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_2 Splashproof
- Data Logging
- Hot Gas Bypass
- 5 Years Vacuum Warranty
- From 13,000 to 94,875 Cryovials

- Self-diagnostics
- Vapour Phase Storage
- Lockable Lid
- Liquid Phase Storage
- One-touch Defogging

Key Features

- Massive capacity between 13,000 to 94,875×2ml Vials
- Vapour phase storage is the only guaranteed method to prevent cross-contamination
- Vapour phase storage at -190°C
- 5-Year vacuum warranty

- One-touch defogging for easier access
- LN_2 splash proof ensures a safer operation
- Can be used to store all kinds of biological sample

Product Advantages

Optimal Use of Storage Space

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

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.
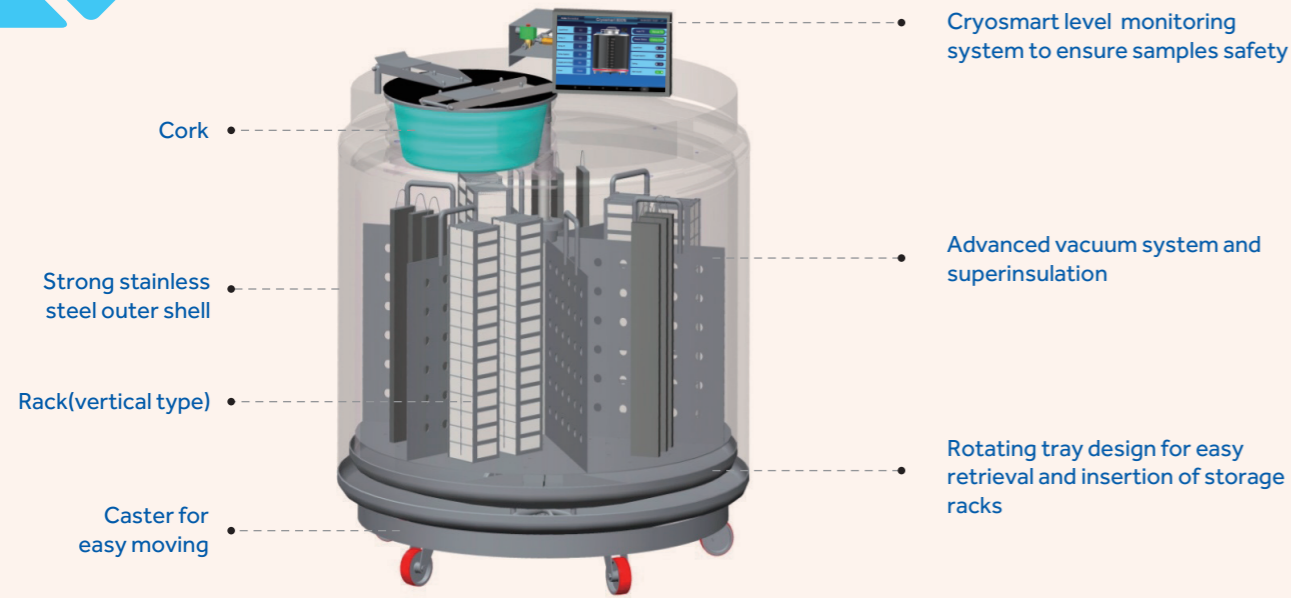
Advanced Vacuum Technology and Superinsulation Technology

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.

Liquid Nitrogen Storage Solution

Haier Biomedical Liquid Nitrogen Storage Solutions

- Cryosmart level monitoring system to ensure samples safety
- Cork
- Strong stainless steel outer shell
- Rack(vertical type)
- Caster for easy moving
- Advanced vacuum system and superinsulation
- Rotating tray design for easy retrieval and insertion of storage racks

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.
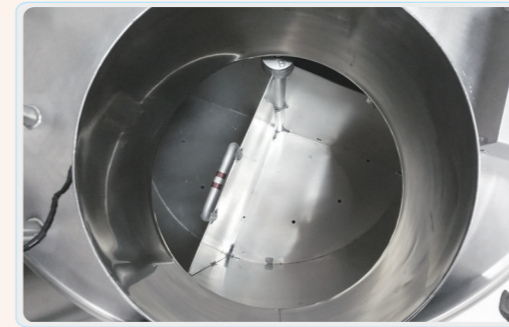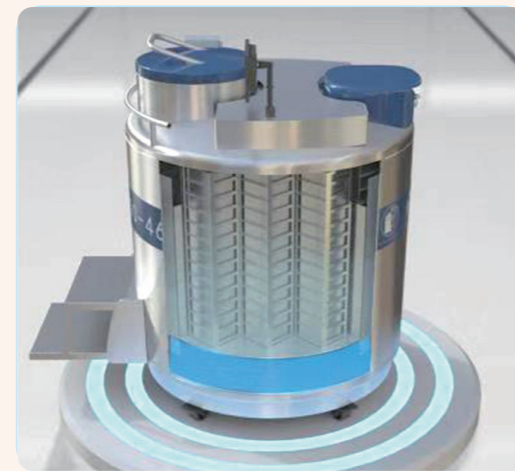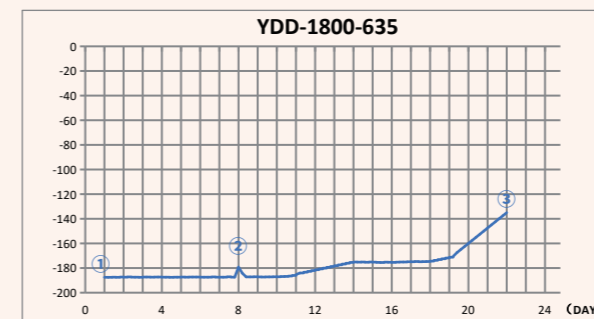
Liquid and Gas Phase

Liquid Phase
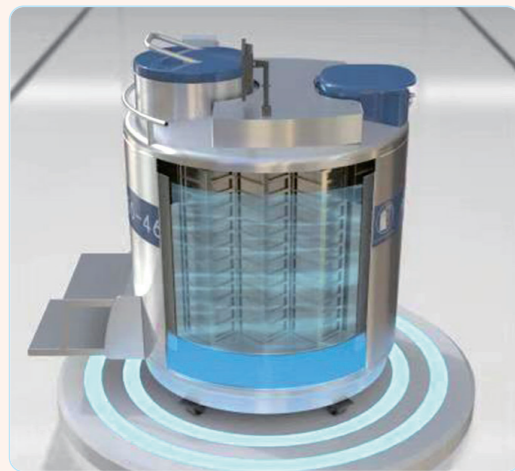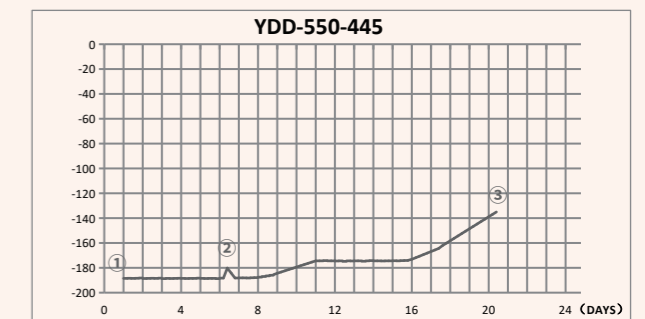
Gas Phase

Top of the Container

Liquid Feed System

Temperature Test Graph

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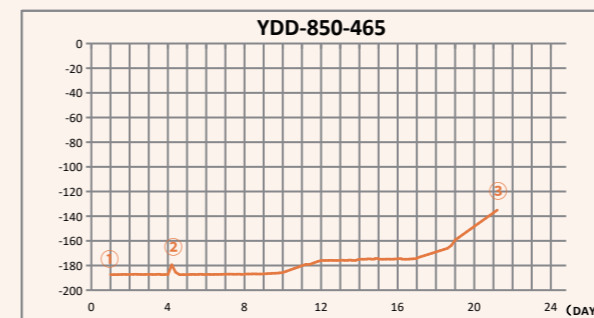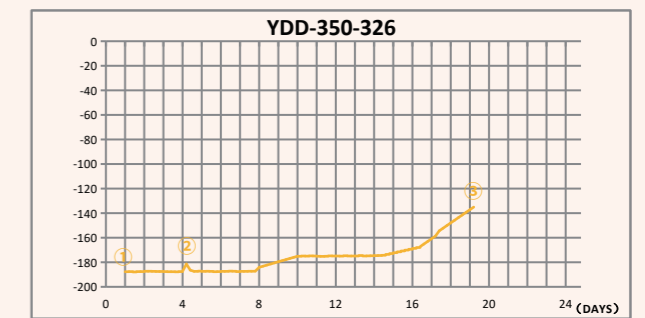
① Precooling stage when freezer filled to high level
② Lid open test, -181.4°C max
③ With no liquid nitrogen supply, the temperature maintained below -135°C for 19 days

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

Haier Biomedical Liquid Nitrogen Storage Solutions

Intelligent Protection of Life Science

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$_2$ (L)	350	370	480	587	783
Volume of LN$_2$ 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)	219	230	286	328	372
Full Weight (kg)	502	529	674	802	1005
Shipping Weight (kg)	358	438	479	520	616

Blood bag capacity

	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
25ml (791 OS/U)	1176	6	196	1372	7	196	1602	9	178	2208	6	368	2944	8	368
50ml (4R9951)	720	6	120	840	7	120	990	9	110	1392	6	232	1856	8	232
250ml (4R9953)	264	3	88	352	4	88	450	5	90	516	3	172	860	5	172
500ml (DF-200)	168	3	56	168	3	56	270	5	54	336	3	112	560	5	112
500ml (4R9955)	144	3	48	192	4	48	260	5	52	288	3	96	480	5	96
700ml (DF - 700)	96	3	32	96	3	32	180	5	36	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	22640	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	8	6	7	9
Performance					
Volume of LN$_2$ (L)	890	1014	1340	1660	1880
Volume of LN$_2$ 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

	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
25ml (791 OS/U)	2996	7	428	3852	9	428	4536	6	756	5292	7	756	7218	9	802
50ml (4R9951)	1904	7	272	2394	9	266	2808	6	468	3276	7	468	4446	9	494
250ml (4R9953)	832	4	208	1020	5	204	1062	3	354	1770	5	354	1940	5	388
500ml (DF-200)	544	4	136	670	5	134	666	3	222	888	4	222	1290	5	258
500ml (4R9955)	464	4	116	520	5	104	654	3	218	792	4	198	1090	5	218
700ml (DF - 700)	320	4	80	400	5	80	396	3	132	528	4	132	775	5	155

Liquid Nitrogen Storage Solution

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

Liquid Nitrogen Storage Solution
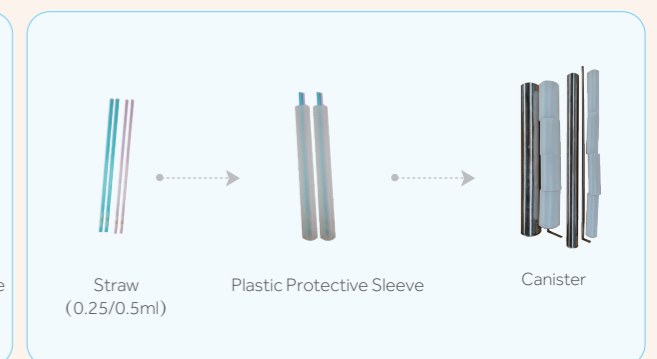
Product List

Model	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 cryosmart (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	5*5 (2.0)	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9*9 (2.0)	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10*10 (2.0)	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N201 (N4.1)	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	5*5 (2.0)	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9*9 (2.0)	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10*10 (2.0)	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N201 (N4.1)	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-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	5*5 (2.0)	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9*9 (2.0)	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10*10 (2.0)	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N201(N4.1)	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module

Product List

Model	Product	Model	Description and Accessories
YDD-550-445/ 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	5*5 (2.0)	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9*9(2.0)	Used for storing1.8ml/2ml vial (81 holes)
	Plastic cryo box	10*10(2.0)	Used for storing 1.8ml/2ml vial (interally threaded,100 holes)
	Cryosmart level monitoring system	ITC-800N201 (N4.1)	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	5*5 (2.0)	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9*9 (2.0)	Used for storing1.8ml/2ml vial (81 holes)
	Plastic cryo box	10*10 (2.0)	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N201 (N4.1)	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	5*5 (2.0)	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9*9 (2.0)	Used for storing1.8ml/2ml vial (81 holes)
	Plastic cryo box	10*10 (2.0)	Used for storing 1.8ml/2ml vial (interally threaded,100 holes)
	Cryosmart level monitoring system	ITC-800N201 (N4.1)	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module

Product List

Model	Product	Model	Description and Accessories
YDD-1000-465/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-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	5*5 (2.0)	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9*9 (2.0)	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10*10 (2.0)	Used for storing 1.8ml/2ml vial (interally threaded,100 holes)
	Cryosmart level monitoring system	ITC-800N201(N4.1)	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), 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/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	5*5 (2.0)	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9*9 (2.0)	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10*10 (2.0)	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N201 (N4.1)	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), 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/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	5*5 (2.0)	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9*9 (2.0)	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10*10 (2.0)	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N201(N4.1)	Suitable for all capacitive measurement of gas phase liquid nitrogen containers, including the liquid inlet system and excluding the wireless data transmission module

Product List

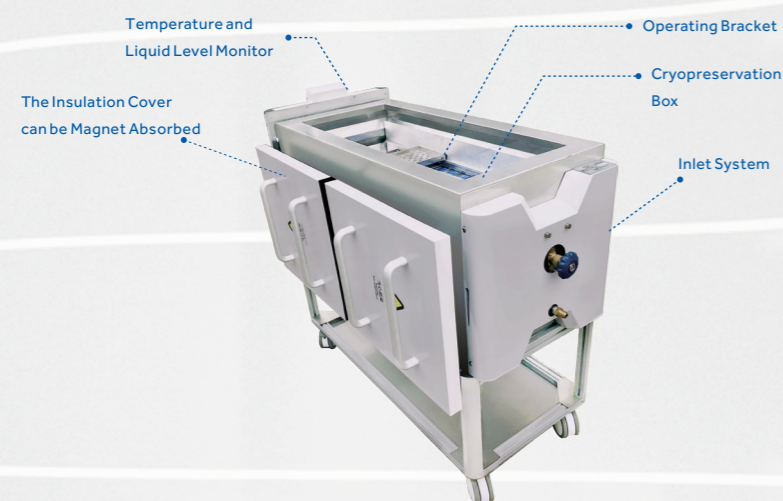| Model	Product	Model	Description and Accessories
YDD-1800-635/ PT (95K)	Biobank freezer (Smart type)	YDD-1800-635/PT	Includes vacuum isolated hose (GRG-DN10/2.0), 13 pcs of 15-tier rack (5*5), 60 pcs of 15-tier rack (9*9), 195pcs of cryo boxes (5*5) for 2ml vial, 900pcs of cryo boxes (9*9) for 2ml vial, 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-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	5*5 (2.0)	Used for storing 1.8ml/2ml vial (25 holes)
	Plastic cryo box	9*9 (2.0)	Used for storing 1.8ml/2ml vial (81 holes)
	Plastic cryo box	10*10 (2.0)	Used for storing 1.8ml/2ml vial (interally threaded, 100 holes)
	Cryosmart level monitoring system	ITC-800N201 (N4.1)	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-250-3	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-250-4	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-250-5	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-25-7	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-25-8	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-25-9	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-50-6	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-50-7	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-50-8	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-50-9	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 (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-350\YDD-550\YDD-1300

Low Temperature Transport Trolley YDC-3000H

Mobile Cryogenic Transfer Operation Platform

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.

Temperature and Liquid Level Monitor

Operating Bracket

The Insulation Cover can be Magnet Absorbed

Cryopreservation Box

Inlet System

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.

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-160°C 100mm 480min Set

User Friendly Design

Appearance Spray
The appearance of spray, not easily affected by stains.

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.

The Insulation Cover can be Magnet Absorbed
The insulation cover can be magnet absorbed to the side of vehicle, which is convenient to extract, and the space reserved at the bottom can be used to store other tools.

Technical Parameters

Product Model	Dimensions (L*W*H)(mm)	Frozen Storage Space (L*W*H)(mm)	Liquid Nitrogen Under Tray (L)	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)
YDC-3000H	1295*523*1095	900*335*163	33	65	30	105	50	3000

Haier Biomedical Liquid Nitrogen Storage Solutions

Cryovial Transfer Flask BioT Air

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 compatibilit**

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

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

It is specially equipped with liquid nitrogen adsorption layer, and under special circumstances, the container pours liquid nitrogen out, which can also ensure the low temperature environment in a certain period of time and ensure the safety of samples.

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

Haier Biomedical Liquid Nitrogen Storage Solutions

Cryovial Transfer Flask Bio-2T

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.
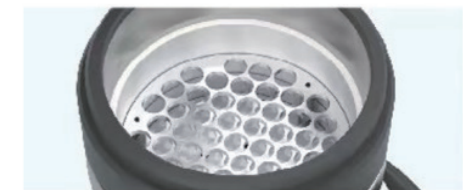
No liquid nitrogen overflow

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	265	3	2	8	6	54	-135~-196	-20~40

Haier Biomedical Liquid Nitrogen Storage Solutions

Intelligent Liquid Nitrogen Biological Container

It is suitable for the deep and low temperature storage of plasma, cell tissues and various biological samples in hospitals, laboratories, scientific research institutes, disease control centers, various databases and other places.

•Easier access

With the full opening design on the top of product and hydraulic uncapping, it saves energy and is easier for storing and taking sample.

•Brand new intelligent monitoring system

It's equipped with the brand-new intelligent monitoring system and matched with IoT module which can connect with the Haier's big data cloud platform to realize the remote data transmission. Integrating three screens, it can realize the remote alarm via APP, e-mail and other ways.

•Reduce frosting and freezing

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

Personalized Design

•Safe

24V DC voltage makes electricity safer.

Double lock and double control design, the sample storage is safer.

The liquid nitrogen filter can effectively reduce impurities and prolong the service life of the whole machine.

•Convenient

With USB interface, it supports data export.

Bottom caster, easy to move, with adjustable back brake, easy to fix and stabilize.

With larger battery capacity, it can still be used after power failure.

•Experience Feeling

Haier's family-style design is more three-dimensional and beautiful.

The advantage of operating screen position effectively reduces the influence of opening low temperature and improves the stability.

The advantage of operatinLCD touch screen, integrated design, not easy to dust.g screen position effectively reduces the influence of opening low temperature and improves the stability.

Product Parameters

Product Model	Temperature (°C)	Volume (L)	Overall dimensions (L*W*H)(mm)	Weight (KG)	I.D. (mm)
CryoBio 34Z	-196~ normal temperature	550	1410*1100*1190	400	φ1000

Storage State	2ml internal-rotation freezing tube	Number of frozen shelf layers	Number of 5*5 frozen shelves	Number of 5*5 freezer boxes	Number of 10*10 frozen storage racks	Number of 10*10 freezer boxes
Gas Phase	33550	11	10	110	28	308
Liquid Phase	42900	13	8	104	31	403

Haier Biomedical Liquid Nitrogen Storage Solutions

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.
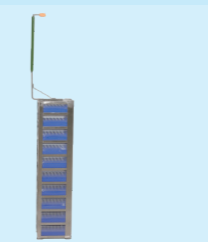
Low consumption rate and high performance stability

Automated manufacture ensures build quality and reliable vacuum which delivers stable and uniform temperature performance as well as low LN$_2$ consumption rates.

Accessories

Rack	Roller Base

Haier Biomedical Liquid Nitrogen Storage Solutions

Technical Parameters

Model	YDS-65-216-FZ	YDS-95-216-FZ	YDS-115-216-FZ	YDS-145-216-FZ	YDS-175-216-FZ
Maximum Storage Volume					
No. of Rack	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	1458	1944	2430
Layers in Rack	—	2	3	4	5
Function					
Liquid Nitrogen Volume (L)	65	95	115	145	175
Static Evapouration Rate* (L/D)	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)	39.3	42.7	43.3	49.9	54.8
Full Weight (kg)	81.5	112.3	133.5	158.9	199.5
Shipping Weight (kg)	63.8	67.9	71.2	82.1	91.3

* Static evapouration and static holding time are theoretical values. Actual evapouration 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 evapourate 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	Model	Description and Accessories
YDS-65-216	Smart liquid nitrogen container (smart series)	YDS-65-216-FZ	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-FZ	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-FZ	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-FZ	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-FZ	Includes 6 racks (10-tier), cryoboxes (9*9), lockable cap, roller base is optional
YDS-175-216	Roller Base	YSC-685-5W	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels

Medium Sized Storage Series (Square Racks)

Medium Sized Storage Series (Square Racks) features low LN$_2$ consumption and relatively small footprint for medium capacity sample storage.

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

YDS-175-216-F

YDS-140-216-F

YDS-115-216-F

YDS-95-216-F

YDS-65-216-F

Haier Biomedical Liquid Nitrogen Storage Solutions

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 evapouration loss

Product Advantages

### ULT Storage with Extremely Low LN$_2$ Evapouration Loss

Freezer racks are in the ultra-low temperature environment with extremely low LN$_2$ evapouration. Even stored in vapour 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 LN$_2$ storage tanks.
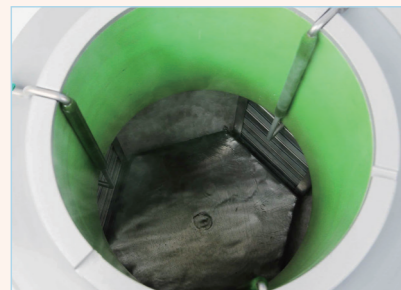
Liquid Nitrogen Temperature Detector

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-F	YDS-95-216-F	YDS-115-216-F	YDS-145-216-F	YDS-175-216-F
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	1458	1944	2430
No. of Boxes in (5ml each Rack)	-	2	3	4	5
Performance					
Volume of LN$_2$ (L)	65	95	115	145	175
Static Evapouration 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)	712	774	846	946	1060
Outer Diameter (mm)	681	681	681	681	681
Empty Weight (kg)	38.3	41.3	42.3	48.9	53.8
Full Weight (kg)	80.8	112.4	132.8	157.3	198.5
Shipping Weight (kg)	61.8	65.9	72.9	80.1	89.2

* Static evapouration and static holding time are theoretical values. Actual evapouration 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 evapourate 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	SmartCap	Rack

Haier Biomedical Liquid Nitrogen Storage Solutions

Product List

Model	Product	Model	Description and Accessories
YDS-65-216	Liquid Nitrogen container	YDS-65-216-F	Includes 6 racks (4 layers), 9*9 cryoboxes, lockable cap, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-65-216S	Includes lockable cap, no rack, no PU bag
	Rack	FTT-81-4	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-216-340-6H530	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-F (5.0)	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-F	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/YDS-25H-216
	Rack	FTT-81-2 (5.0)	Used to store 5ml cryo boxe s(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-216-370-6H580	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/Y-DH-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-F (5.0)	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-F	Includes 6 racks (6 layers), 9*9 cryoboxes, lockable cap, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-115-216S	Includes lockable cap, no rack, no PU bag
	Rack	FTT-81-6	Used for storing 9*9 cryo boxes (2ml), 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-216-450-6H660	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/Y-DH-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-F (5.0)	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-145-216-F	Includes 6 racks (6 layers), 9*9 cryoboxes, lockable cap, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-145-216S	Includes lockable cap, no rack, no PU bag
	Rack	FTT-81-8	Used for storing 9*9 cryo boxes (2ml), 6 layers in total, with 9*9 cryo boxes included, suitable for YDS-115-216
	Rack	FTT-81-4 (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-216-570-6H770	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/Y-DH-15-216/YDH-25-216
	Lockable cap	SG-216	Suitable for container with 216mm neck opening

Product List

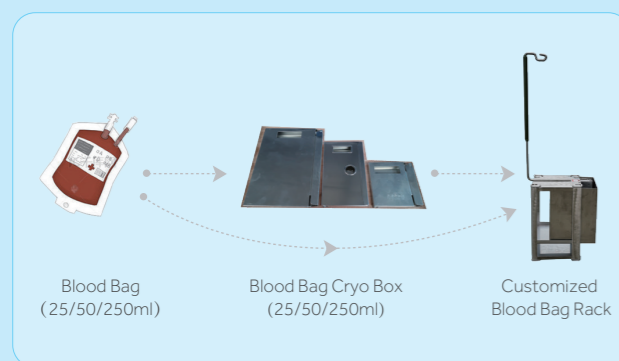| Model	Product	Model	Description and Accessories
YDS-175-216	Liquid Nitrogen container (5.0ml Vial)	YDS-175-216-F (5.0)	Includes 6 racks for 5ml, 5 layers in total, 30pcs of 5ml 9*9 cryo boxes and lockable cap included, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-175-216-F	Includes 6 racks (10 layers), 9*9 cryoboxes, lockable cap, no PU bag, roller base is optional
	Liquid Nitrogen container	YDS-175-216S	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
	Rack	FTT-81-5 (5.0)	Used for storing 9*9 cryo boxes (5ml), 5 layers in total, with 9*9 cryo boxes included, suitable for YDS-175-216
	Roller Base	YSC-685-5W	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	SmartCap	LT-216-670-6H870	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/Y-DH-15-216/YDH-25-216
	Lockable cap	SG-216	Suitable for container with 216mm neck opening
YDS-175-216	blood bag rack	XTT-25-2F14 (65)	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 (95)	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 (115)	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 (145)	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 (175)	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 (65)	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 (95)	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 (115)	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 (145)	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 (175)	Used for storing 50ml blood bag, 3 levels in total with each layer storing 14pcs of 50ml blood bag, with 42 cassettes included, suitable for YDS-175-216, 6 racks can be fitted.
	blood bag rack	XTT-250-1F8 (65)	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 (95)	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 (115)	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 (145)	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, 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.

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
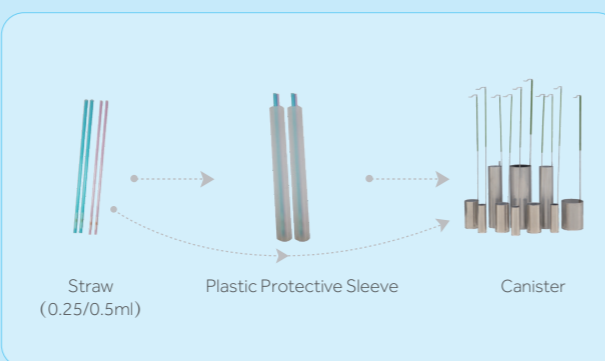
Small Sized Storage Series (Square Racks)

Widely used within many laboratories, this small-sized storage series features low LN₂ consumption and dual handle design. Stores between 100 and 1100 vials in square racks and cryo boxes.

- 5 Years Vacuum Warranty
- High Thermal Efficiency
- Lightweight
- 10 Litre to 50 Litre Capacity

- Durable
- Secure
- Super-Insulation
- Ideal for Lab Applications

Haier Biomedical Liquid Nitrogen Storage Solutions

Intelligent Protection of Life Science

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 years vacuum warranty
• Ultra-low LN$_2$ evapouration 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 evapouration 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 2ml 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-F	YDS-30-125-F	YDS-35-125-F	YDS-47-127-T37	YDS-50B-125-F
Maximum Storage Capacity					
No. of Rack	1	6	6	6	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	31.5	35.5	47	50
Static Evapouration* (L/Day)	0.42	0.35	0.36	0.36	0.45
Static Holding Time** (Day)	24	90	97	130	110
Dimensions					
Opening Diameter (mm)	125	125	125	127	125
Height (mm)	625	704	748	718	818
Outside 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 evapouration and static holding time are theoretical values. Actual evapouration 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$_2$ to evapourate 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	Model	Description and Accessories
YDS-10-125	Liquid Nitrogen container	YDS-10-125-F	Include 1 square rack with 4 layers and 5*5 cryobox; lockable cap; no PU bag
	Liquid Nitrogen container	YDS-10-125	No canister; no PU bag; no lockable cap; equiped with braces for carrying
	Rack	FTT-25-4	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	TT10H-125	Φ97,120mm single tier canister, No goblet, suitable for YDH-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-F	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-25-4	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-125-370-6H540	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

* All models with F-suffix are supplied with stainless steel racks and cryo boxes.

Liquid Nitrogen Storage Solution

Haier Biomedical Liquid Nitrogen Storage Solutions

Product List

Model	Product	Model	Description and Accessories
YDS-35-125	Liquid Nitrogen container	YDS-35-125-LYS	Includes 6 canisters (Height 276mm), lockable cap and PU bag,roller base is optional
	Liquid Nitrogen container	YDS-35-125-F	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 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."
	SmartCap	LT-125-400-6H575	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-T37	Includes 6 canisters (Height 276mm), lockable cap and PU bag,roller base is optional
	Liquid Nitrogen container	YDS-47-127-10TS	Includes 6 racks with 5 layers, 5*5 cryoboxes, lockable cap and PU bag, roller base is optional.
	Round Rack (Y98-37)	YTT-37-5	Includes PU bag only, roller base is optional
	Canister	TTS47-127-10T	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-525-5W	Φ97,120mm single tier canister, No goblet, suitable for YDS-35-125
	SmartCap	LT-127-370-10H570	Φ97,276mm double-tier canister, 2 goblets included. Suitable for YDS-35-125
	SmartCap	LT-127-400-6H570	"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	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-127-210-10	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-125	Liquid Nitrogen container	YDS-50B-125-F	Includes 6 racks with 6 layers, 5*5 cryoboxes, lockable cap and PU bag, roller base is optional.
	Liquid Nitrogen container	YDS-50B-125-LYS	"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-25-6	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."
	SmartCap	LT-125-500-6H670	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

Product Description

SmartCap is a low energy consumption 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 50mm, 80mm, 125mm, 216mm. The built-in high efficiency lithium battery can operate the device for more than two years.

SmartCap

Product Characteristics
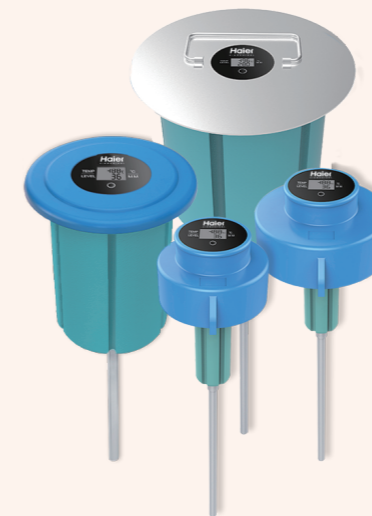
Independent, high accuracy measuring system for liquid level and temperature

Real time display of level and temperature.

Built-in high efficiency lithium battery for longevity

Liquid Nitrogen Storage Solution

Haier Biomedical Liquid Nitrogen Storage Solutions

Product List

Model	Product	Model	Description and Accessories
Smart Cap	SmartCap	LT-50-220-6H360	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
	SmartCap	LT-50-280-6H420	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
	SmartCap	LT-50-370-6H540	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
	SmartCap	LT-50-400-6H570	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
	SmartCap	LT-50-450-6H580	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
	SmartCap	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
	SmartCap	LT-80-220-6H370	Used for monitoring real time level and temperature for containers with 80mm neck opening, 6 grooves and 370mm height. suitable for YDS-6-80
	SmartCap	LT-80-280-6H430	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-80-370-6H530	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
	SmartCap	LT-80-400-6H580	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
	SmartCap	LT-80-500-6H640	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-125-370-6H540	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
	SmartCap	LT-125-400-6H575	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
	SmartCap	LT-125-500-6H670	Used for monitoring real time level and temperature for containers with 125mm neck opening, 6 grooves and 670mm height. suitable for YDS-50B-125
	SmartCap	LT-127-370-10H50	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
	SmartCap	LT-127-400-6H570	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
	SmartCap	LT-216-340-6H530	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 530mm height. suitable for YDS-65-216
	SmartCap	LT-216-340-4H540 D1	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 Crosysterm 2000
	SmartCap	LT-216-370-6H580	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 580mm height.suitable for YDS-95-216
	SmartCap	LT-216-450-6H660	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 660mm height. suitable for YDS-115-216
	SmartCap	LT-216-570-6H770	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 770mm height.suitable for YDS-145-216
	SmartCap	LT-216-670-6H870	Used for monitoring real time level and temperature for containers with 216mm neck opening, 6 grooves and 870mm height.suitable for YDS-175-216
	Data repeater	RP-3002G	SIM card to tranfer data through GPRS and WIFI; include the SIM card
	Data transfer module-WIFI	RP-300W	WIFI to transfer data; prior for client not in China
	SMS alarm service cost	SMS alarm service cost	Not recommended
	Cloud platform service cost	Cloud platform service cost	Suitable for SJ CRYO'S service, charged by quantity of container, 1 year/set

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 Years Vacuum Warranty
- Extended Hold Time

- LN2 Dispenser
- Round Canisters for Straw Storage
- Lockable
- Roller Bases Available

Haier Biomedical Liquid Nitrogen Storage Solutions

Key Features

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

• Roller bases available
• High thermal efficiency
• 5 years vacuum warranty
• Ultra-low evapouration loss

Product Advantages

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

Large-capacity models have wider necks for easy access to biological samples.
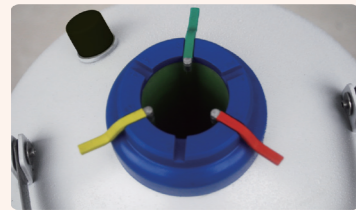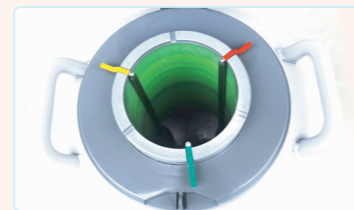
Long-term cryopreservation models have narrower necks with less heat intrusion.

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)	(0) 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 Evapouration* (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)	399	428	435	482	552	557
	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-20	YDS-30
Maximum Capacity	No. of Canister	1 (0)	6 (0)	6 (0)	6 (0)	6
	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 LN₂ (L)	10	13	15	20	30
	Static Evapouration* (L/Day)	0.43	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	623	591	672	705
	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)	6.3	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	–	–	–
	No. of Straws (Single Layer) (0.25ml each canister)	5022	11640	1788	–	–	–
	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 LN₂ (L)	30	30	35	35	35	47
	Static Evapouration* (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)	709	704	749	753	748	718
	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	276	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	54
	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 Evapouration* (L/Day)	0.2	0.2	0.2
	Static Holding Time** (Day)	101	159	179
Dimensions	Opening Diameter (mm)	50	50	50
	Height (mm)	672	705	749
	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 Evapouration* (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)	753	748	810	817
	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 evapouration and static holding time are theoretical values. Actual evapouration 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 evapourate 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.

Vials 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

Accessories

Vial

Vial cane

Canister

Product List

Model	Product	Model	Description and Accessories
YDS-2-30	Liquid Nitrogen container	YDS-2-30-YS	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-YS	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-YS	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-YS	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-YS	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-YS	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-LYS	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	Model	Description and Accessories
YDS-15	Liquid Nitrogen container	YDS-15-YS	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-LYS	Includes 6 canisters (Height 276mm), lockable cap and PU bag
	Liquid Nitrogen container	YDS-20-YS	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-LYS	Includes 6 canisters (Height 276mm), lockable cap and PU bag,roller base is optional
	Liquid Nitrogen container	YDS-30-YS	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."
	SmartCap	LT-50-370-6H540	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-LYS	Includes 6 canisters (Height 276mm), lockable cap and PU bag,roller base is optional
	Liquid Nitrogen container	YDS-30-80-YS	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."
	SmartCap	LT-80-370-6H530	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

Haier Biomedical Liquid Nitrogen Storage Solutions

Intelligent Protection of Life Science

Product List

Model	Product	Model	Description and Accessories
YDS-35	Liquid Nitrogen container	YDS-35-LYS	Includes 6 canisters (Height 276mm), lockable cap and PU bag,roller base is optional
	Liquid Nitrogen container	YDS-35-YS	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, equipped with 5 universal wheels."
	SmartCap	LT-50-450-6H580	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-LYS	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."
	SmartCap	LT-80-400-6H580	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
	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-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

Product List

Model	Product	Model	Description and Accessories
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-25-5	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."
	SmartCap	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

Haier Biomedical Liquid Nitrogen Storage Solutions

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_2 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_2 Spillage**

Key Features

- Straw and cryovial storage options
- Rugged and durable aluminium construction
- Designed to ensure no LN_2 spillage
- Vapour phase cryogenic storage
- Faster LN_2 fill times
- Lockable lids
- 3 years vacuum warranty

Product Advantages

Liquid Nitrogen Adsorption

Adsorbent 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.
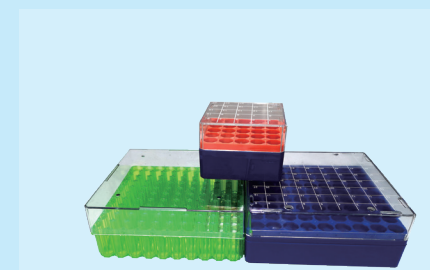
Stainless Steel Mesh

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 a variety of stainless steel canisters and polycarbonate cryogenic boxes. Locking cover is optional.

Accessories

| Plastic Cryo Box | Canister+Rack | Rack(vertical type) |