Haier Biomedical
Intelligent Protection of Life Science

LN₂ Storage Solutions

- ◉ Liquid/Vapor Phase Storage
- ◉ Hot Gas Bypass
- ◉ Lockable Lid
- ◉ One-Touch Defogging

Haier Biomedical USA

Website: www.haiermedical-usa.com

Haier Biomedical
Intelligent Protection of Life Science

Haier Biomedical USA | Haier Biomedical International | @haiermedicalint | Haier Biomedical International | Haier Biomedical International

❯ Key Features

- Massive capacity between 13,000 to 94,875×2ml Vials
- Vapor phase storage is a guaranteed method to prevent cross-contamination
- Vapor phase storage at -190°C
- 5-Year vacuum warranty
- One-touch defogging for easier access
- Splash proof LN₂ design ensures safer usage & operation
- Used to store a variety of biological samples

❯ Product Advantages
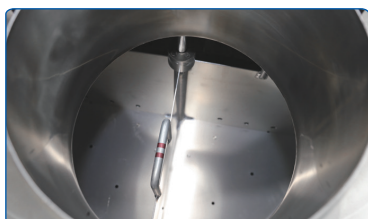
Optimal Use of Storage Space

Racks are stored on the rotating tray with an appropriate distance from the wall of the chamber. Liquid nitrogen or supercooled nitrogen vapor 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 Storage

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.
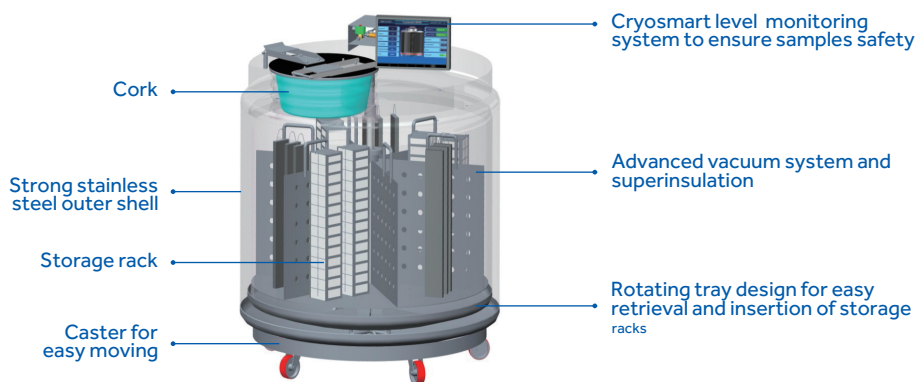
Advanced Vacuum Technology and Superinsulation Technology

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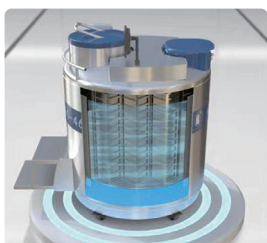
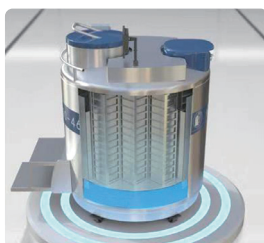### Cryosmart Level Monitoring System ITC-800N201 (N4.1)

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.

Cryosmart level monitoring system to ensure samples safety

Cork

Advanced vacuum system and superinsulation

Strong stainless steel outer shell

Storage rack

Rotating tray design for easy retrieval and insertion of storage racks

Caster for easy moving

❯ Liquid and Gas Phase
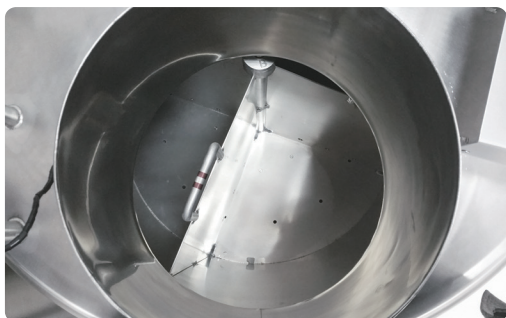
Liquid Phase   Gas Phase   Top of the Container   Liquid Feed System

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

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

❯ Temperature Test Graph

YDD-1800-635
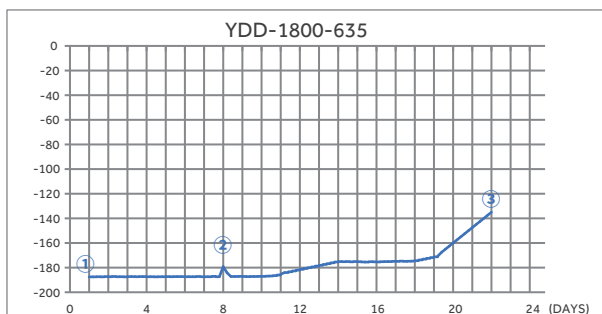
① Precooling stage when freezer filled to high level
② Lid open test, -179.2°C max
③ With no liquid nitrogen supply, the temperature maintained below -135°C for 22 days

YDD-550-445
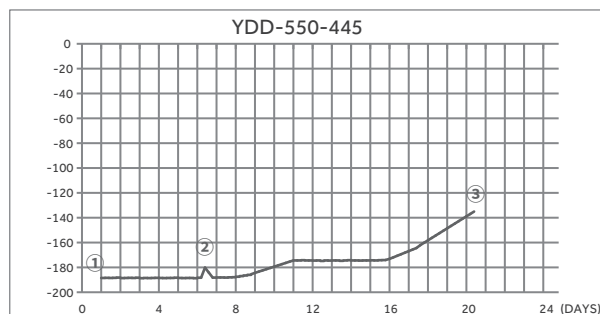
① Precooling stage when freezer filled to high level
② Lid open test, -180.2°C max
③ With no liquid nitrogen supply, the temperature maintained below -135°C for 20 days

YDD-850-465

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

YDD-350-326
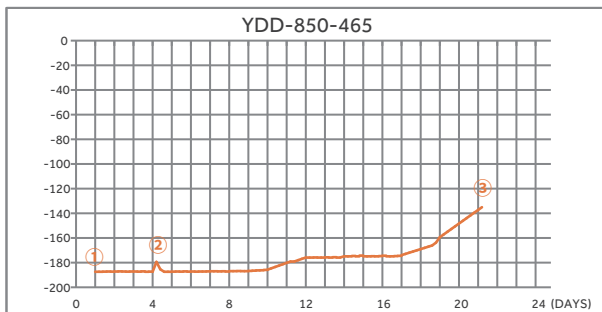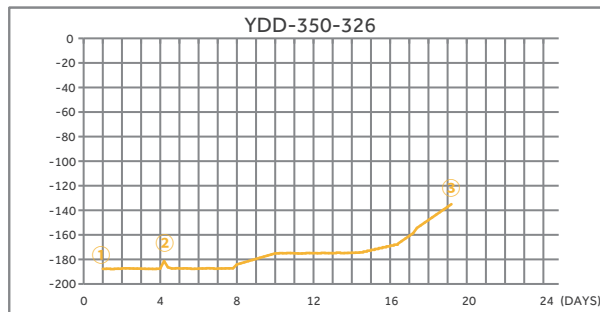
① Precooling stage when freezer filled to high level
② Lid open test, -181.4°C max
③ With no liquid nitrogen supply, the temperature maintained below -135°C for 19 days

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

◈ Technical Parameters

Model	YDD-350-326	YDD-370-326	YDD-450-326	YDD-550-445	YDD-750-445
2ml Volume	13K	16K	21K	27K	38K

Maximum Storage Capacity

	YDD-350-326	YDD-370-326	YDD-450-326	YDD-550-445	YDD-750-445
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 LN2 (L)	350	370	480	587	783
Volume of LN2 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			YDD-370-326			YDD-450-326			YDD-550-445			YDD-750-445		
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	YDD-1000-465	YDD-1300-635	YDD-1600-635	YDD-1800-635
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 LN₂ (L)	890	1014	1340	1660	1880
Volume of LN₂ 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			YDD-1000-465			YDD-1300-635			YDD-1600-635			YDD-1800-635		
Bag Specifications	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks	Total No.of Bags	Rack Layers	No.of Racks	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

⟨⟩ Racks (vertical type) and Blood bag Frame

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

❯ Biological Sample Bank-YDD Series

Storage Example of 2ml Internally Threaded Vial

Vial
(1.2/2ml)

Plastic Cryo box
(25, 81, 100)

Rack (vertical type)

Vial
(1.2/2ml)

Vial Cane
(3, 6)

Canister

Storage Example of Tall 5ml Cryovials

Vial
(5ml)

Cryo box
(25, 81)

Rack (vertical type)
(5ml)

Vial
(5ml)

Vial Cane
(6)

Canister

Blood Bag Storage Example

Blood Bag
(25/50/250ml)

Blood Bag Cassette

Blood Bag Frame

Straw Storage Example

Straw
(0.25/0.5ml)

Plastic Protective Sleeve

Canister
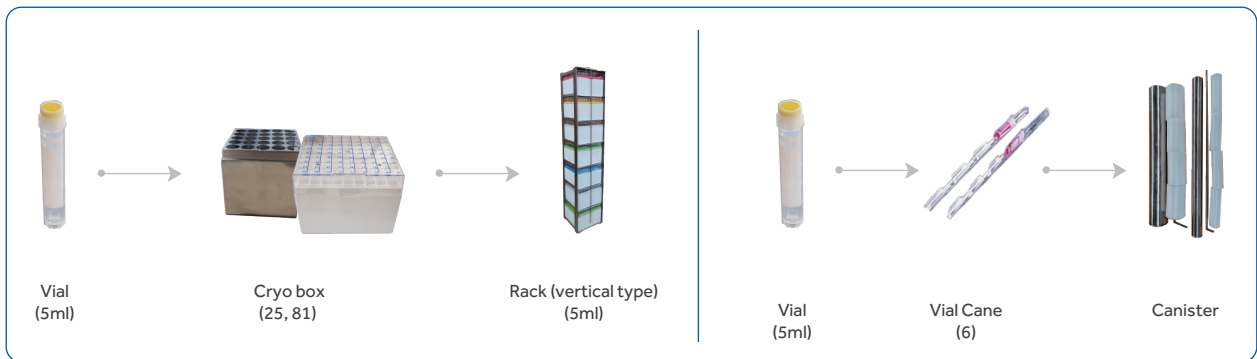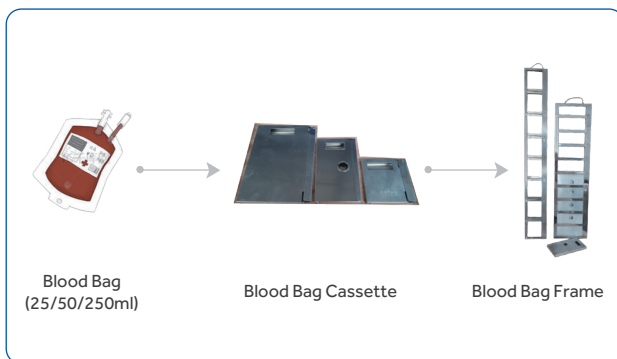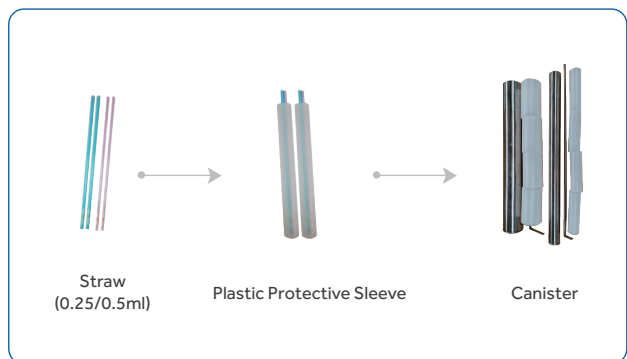
⟨⟩ Product List

Model	Product	Product Model	Description and Accessories
YDD-350-326	Biobank freezer (Smart type)	YDD-350-326	Includes vacuum isolated hose (GRG-DN10/2.0), 4pcs of 10-tier rack (5*5), 12 pcs of 10-tier rack (9*9), 40pcs of cryo boxes for 2ml vial(5*5), 120pcs of cryo boxes for 2ml vial (9*9), 1 set of cryo smart (level monitoring system)
	Biobank freezer	YDD-350-326	Includes vacuum isolated hose (GRG-DN10/2.0). Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-10	Used 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-201	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-370-326	Biobank freezer (Smart type)	YDD-370-326	Includes vacuum isolated hose (GRG-DN10/2.0). 4pcs of 12-tier rack (5*5). 12 pcs of 12-tier rack (9*9). 48pcs of cryo boxes for 2ml vial (5*5), 144pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system)
	Biobank freezer	YDD-370-326	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-12	Used 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 (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N-201	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-450-326	Biobank freezer (Smart type)	YDD-450-326	Includes vacuum isolated hose (GRG-DN10/2.0). 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	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-450/1000/1800 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-15	Used for storing 9*9 cryoboxes (2ml), Fifteen layers in total, suitable for YDD-450/1000/1800 (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-201	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-550-445	Biobank freezer (Smart type)	YDD-550-445	Includes vacuum isolated hose (GRG-DN10/2.0). 12pcs of 10-tier rack (5*5). 24 pcs of 10-tier rack (9*9). 120pcs of cryo boxes for 2ml vial (5*5). 240pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system)
	Biobank freezer	YDD-550-445	Includes vacuum isolated hose (GRG-DN10/2.0). Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-10	Used 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 (interallythreaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N-201	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-750-445	Biobank freezer (Smart type)	YDD-750-445	Includes vacuum isolated hose (GRG-DN10/2.0). 12pcs of 14-tier rack (5*5). 24 pcs of 14-tier rack (9*9). 168pcs of cryo boxes for 2ml vial (5*5). 336pcs of cryo boxes for 2ml vial (9*9), 1 set of cryosmart (level monitoring system)
	Biobank freezer	YDD-750-445	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-14	Used 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 (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N-201	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-850-465	Biobank freezer (Smart type)	YDD-850-465	Includes vacuum isolated hose (GRG-DN10/2.0), 4 pcs of 13-tier rack (5*5). 32 pcs of 13-tier rack (9*9), 52pcs of cryo boxes (5*5) for 2ml vial. 416pcs of cryo boxes (9*9) for 2ml vial, 1 set of cryosmart (level monitoring system)
	Biobank freezer	YDD-850-465	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-13	Used 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 storinq 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-201	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system an excluding the wireless data transmission module
YDD-1000-465	Biobank freezer (Smart type)	YDD-1000-465	Includes vacuum isolated hose (GRG-DN10/2.0), 16 pcs of 15-tier rack (5*5), 30 pcs of 15-tier rack (9*9), 240pcs of cryo boxes (5*5) for 2ml vial, 450pcs of cryo boxes (9*9) for 2ml vial. 1 set of cryosmart (level monitoring system)
	Biobank freezer	YDD-1000-465	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-15	Used for storing 5*5 cryoboxes (2ml), Fifteen layers in total. suitable for YDD-450/1000/1800 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-15	Used for storing 9*9 cryoboxes (2ml), Fifteen layers in total, suitable for YDD-450/1000/1800 (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-201	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-1300-635	Biobank freezer (Smart type)	YDD-1300-635	Includes vacuum isolated hose (GRG-DN10/2.0), 120 pcs of round rack, 240 pcs of φ97mm canister (2 goblets included for each), 1 set of cryosmart (level monitoring system)
	Biobank freezer	YDD-1300-635	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-10	Used 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-201	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
YDD-1600-635	Biobank freezer (Smart type)	YDD-1600-635	Includes vacuum isolated hose (GRG-DN10/2.0), 468pcs of 7-tier blood bag rack for 50ml. 3276pcs of 50ml blood bag cryo box (4R9951). 1 set of cryosmart (level monitoring system)
	Biobank freezer	YDD-1600-635	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-13	Used 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-201	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	Biobank freezer (Smart type)	YDD-1800-635	Includes vacuum isolated hose (GRG-DN10/2.0), 13 pcs of 15-tier rack (5*5), 60 pcs of 15-tier rack (9*9), 195pcs of cryo boxes (5*5) for 2ml vial, 900pcs of cryo boxes (9*9) for 2ml vial, 1 set of cryosmart (level monitoring system)
	Biobank freezer	YDD-1800-635	Includes vacuum isolated hose (GRG-DN10/2.0), Rack and intelligent level monitoring system are optional
	Rack (vertical type)	FDCJ-25-15	Used for storing 5*5 cryoboxes (2ml). Fifteen layers in total, suitable for YDD-450/1000/1800 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-81-15	Used for storing 9*9 cryoboxes (2ml), Fifteen layers in total, suitable for YDD-450/1000/1800 (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-201	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module
Other Racks	Blood bag frame	DCJ-250-3H	3 layers frame used for storing 250ml blood bag, each layer storing one blood bag, with blood bag cassettes included. Suitable for YDD-350/550/1300
	Blood bag frame	DCJ-250-4H	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-25-6H	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-1000/1800
	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-450/750/850/1600 (excluding cryoboxes)
	Rack (vertical type)	FDCJ-25-9/5.0	Used for storing 5*5 cryoboxes (5ml), nine layers in total, suitable for YDD-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. suitable for YDD-350/550/1300
	Round Rack	YDCJ-97-2	With 2 stainless steel canisters (φ 97/276mm), 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-350\YDD-550\YDD-1300

Key Features

- 5 models from 2,400 to 6,000 cryovial capacity
- 5 years vacuum warranty
- Durable aluminium construction
- Real time monitoring of temperature and liquid level

- Low consumption rate and high performance stability
- New lockable design

Accessories

Color identification for Rack handles

Rack handles are color-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.
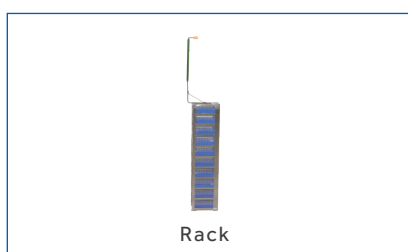

Multilayer protection for ultimate safety

Temperature and level are monitored in real time to safeguard the storage environment.

Low consumption rate and high performance stability

The reliable vaccum and build quality ensures a stable and uniform temperature performance as well as keeping low LN$_2$ consumption rates.

Rack

Roller Base

Haier Biomedical
Intelligent Protection of Life Science

❯ Technical Parameters

Model	YDS-65-216	YDS-95-216	YDS-115-216	YDS-145-216	YDS-175-216
Picture					
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 Rate* (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 and static holding time are theoretical values. Actual evaporation and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

** Static Holding Time: the amount of days it takes for all of the LN to evaporate out after container is filled with liquid nitrogen to pre-cool and reach thermal

equilibrium and the liquid nitrogen filling rate reaches 100% under standard atmospheric condition.

❯ 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

❯ Key Features

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

❯ Product Advantages

ULT Storage with Extremely Low LN₂ Evaporation Loss

Freezer racks are in the ultra-low temperature environment with extremely low LN₂ evaporation. Even stored in vapor phase, the temperature will be below -190°C for a long time.

Advanced Vacuum Technology and Superinsulation Technology

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

Compatible for Blood Bag Storage

Suitable for blood bag applications, the racks can be adapted to provide temporary blood bag storage before transferring bags to larger LN₂ 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					
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_2 (L)	65	95	115	145	175
Static Evaporation Rate* (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 and static holding time are theoretical values. Actual evaporation and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

** Static Holding Time: the amount of days it takes for all of the LN to evaporate out after container is filled with liquid nitrogen to pre-cool and reach thermal

equilibrium and the liquid nitrogen filling rate reaches 100% under standard atmospheric condition.
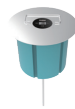
◈ Accessories
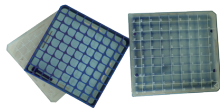
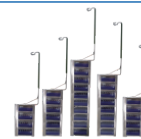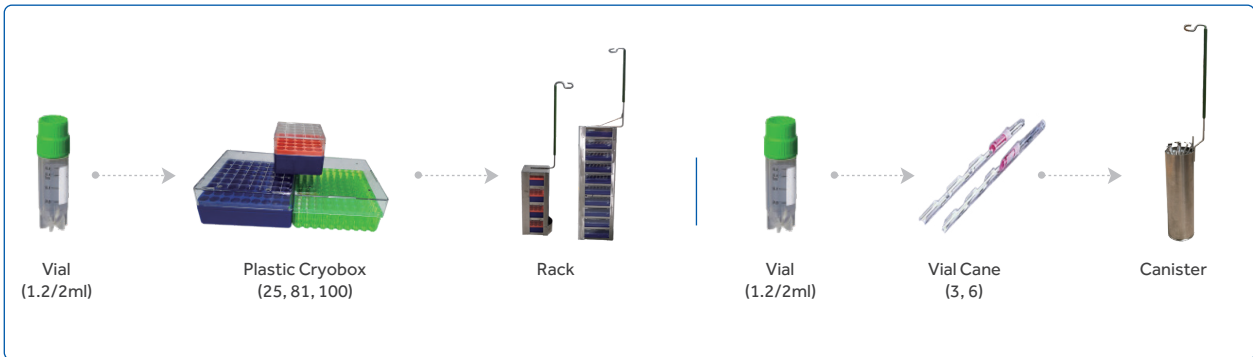| Roller Base	Plastic Cryo Box	Lockable Cap (SG-216)	Rack (5ml)

5 ml Customized Cryogenic Box	Smart Cap	Rack

❖ Biological Sample Library-YDS Series

Storage Example of 2ml Internally Threaded Vial

Vial
(1.2/2ml)

Plastic Cryobox
(25, 81, 100)

Rack

Vial
(1.2/2ml)

Vial Cane
(3, 6)

Canister

Storage Example of Tall 5ml Cryovials

Vial
(5ml)

Cryobox
(25, 81)

Rack (5ml)

Vial
(5ml)

Vial Cane
(6)

Canister

Blood Bag Storage Example

Blood Bag
(25/50/250ml)

Blood Bag Cryo Box
25/50/250ml

Customized
Blood Bag Rack

Straw Storage Example

Straw
(0.25/0.5ml)

Plastic Protective Sleeve

Canister
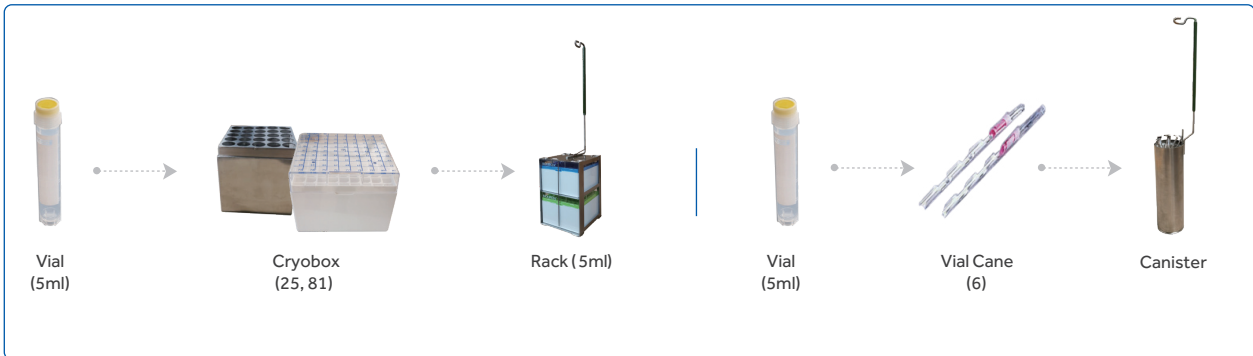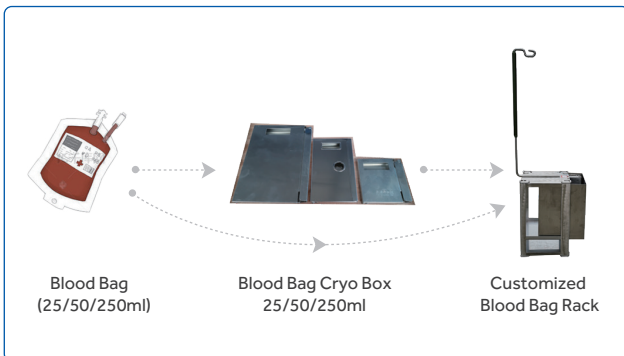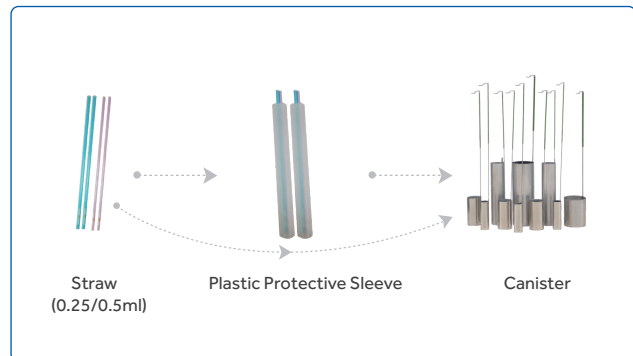
Product List

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(S 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-81-5H	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-81-2/5.0H	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-I15-216/YDS-145-216/YDS-I75-216/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	ncludes 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-81-6H	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-81-3/5.0H	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-81-8H	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-I75L 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 (5.0mlVial)	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-81-10H	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
	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
	Lockable cap	SG-216	Suitable for container with 216mm neck opening
Other Racks	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 forYDS-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, 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, suitablefor 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, suitablefor YDS-115-216, 6 racks can befitted.
	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-250-2F8/175H	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.

◈ 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$_2$ evaporation loss

◈ Product Advantages

Low LN$_2$ Consumption and Maximum Storage Efficiency

Haier Biomedical's Small Sized Storage Series (Square Racks) Liquid Nitrogen Storage System features low LN$_2$ 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

Roller Base	Rack	Liquid Nitrogen Temperature Detector	Lockable Cap (SG-125)	Smart Cap

◈ Technical Parameters

Model	YDS-10-125	YDS-30-125	YDS-35-125	YDS-47-127	YDS-50B-125
Picture					
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$_2$ (L)	10	30	35	47	50
Static Evaporation Rate* (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 and static holding time are theoretical values. Actual evaporation and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.
** Static Holding Time: the amount of days it takes for all of the LN to evaporate out after container is filled with liquid nitrogen to pre-cool and reach thermal equilibrium and the liquid nitrogen filling rate reaches 100% under standard atmospheric condition.

◈ 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. 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-4 7-127 /YDS-35B-125
	Lockable cap	SG-125	Suitable for container with 125mm and 127mm neck opening
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-25-5H	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 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.
	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	TTS47-127-10T	φ72, 276mm double-tier canister, 2 goblets included. Suitable for YDS-4 7-127-10T
	Roller Base	YSC-525-5W	Suitable for tanks with diameter less than φ525. Can be used for 47L alunimium 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-4 7-127 /YDS-35B-125
	Cork (125)	GS-127-210-10	Suitable for YDS-47-127-10T
	Lockable cap	SG-125	Suitable for container with 125mm and 127mm neck opening
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

❯ Key Features

- Strong and lightweight aluminium construction
- Heavy duty lockable enclosure offers excellent security
- Numbered index location points for canisters
- Straw storage
- LN₂ dispensing pump available

- Roller bases available
- High thermal efficiency
- 5 year vacuum warranty
- Ultra-low evaporation loss

❯ Product Advantages
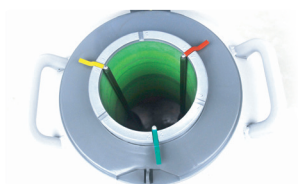
Narrow neck design and excellent thermal conductivity reduces evaporation loss of liquid nitrogen to extend storage times.
Large-capacity models have wider necks for easy access to biological samples.
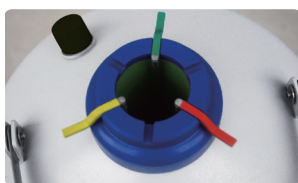
Long-term cryopreservation models have narrower necks with less heat intrusion.

❯ 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 LN₂ (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_2 (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_2 (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

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_2 (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_2 (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 and static holding time are theoretical values. Actual evaporation and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

** Static Holding Time: the amount of days it takes for all of the LN to evaporate out after container is filled with liquid nitrogen to pre-cool and reach thermal equilibrium and the liquid nitrogen filling rate reaches 100% under standard atmospheric condition.

❯ Vial Cane Specification

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

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

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

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

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

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

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

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

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

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

❯ Vial Cane Specification

Vial   Vial cane   Canister
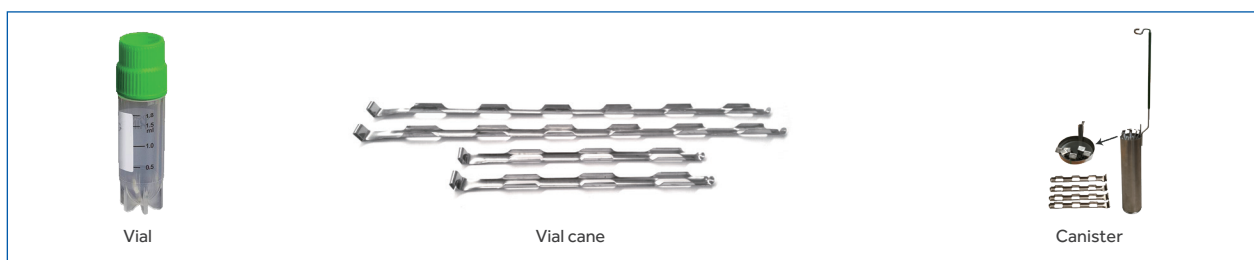
Product List

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	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

Product List

Model	Product	Product Model	Description and Accessories
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
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
	Lockable cap	SG-50	Suitable for container with 50mm neck opening
YDS-30	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
	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
YDS-30-80	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
	Liquid Nitrogen container	YDS-30-80	Includes PU bag only, roller base is optional
	Canister	TT30-80	φ63, 120mm single tier canister, no goblet. Suitable for YDS-30-80
	Canister	TTS30-80	φ63,276mm double-tier canister, 2 goblets included. Suitable for 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-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
	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-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.
	Roller Base	LT-50	Used for monitoring real time level and temperature for containers with 50mm neck opening, 6 grooves and 580mm 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
YDS-35-80	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
	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

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
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
	Lockable cap	SG-125	Suitable for container with 125mm and 127mm neck opening
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

❯ Key Features

- Straw and cryovial storage options
- Rugged and durable aluminium construction
- Designed to ensure no LN$_2$ spillage
- Vapor phase cryogenic storage

- Faster LN$_2$ fill times
- Lockable lids
- 3 year vacuum warranty

❯ Product Advantages

Liquid Nitrogen Absorption

Absorbent materials are used to absorb and retain LN$_2$ for safe transport. No spillover of LN$_2$ can occur even when the tank is capsized.

Stainless Steel Mesh

Special stainless steel mesh divides storage space and LN$_2$ absorbents to prevent absorbent materials from contaminating the samples.

Complete Accessories Set

All models are offered in a variety of stainless steel canisters and polycarbonate cryogenic boxes. The locking cover is optional.

❯ Accessories

Plastic Cryo Box

Canister+Rack

Rack(vertical type)

Protective Case

⬡ Technical Parameters

Model	YDH-3	YDH-6-80	YDH-10-125	YDH-10-125	YDH-15-216	YDH-25-216
Picture						
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_2 (L)	1.3	2.9	3.4	3.4	6	9
Static Evaporation* (L/Day)	0.16	0.2	0.43	0.43	1.5	0.89
Vapor Phase Static Holding Time** (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 and static holding time are theoretical values. Actual evaporation and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

** Vapor Phase Static Holding Time: the amount of days it takes for all of the LN to evaporate out after pouring liquid nitrogen into container to makeing absorbent materials fully absorb LN under standard atmospheric condition.

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. 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. 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 cryoboxes 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. 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. suitable for YDH-15-216
	Cork (216-2)	GS-216-150 (L)	Suitable for YDH-15-216
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
YDH-25-216	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-95-216
	Smart Cap	T-216	Used for monitoring real time temperature for containers with 216mm neck opening, 6 grooves and 210mm heigh cork. 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

Key Features

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

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.

Variety of Accessories
The self-pressurized models for LN₂ storage are equipped with a pressure valve, drain valve, relief valve, and a pressure gauge.

Casters
All models have four casters for better mobility and placement in different locations/areas.

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

Pressure stabilizing valve
Stabilize fluid pressure during auto filling

Large diameter vent valve
Rapid relief of over pressure
Protection of safety valve

Technical Parameters

Model	YDZ-5	YDZ-15	YDZ-30	YDZ-50	YDZ-50	YDZ-100	YDZ-100K	YDZ-150
Picture								
Performance								
Volume of LN₂ (L)	5	15	30	50	50	100		150
Static Evaporation (L/Day)	0.15	0.38	0.75	1	1	1.3		1.95
LN₂ Output (L/Min)	≥2	≥2	≥3	≥3	≥3	≥4		≥6
Dimensions								
Height (mm)	652	771	900	1009	1009	1179		1208
Outside Diameter (mm)	354	404	454	506	506	606		706
Empty Weight (kg)	19	26	38	54	54	86		107
Full Weight (kg)	23.0	38.1	62.2	94.4	94.4	166.8		228
Shipping Weight (kg)	32	37	53	63	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

Model	YDZ-200	YDZ-200K	YDZ-240K	YDZ-300	YDZ-300K	YDZ-500	YDZ-500K
Picture							
Performance							
Volume of LN₂ (L)	200		240	300		500	
Static Evaporation (L/Day)	2.4		2.9	3.3		5.5	
LN₂ 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

Model	YDZ-100/1.5 (P)	YDZ-240/1.5 (P)
Picture		
Authentication	PED	PED
Performance		
Volume of LN₂ (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	

* Static evaporation and static holding time are theoretical values. Actual evaporation and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

❯ Technical Parameters

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
Self-Pressurized Filling Tank	YDZ-100K	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-200K	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-240K	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-300K	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-320K	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-500K	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	DLZ-300 (YDZ-240K)	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 (YDZ-500K)	Digital display real time liquid nitrogen level of self pressurized tank, low power consumption battery, wireless transmission (YDZ-500K)
Float-Type Liquidometer	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

*Haier Biomedical reserves the right to change products and specifications without prior notice.