repeater	SG-3002G	SIM card to tranferdata through GPRS and WIFI: include the SIM card

High Capacity Series for Storage or Transport (Round Canisters)

High Capacity Series for Storage or Transport (Round Canisters) provides two cryopreservation solutions for long-term static storage and transportation of biological samples.

- Numbered Index Canister Locations
  - High Capacity
  - High Thermal Efficiency
  - 5 Year Vacuum Warranty
  - Extended Hold Time
- LN<sub>2</sub> Dispenser
  - Round Canisters for Straw Storage
  - Lockable
  - Roller Bases Available





# High Capacity Series for Storage or Transport (Round Canisters)

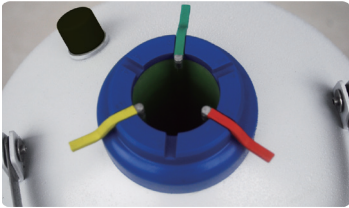
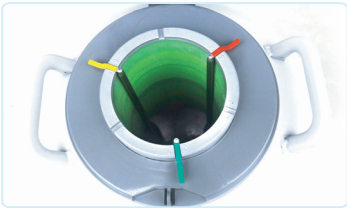
## Key Features

- Strong and lightweight aluminium construction
  - Heavy duty lockable enclosure offers excellent security
  - Numbered index location points for canisters
  - Straw storage
  - LN<sub>2</sub> dispense pump available
- Roller bases available
  - High thermal efficiency
  - 5 year vacuum warranty
  - Ultra-low evaporation loss

## Product Advantages

Narrow neck design and excellent thermal conductivity reduces evaporation loss of liquid nitrogen to extend storage times.

Large-capacity models have wider necks for easy access to biological samples.



Long-term cryopreservation models have narrower necks with less heat intrusion.

## Technical Parameters

Model		YDS-2-30	YDS-2-35	YDS-3	YDS-6	YDS-10	YDS-10-80
Maximum Capacity	No. of Canister	3(3)	3(3)	6(0)	6(0)	6(0)	6(0)
	No. of Straws (Single Layer) (0.5ml each canister)	90	165	792	792	792	2244
	No. of Straws (Single Layer) (0.25ml each canister)	204	330	1788	1788	1788	5022
	No. of Straws (Double Layer) (0.5ml each canister)	-	-	-	-	-	-
	No. of Straws (Double Layer) (0.25ml each canister)	-	-	-	-	-	-
Performance	Volume of LN <sub>2</sub> (L)	2	2	3	6	10	10
	Static Evaporation* (L/Day)	0.07	0.08	0.12	0.12	0.12	0.21
	Static Holding Time** (Day)	28	24	26	52	86	48
Dimensions	Opening Diameter (mm)	30	35	50	50	50	80
	Height(mm)	415	435	445	495	565	567
	Outside Diameter (mm)	223	204	223	300	300	300
	Canister Outside Diameter (mm)	19	25	38	38	38	63
	Outside Height (mm)	120	120	120	120	120	120
	Empty Weight (kg)	2.8	2.6	3.1	4.8	6.1	6.2
	Full Weight (kg)	4.5	4.4	6	9.9	14.5	14.7
	Shipping Weight (kg)	5.1	4.9	5.8	8	9	9.3

Model		YDS-10-125	YDS-13	YDS-15	YDS-15	YDS-30
Maximum Capacity	No. of Canister	1(0)	6(0)	6(0)	6(0)	6(0)
	No. of Straws (Single Layer) (0.5ml each canister)	854	-	792	792	792
	No. of Straws (Single Layer) (0.25ml each canister)	1940	-	1788	1788	1788
	No. of Straws (Double Layer) (0.5ml each canister)	-	1284	-	1284	1284
	No. of Straws (Double Layer) (0.25ml each canister)	-	2832	-	2832	2832
Performance	Volume of LN <sub>2</sub> (L)	10	13	15	20	30
	Static Evaporation* (L/Day)	0.42	0.12	0.11	0.12	0.12
	Static Holding Time** (Day)	24	109	134	168	254
Dimensions	Opening Diameter (mm)	125	50	50	50	50
	Height(mm)	625	635	610	700	725
	Outside Diameter (mm)	300	310	394	394	462
	Canister Outside Diameter (mm)	97	38	38	38	38
	Outside Height (mm)	120	276	120	120/276	120/276
	Empty Weight (kg)	63	6.3	8.5	9.5	12.9
	Full Weight (kg)	15.1	17.3	20.5	28.1	36.6
	Shipping Weight (kg)	8.6	11	13	15	18

Model		YDS-30-80	YDS-30-125	YDS-35	YDS-35-80	YDS-35-125	YDS-47-127
Maximum Capacity	No. of Canister	6(0)	6(0)	6(0)	6(0)	6(0)	10(0)
	No. of Straws (Single Layer) (0.5ml each canister)	2244	5124	792	2244	5124	-
	No. of Straws (Single Layer) (0.25ml each canister)	5022	11640	1788	5022	11640	-
	No. of Straws (Double Layer) (0.5ml each canister)	3624	-	1284	3624	9048	8200
	No. of Straws (Double Layer) (0.25ml each canister)	8460	-	2832	8460	20760	16400
Performance	Volume of LN <sub>2</sub> (L)	30	30	35	35	35	47
	Static Evaporation* (L/Day)	0.21	0.35	0.12	0.22	0.37	0.36
	Static Holding Time** (Day)	147	90	286	159	97	130
Dimensions	Opening Diameter (mm)	80	125	50	80	125	127
	Height(mm)	729	725	765	768	765	740
	Outside Diameter (mm)	462	462	462	462	462	508
	Canister Outside Diameter (mm)	63	97	38	63	97	72
	Outside Height (mm)	120/276	120	120/276	120/276	120/276	276
	Empty Weight (kg)	13	13	14.2	14.5	14.6	18.2
	Full Weight (kg)	37	38.9	42.7	42.9	43.2	56.2
	Shipping Weight (kg)	18.3	19.3	20	20.7	22	28

High Capacity Series for Storage or Transport (Round Canisters)

Model		YDS-20B	YDS-30B	YDS-35B
Maximum Capacity	No. of Canister	6(0)	6(0)	6(0)
	No. of Straws (Single Layer) (0.5ml each canister)	792	792	792
	No. of Straws (Single Layer) (0.25ml each canister)	1788	1788	1788
	No. of Straws (Double Layer) (0.5ml each canister)	1284	1284	1284
	No. of Straws (Double Layer) (0.25ml each canister)	2832	2832	2832
Performance	Volume of LN <sub>2</sub> (L)	20	30	35
	Static Evaporation* (L/Day)	0.2	0.2	0.2
	Static Holding Time** (Day)	101	159	179
Dimensions	Opening Diameter (mm)	50	50	50
	Height(mm)	700	725	765
	Outside Diameter (mm)	394	462	462
	Canister Outside Diameter (mm)	38	38	38
	Outside Height (mm)	120/276	120/276	120/276
	Empty Weight (kg)	9.5	12.9	14.2
	Full Weight (kg)	27.9	37.1	42.8
	Shipping Weight (kg)	15.1	18.3	20.1

Model		YDS-35B-80	YDS-35B-125	YDS-50B	YDS-50B-125
Maximum Capacity	No. of Canister	6(0)	6(0)	6(0)	6(0)
	No. of Straws (Single Layer) (0.5ml each canister)	2244	5124	792	5124
	No. of Straws (Single Layer) (0.25ml each canister)	5022	11640	1788	11640
	No. of Straws (Double Layer) (0.5ml each canister)	3624	9048	1284	9048
	No. of Straws (Double Layer) (0.25ml each canister)	8460	20760	2832	20760
Performance	Volume of LN <sub>2</sub> (L)	35	35	50	50
	Static Evaporation* (L/Day)	0.3	0.41	0.24	0.45
	Duration of Normal Operation** (Day)	119	86	213	110
Dimensions	Opening Diameter (mm)	80	125	50	125
	Height(mm)	768	765	825	830
	Outside Diameter (mm)	462	462	462	462
	Canister Outside Diameter (mm)	63	97	38	97
	Outside Height (mm)	120/276	120/276	120/276	120/276
	Empty Weight (kg)	14.5	14.6	17.2	17.3
	Full Weight (kg)	43	43.5	60.3	62
	Shipping Weight (kg)	20.7	22	24	25.4

A(B): A for maximum number of canisters, B for number of canisters in standard configuration

\*Static Evaporation: The amount of liquid nitrogen lost by natural evaporation within 24 hours after the container is allowed to reach thermal equilibrium under the specified filling rate, which is converted into the evaporation value under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C).

\*\*Static Holding Time: under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C), the container is filled with liquid nitrogen pre-cooled and reaches thermal equilibrium, and the liquid nitrogen filling rate reaches 100%, the number of days when the liquid nitrogen is completely evaporated on standing.

Vials Cane Specification

Canister	Height 120mm, Diameter 38mm (50mm neck)			Canister	Height 276mm, Diameter 38mm (50mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister	Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	4	3	12	0.5ml	4	6	24
1.5ml	4	3	12	1.5ml	4	6	24
2ml	4	3	12	2ml	4	6	24
3ml	4	3	12	3ml	4	6	24
5ml	4	1	4	5ml	4	3	12

Canister	Height 120mm, Diameter 63mm (80mm neck)			Canister	Height 276mm, Diameter 63mm (80mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister	Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	16	3	48	0.5ml	16	6	96
1.5ml	16	3	48	1.5ml	16	6	96
2ml	16	3	48	2ml	16	6	96
3ml	16	3	48	3ml	16	6	96
5ml	16	1	16	5ml	16	3	48

Canister	Height 120mm, Diameter 72mm (127mm neck)			Canister	Height 276mm, Diameter 72mm (127mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister	Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	21	3	63	0.5ml	21	6	126
1.5ml	21	3	63	1.5ml	21	6	126
2ml	21	3	63	2ml	21	6	126
3ml	21	3	63	3ml	21	6	126
5ml	21	1	21	5ml	21	3	63

Canister	Height 120mm, Diameter 97mm (125mm neck)			Canister	Height 276mm, Diameter 97mm (125mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister	Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	-	-	-	0.5ml	-	-	-
1.5ml	40	3	120	1.5ml	40	6	240
2ml	40	3	120	2ml	40	6	240
3ml	40	3	120	3ml	40	6	240
5ml	40	1	40	5ml	40	3	120

Canister	Height 120mm, Diameter 104mm (127mm neck)			Canister	Height 276mm, Diameter 104mm (127mm neck)		
Vials	Canes/Canister	Vials/Cane	Vials/Canister	Vials	Canes/Canister	Vials/Cane	Vials/Canister
0.5ml	-	-	-	0.5ml	-	-	-
1.5ml	46	3	138	1.5ml	46	6	276
2ml	46	3	138	2ml	46	6	276
3ml	46	3	138	3ml	46	6	276
5ml	46	1	46	5ml	46	3	138

Accessories





High Capacity Series for Storage or Transport (Round Canisters)

Product List

Model	Product	Product Model	Description and Accessories
YDS-2-30	Liquid Nitrogen container	YDS-2-30	Includes 3 canisters, lockable cap and PU bag
	Canister	TT2-30	φ19, 120mm single tier canister, No goblet, suitable for YDS-2-30
	Cork (30)	GS-30-125	Suitable for YDS-2-30
	Lockable cap	SG-30	Suitable for container with 30mm neck opening, suitable for YDS-2-30
YDS-2-35	Liquid Nitrogen container	YDS-2-35	Includes 3 canisters, lockable cap and Braces for carrying, no PU bag
	Canister	TT2-35	φ25, 120mm single tier canister, No goblet, suitable for YDS-2-35
	Cork (30)	GS-35-125 (L)	Suitable for YDS-2-35
	Lockable cap	SG-35	Suitable for container with 35mm neck opening, suitable for YDS-2-35
YDS-3	Liquid Nitrogen container	YDS-3	Includes 6 canisters (Height 120mm), lockable cap and PU bag
	Liquid Nitrogen container	YDS-3	Includes PU bag only
	Canister	TT3-50	φ38, 120mm single tier canister, No goblet. suitable for YDS-3
	Cork (50)	GS-50-180	Suitable for YDS-3/YDH-3/YDS-6/YDS-10/YDS-13/YDS-25/YDS-50B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening
YDS-6	Liquid Nitrogen container	YDS-6	Includes 6 canisters (Height 120mm), lockable cap and PU bag
	Liquid Nitrogen container	YDS-6	Includes PU bag only
	Canister	TT6-50	φ38, 120mm single tier canister, No goblet. suitable for YDS-6
	Cork (50)	GS-50-180	Suitable for YDS-3/YDH-3/YDS-6/YDS-10/YDS-13/YDS-25/YDS-50B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening
YDS-10	Liquid Nitrogen container	YDS-10	Includes 6 canisters (Height 120mm), lockable cap and PU bag
	Liquid Nitrogen container	YDS-10	Includes PU bag only
	Canister	TT10-50	φ38, 120mm single tier canister, No goblet, suitable for YDS-10
	Cork (50)	GS-50-180	Suitable for YDS-3/YDH-3/YDS-6/YDS-10/YDS-13/YDS-25/YDS-50B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening
YDS-10-80	Liquid Nitrogen container	YDS-10-80	Includes 6 canisters (Height 120mm), lockable cap and PU bag
	Liquid Nitrogen container	YDS-10-80	Includes PU bag only
	Canister	TT10-80	φ63, 120mm single tier canister, No goblet, suitable for YDS-10-80
	Cork (80)	GS-80-180	Suitable for YDH-6-80/YDS-10-80
	Lockable cap	SG-80	Suitable for container with 80mm neck opening
YDS-13	Liquid Nitrogen container	YDS-13	Includes 6 canisters (Height 276mm), lockable cap and PU bag
	Liquid Nitrogen container	YDS-13	Includes PU bag only
	Canister	TTS13-50	φ38, 276mm double-tier canister, 2 goblets included. Suitable for YDS-13
	Cork (50)	GS-50-180	Suitable for YDS-3/YDH-3/YDS-6/YDS-10/YDS-13/YDS-25/YDS-50B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening
YDS-15	Liquid Nitrogen container	YDS-15	Includes 6 canisters (Height 120mm), lockable cap and PU bag
	Liquid Nitrogen container	YDS-15	Includes PU bag only
	Canister	TT15-50	φ38, 120mm single tier canister, No goblet. suitable for YDS-15
	Cork (50)	GS-50-210	Suitable for YDS-15/YDS-20/YDS-30/YDS-35/YDS-20B/YDS-30B/YDS-35B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening

Product List

Model	Product	Product Model	Description and Accessories
YDS-20	Liquid Nitrogen container	YDS-20	Includes 6 canisters (Height 276mm), lockable cap and PU bag
	Liquid Nitrogen container	YDS-20	Includes 6 canisters (Height 120mm), lockable cap and PU bag
	Liquid Nitrogen container	YDS-20	Includes PU bag only
	Canister	TT30-50	φ38, 120mm single tier canister, No goblet. suitable for YDS-20/YDS-30
	Canister	TTS30-50	φ38,276mm double-tier canister, 2 goblets included. Suitable for YDS-20/YDS-30
	Cork (50)	GS-50-210	Suitable for YDS-15/YDS-20/YDS-30/YDS-35/YDS-20B/YDS-30B/YDS-35B
YDS-30	Lockable cap	SG-50	Suitable for container with 50mm neck opening
	Liquid Nitrogen container	YDS-30	Includes 6 canisters (Height 276mm). lockable cap and PU bag. roller base is optional
	Liquid Nitrogen container	YDS-30	Includes 6 canisters(Height 120mm), lockable cap and PU bag, roller base is optional
	Liquid Nitrogen container	YDS-30	Includes PU bag only, roller base is optional
	Canister	TT30-50	φ38, 120mm single tier canister, No goblet. suitable for YDS-20/YDS-30
	Canister	TTS30-50	φ38, 276mm double-tier canister, 2 goblets included. Suitable for YDS-20/YDS-30
YDS-30-80	Roller Base	YSC-465-5W	Suitable for tanks with diameter less than φ465. Can be used for 30L, 35L and 50L tank. equipped with 5 universal wheels.
	Smart Cap	LT-50	Used for monitoring real time level and temperature for containers with 50mm neck opening, 6 grooves and 540mm height. suitable for YDS-20/YDS-30
	Cork (50)	GS-50-210	Suitable for YDS-15/YDS-20/YDS-30/YDS-35/YDS-20B/YDS-30B/YDS-35B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening
	Liquid Nitrogen container	YDS-30-80	Includes 6 canisters (Height 276mm), lockable cap and PU bag. roller base is optional
	Liquid Nitrogen container	YDS-30-80	Includes 6 canisters(Height 120mm), lockable cap and PU bag, roller base is optional
YDS-35	Liquid Nitrogen container	YDS-35	Includes 6 canisters (Height 276mm), lockable cap and PU bag, roller base is optional
	Liquid Nitrogen container	YDS-35	Includes 6 canisters(Height 120mm), lockable cap and PU bag, roller base is optional
	Liquid Nitrogen container	YDS-35	Includes PU bag only, roller base is optional
	Canister	TT35-50	φ38, 120mm single tier canister, No goblet. suitable for YDS-25/YDS-35
	Canister	TTS35-50	φ38, 276mm double-tier canister, 2 goblets included. Suitable for YDS-35
	Roller Base	YSC-465-5W	Suitable for tanks with diameter less than φ465. Can be used for 30L, 35L and 50L tank. eauipped with 5 universal wheels.
YDS-35-80	Roller Base	LT-50	Used for monitoring real time level and temperature for containers with 50mm neck opening, 6 grooves and 570mm height. suitable for YDS-25/YDS-35
	Cork (50)	GS-50-210	Suitable for YDS-15/YDS-20/YDS-30/YDS-35/YDS-20B/YDS-30B/YDS-35B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening
	Liquid Nitrogen container	YDS-35-80	Includes 6 canisters (Height 276mm). lockable cap and PU bag. roller base is optional
	Liquid Nitrogen container	YDS-35-80	Includes PU bag only, roller base is optional
	Canister	TT35-80	φ63, 120mm single tier canister, No goblet. suitable for YDS-35-80
YDS-35-80	Canister	TTS35-80	φ63, 276mm double-tier canister, 2 goblets included. Suitable for YDS-35-80
	Roller Base	YSC-465-5W	Suitable for tanks with diameter less than φ465. Can be used for 30L, 35L and 50L tank. equipped with 5 universal wheels.
	Roller Base	LT-80	Used for monitoring real time level and temperature for containers with 80mm neck opening, 6 grooves and 580mm heiaht. suitable for YDS-25-80/YDS-35-80
	Cork (80)	GS-80-210	Suitable for YDS-30-80/YDS-35-80/YDS-35B-80
	Lockable cap	SG-80	Suitable for container with 80mm neck opening
	Liquid Nitrogen container	YDS-35-80	Includes 6 canisters (Height 276mm). lockable cap and PU bag. roller base is optional

High Capacity Series for Storage or Transport (Round Canisters)

Product List

Model	Product	Product Model	Description and Accessories
YDS-20B	Liquid nitrogen container	YDS-20B	Includes PU bag only.
	Canister	TT30-50	φ38, 120mm single tier canister, No goblet. suitable for YDS-20/YDS-30
	Canister	TTS30-50	φ38, 276mm double-tier canister, 2 goblets included. Suitable for YDS-20/YDS-30
	Cork (50)	GS-50-210	Suitable for YDS-15/YDS-20/YDS-30/YDS-35/YDS-20B/YDS-30B/YDS-35B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening
YDS-30B	Liquid nitrogen container	YDS-30B	Includes PU bag only, roller base is optional
	Canister	TT30-50	φ38, 120mm single tier canister, No goblet. suitable for YDS-20/YDS-30
	Canister	TTS30-50	φ38, 276mm double-tier canister, 2 goblets included. Suitable for YDS-20/YDS-30
	Roller base	YSC-465-5W	Suitable for tanks with diameter less than φ465. Can be used for 30L, 35L and 50L tank, equipped with 5 universal wheels.
	Cork (50)	GS-50-210	Suitable for YDS-15/YDS-20/YDS-30/YDS-35/YDS-20B/YDS-30B/YDS-35B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening
YDS-35B	Liquid nitrogen container	YDS-35B	Includes PU bag only, roller base is optional
	Canister	TT35-50	φ38, 120mm single tier canister, No goblet. suitable for YDS-25/YDS-35
	Canister	TTS35-50	φ38,276mm double-tier canister, 2 goblets included. Suitable for YDS-35
	Roller base	YSC-465-5W	Suitable for tanks with diameter less than φ465 Can be used for 30L, 35L and 50L tank, equipped with 5 universal wheels.
	Cork (50)	GS-50-210	Suitable for YDS-15/YDS-20/YDS-30/YDS-35/YDS-20B/YDS-30B/YDS-35B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening

Product List

Model	Product	Product Model	Description and Accessories
YDS-35B-80	Liquid Nitrogen container	YDS-35B-80	Includes PU bag only, roller base is optional
	Canister	TT35-80	φ63, 120mm single tier canister. No goblet, suitable for YDS-35-80
	Canister	TTS35-80	φ63, 276mm double-tier canister, 2 goblets included. Suitable for YDS-35-80
	Roller Base	YSC-465-5W	Suitable for tanks with diameter less than φ465. Can be used for 30L, 35L and 50L tank, equipped with 5 universal wheels.
	Cork (80)	GS-80-210	Suitable for YDS-30-80/YDS-35-80/YDS-35B-80
	Lockable cap	SG-80	Suitable for container with 80mm neck opening
YDS-35B-125	Liquid Nitrogen container	YDS-35B-125	Includes PU bag only
	Canister	TT35-125	φ97, 120mm single tier canister, No goblet, suitable for YDS-35-125
	Canister	TTS35-125	φ97,276mm double-tier canister, 2 goblets included. Suitable for YDS-35-125
	Rack	FTT-25-5H	Used for storing 5*5 cryo boxes(2ml), 5 layers in total, with 5*5 cryo boxes included, suitable for YDS-35-125
	Roller Base	YSC-465-5W	Suitable for tanks with diameter less than φ465. Can be used for 30L, 35L and 50L tank, equipped with 5 universal wheels.
	Cork (125)	GS-125-210	Suitable for YDS-30-125/YDS-35-125/YDS-47-127 /YDS-35B-125
YDS-50B	Liquid Nitrogen container	YDS-50B	Includes PU bag only, roller base is optional
	Canister	TT50-50	φ38, 120mm single tier canister, No goblet. suitable for YDS-50
	Canister	TTS50-50	φ38, 276mm double-tier canister, 2 goblets included. Suitable for YDS-50
	Roller Base	YSC-465-5W	Suitable for tanks with diameter less than φ465. Can be used for 30L, 35L and 50L tank, equipped with 5 universal wheels.
	Smart cap	LT-50-500-6H640	Used for monitoring real time level and temperature for containers with 50mm neck opening, 6 grooves and 640mm height. suitable for YDS-50
	Cork (50)	GS-50-180	Suitable for YDS-3/YDH-3/YDS-6/YDS-10/YDS-13/YDS-25/YDS-50B
	Lockable cap	SG-50	Suitable for container with 50mm neck opening



## Dryshipper Series for Transportation (Round Canisters)

Dryshipper Series for Transportation (Round Canisters) is designed for safe sample transportation under cryogenic conditions (vapour phase storage, temperature under -190°C). Since the risk of LN<sub>2</sub> release is avoided, it is suitable for air transportation of samples.

- Rugged and Durable
- 3 Years Vacuum Warranty
- Cryo Absorbant
- Vapour Phase Storage
- Secure
- No LN<sub>2</sub> Spillage



### Key Features

- Straw and cryovial storage options
- Rugged and durable aluminium construction
- Designed to ensure no LN<sub>2</sub> spillage
- Vapour phase cryogenic storage
- Faster LN<sub>2</sub> fill times
- Lockable lids
- 3 years vacuum warranty

### Product Advantages

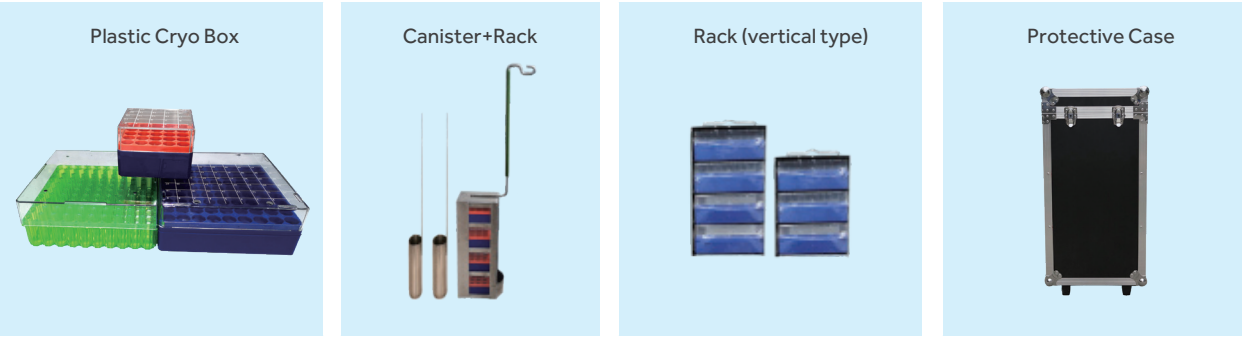
**Liquid Nitrogen Adsorption**  
Adsorbent materials are used to absorb and retain LN<sub>2</sub> for safe transport. No spillover of LN<sub>2</sub> can occur even when the tank is capsized.

**Stainless Steel Mesh**  
Special stainless steel mesh divides storage space and LN<sub>2</sub> absorbents to prevent absorbent materials from contaminating the samples.

**Complete Accessories Set**  
All models are offered a variety of stainless steel canisters and polycarbonate cryogenic boxes. Locking cover is optional.









### Accessories



Dryshipper Series for Transportation (Round Canisters)

Technical Parameters

Model	YDH-3	YDH-6-80	YDH-10-125	YDH-10-125	YDH-15-216	YDH-25-216
Picture						
Authentication	CE	CE	CE	CE	CE	CE
Maximum Storage Capacity						
No. of Canister / Rack	1	1	1	1 Rack	1 Rack	1 Rack
No. of Straws (0.5ml / EA)	132	374	854	-	-	-
No. of Straws (0.25ml / EA)	298	837	1940	-	-	-
No. of 2.0 ml Cryovials	-	-	-	100	300	500
No. of Boxes in ( 2ml per holder)	-	-	-	4	3	5
Performance						
Absorbable Volume of LN <sub>2</sub> (L)	1.3	2.9	3.4	3.4	6	9
Static Evapouration* (L/Day)	0.16	0.2	0.43	0.43	1.5	0.89
Static Holding Time in Vapor Phase**(Day)	8	14	8	8	4	10
Dimensions						
Opening Diameter (mm)	50	80	125	125	216	216
Height (mm)	445	500	625	625	555	730
Outside Diameter (mm)	223	300	300	300	394	394
Canister Outside Diameter (mm)	38	63	97	-	-	-
Outside Height (mm)	120	120	120	-	-	-
Empty Weight (kg)	3.2	6.5	8.9	8.9	13	15
Full Weight (kg)	4.7	8.9	12.5	12.5	17.8	23
Shipping Weight (kg)	5.5	7.7	9.7	9.7	15.2	20.5

\*Static Evaporation: The amount of liquid nitrogen lost by natural evaporation within 24 hours after the container is allowed to reach thermal equilibrium under the specified filling rate, which is converted into the evaporation value under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C).

\*\*Static Holding Time in Vapor Phase: under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C), after the container is filled with liquid nitrogen pre-cooled and reaches thermal equilibrium, the adsorption layer is filled with liquid nitrogen and there is no free liquid nitrogen, the number of days when the liquid nitrogen is completely evaporated on standing.

Product List

Model	Product	Product Model	Description and Accessories
YDH-3	Dry Shipper	YDH-3	Includes 1 canister (Height 120mm), lockable cap and PU bag
	Canister	TTH3-50	Φ38, 120mm single tier canister, No goblet, suitable for YDH-3
	Smart Cap	T-50	Used for monitoring real time temperature for containers with 50mm neck opening, 6 grooves and 180mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-3
	Cork (50)	GS-50-180	Suitable for YDS-3/YDH-3/YDS-6/YDS-10/YDS-13/YDS-25/YDS-50B
	Lockable Cap	SG-50	Suitable for container with 50mm neck opening
YDH-6-80	Dry Shipper	YDH-6-80	Includes 1 canister (Height 120mm), lockable cap and PU bag
	Canister	TTH6-80	Φ63, 120mm single tier canister, No goblet, suitable for YDH-6-80
	Smart Cap	T-80	Used for monitoring real time temperature for containers with 80mm neck opening, 6 grooves and 180mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-6-80
	Cork (80)	GS-80-180	Suitable for YDH-6-80/YDS-10-80
	Lockable Cap	SG-80	Suitable for container with 80mm neck opening
YDH-10-125	Dry Shipper	YDH-10-125	Includes 1 rack(4 layers), 5*5 cryoboxes, lockable cap and PU bag
	Dry Shipper	YDH-10-125	Includes lockable cap and PU bag; No Rack
	Rack	FTT-25-4H	Used for storing 5*5 cryo boxes(2ml), 4 layers in total, with 5*5 cryo boxes included, suitable for YDS-30-125/YDS-10-125
	Canister	TTH10-125	Φ97,120mm single tier canister, No goblet, suitable for YDH-10-125
	Smart Cap	T-125	Used for monitoring real time temperature for containers with 125mm neck opening, 6 grooves and 180mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-10-125/YDS-10-125
	Cork (125)	GS-125-180	Suitable for YDS-10-125/YDH-10-125/YDS-50B-125
	Lockable Cap	SG-125	Suitable for container with 125mm and 127mm neck opening
YDH-15-216	Protective Case X	HKX-300/660	Suitable for YDH-10-125
	Dry Shipper	YDH-15-216	Includes 1 rack(3 layers), 9*9 cryoboxes, lockable cap and PU bag
	Rack (Vertical Type)	FDCJ-81-3H	Used for storing 9*9 cryo boxes(2ml), 3 layers in total. With 9*9 cryoboxes included. Suitable for YDH-15-216
	Smart Cap	T-216	Used for monitoring real time temperature for containers with 216mm neck opening, 6 grooves and 150mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-15-216
	Cork (216-2)	GS-216-150 (L)	Suitable for YDH-15-216
YDH-25-216	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
	Dry Shipper	YDH-25-216	Includes 1 rack(5 layers), 9*9 cryoboxes, lockable cap and PU bag
	Rack (Vertical Type)	FDCJ-81-5H	Used for storing 9*9 cryo boxes(2ml), 5 layers in total, with 9*9 cryoboxes included. suitable for YDH-25-216/YDS-216/YDS-95-216
	Smart Cap	T-216	Used for monitoring real time temperature for containers with 216mm neck opening, 6 grooves and 210mm heigh cork, data can be transmitted to Haier's IoT platform. suitable for YDH-25-216/YDS-65-216 /YDS-95-216/YDS-115-216/YDS-145-216/YDS-175-216
	Cork (216)	GS-216-220-7	Suitable for YDS-65-216/YDS-95-216/YDS-115-216/YDS-145-216/YDS-175-216/YDH-15-216/YDH-25-216
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
	Protective Shipping Case	HKX-694	Mushroom Type, Suitable for YDH-25-216
	Protective Case	HKX-394/800	Suitable for YDH-25-216



Self-Pressurized Series for LN<sub>2</sub> Storage and Supply

Liquid Nitrogen Supplement Series for LN<sub>2</sub> Storage and Supply incorporates the latest innovation, its unique design utilises the pressure generated from the vapourisation of a small amount liquid nitrogen to discharge LN<sub>2</sub> into other containers. Storage capacities range from 5 to 500 litres.

- 5 Year Vacuum Warranty
  - Decant Valves
  - Liquid Storage
- Stainless Steel Construction
  - Pressure Raising
  - Integral Safety Mechanisms



Key Features

- All models are equipped with safety valves
  - All welded stainless steel construction
  - Rotary ring construction
- Labelled valves for easy identification
  - 5 year vacuum warranty

Product Advantages

Stainless Steel Structure

Stainless steel structure can withstand the most demanding environment and ensure long-lasting security. It also provides reduced evaporation loss rate, compared with conventional welding insulation tanks.

Casters

All models have four casters for better mobility and convenient use in different occasions.

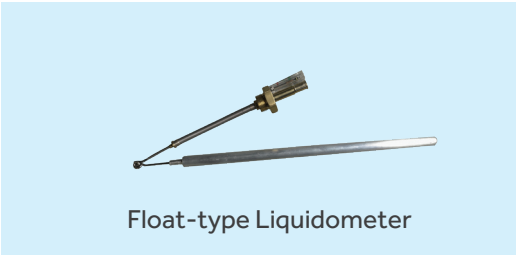
Variety of Accessories

Each Self-pressurized Series for LN<sub>2</sub> Storage and Supply model is equipped with a pressure valve, a drain valve, a relief valve, and a pressure gauge.

Accessories



Transfer Hose



Float-type Liquidometer

Additional Series for Liquid Nitrogen Tank

(Comparison between Standard Series and K Series)



Standard series



K series

New Functions of K Series

➤ Digital Display Level Gauge

DLZ-300  
Digital display of fluid level  
Remote data transmission  
function



➤ Large diameter vent valve

Rapid relief of  
over pressure  
Protection of  
safety valve



➤ Pressure stabilizing valve








Stabilize fluid pressure  
during auto filling





Technical Parameters

Model	YDZ-5	YDZ-15	YDZ-30	YDZ-50	YDZ-100	YDZ-100K	YDZ-150
Picture							
Authentication	CE	CE	CE	CE	CE	CE	CE
Performance							
Volume of LN <sub>2</sub> (L)	5	15	30	50	100		150
Static Evaporation* (L/Day)	0.15	0.38	0.75	1	1.3		1.95
LN <sub>2</sub> Output (L/Min)	≥2	≥2	≥3	≥3	≥4		≥6
Dimensions							
Height (mm)	652	771	900	1009	1179		1208
Outside Diameter (mm)	354	404	454	506	606		706
Empty Weight (kg)	19	26	38	54	86		107
Full Weight (kg)	23.0	38.1	62.2	94.4	166.8		228
Shipping Weight (kg)	32	37	53	63	107		137
Pressure Parameters (MPa)	1. Standard working pressure 0.05, 2. Maximum working pressure 0.09, 3. First stage safety valve relief pressure 0.099, 4. Second stage safety valve release pressure 0.15, 5. Pressure gauge range 0-0.25						
Battery Included	-	-	-	-	-	YES	-
Battery Type	-	-	-	-	-	Lithium Thionyl Chloride	-
Battery Model	-	-	-	-	-	ER14505	-
Battery Capacity	-	-	-	-	-	2700mAh	-
MSDS Report	-	-	-	-	-	Bilingual (Chinese and English)	-

Self-Pressurized Series for LN<sub>2</sub> Storage and Supply

Model	YDZ-200	YDZ-200K	YDZ-240K	YDZ-300	YDZ-300K	YDZ-500	YDZ-500K
Picture							
Authentication	CE		CE	CE		CE	
Performance							
Volume of LN <sub>2</sub> (L)	200		240	300		500	
Static Evaporation* (L/Day)	2.4		2.9	3.3		5.5	
LN <sub>2</sub> Output (L/Min)	≥8		≥8	≥8		≥10	
Dimensions							
Height (mm)	1288		1405	1484		1607	
Outside Diameter (mm)	758		758	858		1008	
Empty Weight (kg)	145		159	193		273	
Full Weight (kg)	307		353	435		677	
Shipping Weight (kg)	179		188	223		342	
Pressure Parameters (MPa)	1. Standard working pressure 0.05, 2. Maximum working pressure 0.09, 3. First stage safety valve relief pressure 0.099, 4. Second stage safety valve release pressure 0.15, 5. Pressure gauge range 0~0.25						
Battery Included	-	YES	YES	-	YES	-	YES
Battery Type	-	Lithium Thionyl Chloride	Lithium Thionyl Chloride	-	Lithium Thionyl Chloride	-	Lithium Thionyl Chloride
Battery Model	-	ER14505	ER14505	-	ER14505	-	ER14505
Battery Capacity	-	2700mAh	2700mAh	-	2700mAh	-	2700mAh
MSDS Report	-	Bilingual (Chinese and English)	Bilingual (Chinese and English)	-	Bilingual (Chinese and English)	-	Bilingual (Chinese and English)

Model	YDZ-100/1.5	YDZ-240/1.5
Picture		
Authentication	PED	PED
Performance		
Volume of LN <sub>2</sub> (L)	100	240
Static Evaporation* (L/Day)	1.3	2.88
Dimensions		
Height (mm)	1270	1500
Outside Diameter (mm)	606	756
Empty Weight(kg)	80	163
Full Weight (kg)	161	360
Shipping Weight (kg)	102	204
Pressure Parameters		
First stage safety valve relief pressure (Mpa/PSI)	0.15/22	
Second stage safety valve release pressure (Mpa/PSI)	0.24/35	
Pressure gauge range (Mpa/PSI)	0~1/145	
Rupture disc burst pressure (Mpa/PSI)	0.66/96	
Battery Included	YES	
Battery Type	Lithium Thionyl Chloride	
Battery Model	ER14505	
Battery Capacity	2700mAh	
MSDS Report	Bilingual (Chinese and English)	

\*Static Evaporation: The amount of liquid nitrogen lost by natural evaporation within 24 hours after the container is allowed to reach thermal equilibrium under the specified filling rate, which is converted into the evaporation value under the standard state (atmospheric pressure 101.325kPa, ambient temperature 20°C).

Product List

Product	Product Model	Description and Accessories
Self-Pressurized Filling Tank	YDZ-5	Includes single-layer transfusion hoses (ZG-DN10/1.5)
	YDZ-15	Includes single-layer transfusion hoses (ZG-DN10/1.5)
	YDZ-30	Includes single-layer transfusion hoses (ZG-DN10/1.5);
	YDZ-50	Includes single-layer transfusion hoses (ZG-DN10/1.5);
	YDZ-100	Includes single-layer transfusion hoses (ZG-DN10/1.5) and float-type liquidometer
	YDZ-150	Includes single-layer transfusion hoses (ZG-DN10/1.5) and float-type liquidometer
	YDZ-200	Includes single-layer transfusion hoses (ZG-DN10/1.5) and float-type liquidometer
	YDZ-300	Includes single-layer transfusion hoses (ZG-DN10/1.5) and float-type liquidometer
	YDZ-500	Includes single-layer transfusion hoses (ZG-DN10/1.5) and float-type liquidometer
	YDZ-100	Includes single-layer transfusion hoses (ZG-DN10/1.5),Digital display level gauge(DLZ-300) and pressure stabilizer. can be used for auto filling
	YDZ-200	Includes single-layer transfusion hoses (ZG-DN10/1.5),Digital display level gauge(DLZ-300) and pressure stabilizer. can be used for auto filling
	YDZ-240	Includes single-layer transfusion hoses (ZG-DN10/1.5),Digital display level gauge(DLZ-300) and pressure stabilizer. can be used for auto filling
Digital Display Level Gauge	YDZ-300	Includes single-layer transfusion hoses (ZG-DN10/1.5),Digital display level gauge(DLZ-300) and pressure stabilizer. can be used for auto filling
	YDZ-320	Includes single-layer transfusion hoses (ZG-DN10/1.5),Digital display level gauge(DLZ-300) and pressure stabilizer. can be used for auto filling
	YDZ-500	Includes single-layer transfusion hoses (ZG-DN10/1.5),Digital display level gauge(DLZ-300) and pressure stabilizer. can be used for auto filling
Float-Type Liquidometer	DLZ-300	Digital display real time liquid nitrogen level of self pressurized tank, low power consumption battery, wireless transmission (YDZ-240K)
	DLZ-300(YDZ-320K)	Digital display real time liquid nitrogen level of self pressurized tank, low power consumption battery, wireless transmission (YDZ-320K)
	DLZ-300	Digital display real time liquid nitrogen level of self pressurized tank, low power consumption battery, wireless transmission (YDZ-500K)
Self-Pressurized Filling Tank	FZ-100	Suitable for YDZ-100
	FZ-150	Suitable for YDZ-150
	FZ-200	Suitable for YDZ-200
	FZ-300	Suitable for YDZ-300
	FZ-500	Suitable for YDZ-500
Self-Pressurized Filling Tank	YDZ-100/1.5	Include single-layer transfusion hoses (ZG-DN10/1.5), Digital display level gauge(DLZ-300) and pressure stabilizer. The working pressure is 1.5 bar (22psi). PED certified and can be used for auto filling
	YDZ-240/1.5	Include single-layer transfusion hoses (ZG-DN10/1.5), Digital display level gauge(DLZ-300) and pressure stabilizer. The working pressure is 1.5 bar (22psi). PED certified and can be used for auto filling