

Comprehensive Product Catalog of Cryogenic Liquid Nitrogen Storage System

-196°C Intelligent Control Management Smart IoT Cloud Connection



Your Haier Biomedical Partner

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Note: If a slight difference occurs between pictures and actual products, please refer to actual products. Our company reserves the right of final interpretation of this brochure, please contact us for any further information if required.

Company Profile

Haier Biomedical Technology (Chengdu) Co., Ltd. (hereinafter referred to as the "Company" of "Haier Biomedical") was established in 2005, beginning with the R&D, production and sales of biomedical cryogenic storage equipment. It is a provider of digital scenario-based solutions for life sciences and medical innovation, driven by IoT transformation. With the goal of creating the best user experience, the Company's principal business covers two major fields: life sciences and medical innovation. Serving a broad range of users, including hospitals, biopharmaceutical companies, universities and research institutions, centers for disease control and prevention, and blood centers, the Company provides comprehensive digital scenario-based solutions encompassing a variety of products and services, primarily for smart laboratories, digital hospitals, smart public health, and smart blood management scenarios.

Haier Biomedical Technology (Chengdu) Co., Ltd. is a controlled subsidiary of Qingdao Haier Biomedical Co., Ltd. (Stock Code: 688139). The Company possesses a dedicated R&D center and production team, and serves as a global development and manufacturing base of liquid nitrogen container products and liquid nitrogen application equipment. The Company specializes in liquid nitrogen storage systems, liquid nitrogen biological containers, self-pressurizing liquid nitrogen containers, cryogenic sample transport containers, smart caps, thermostats for the nuclear industry, cryotherapy devices, food preservation equipment, rubber hose freezing machines, automated liquid nitrogen containers, and other fields, as well as the construction of various liquid nitrogen supply system projects and the installation of supporting facilities and equipment. Those products are extensively applied in medical care, animal husbandry, scientific research, food, industry and other fields. Based on user needs, the Company supports customized requirements. The Company's products are sold to more than 160 countries and regions worldwide.

Qualifications and Honors

Relying on the professional team and rigorous management, Haier Biomedical Technology (Chengdu) Co., Ltd. builds up a global ecosystem brand for IoT-powered biosafety technology. The Company has passed the certification of ISO9001 quality management system, and ISO14000 environmental management system, and the products have obtained the EU CE certification, pressure vessel PED certification and U.S. FDA certification. In 2016, the Company successfully passed the acceptance assessment as a Level III enterprise for work safety standardization. Through many years of effort and accumulation, the Company has become a National High-Tech Enterprise holding more than 60 patents.



CryoBio Biobank Series Liquid Nitrogen Container



Brand New Frost-free Design

The unique venting structure prevents the frost formation around the neck



Automatic Refilling System

Integrating manual and automatic refilling, it makes greater convenience and less effort



Intelligent Measuring and Control Terminal

IoT monitor, information monitor and automatic alarm



Multiple Safety Protections

Fingerprint and card-based unlocking, with customizable user access permissions



User-friendly Product Interaction

Ergonomic design makes sample storage more convenient



Product Model	CryoBio 13	CryoBio 27	CryoBio 43	CryoBio 95
2ml vials (Internal thread)*	13000	27000	42900	94875
Volume of LN ₂ (L)	350	587	890	1880
Inside Neck Diameter (mm)	326	445	465	635
Height (mm)	1505	1575	1810	1950
Outside Diameter (mm)	910	1140	1240	1565
Door Width Requirements (mm)	930	1160	1300	1625
Empty Weight (kg)	290	420	567	909
Full Weight (kg)	575	895	1262	2428
Minimum Installation Height of Extractor (mm)	2550	2600	2800	3050

* This value only indicates the product's maximum storage capacity when used with internally rotating cryotubes (based on a 10×10 cryotube box). For standard orders, we will provide 9×9 cryotube boxes by default. If you require a 10×10 cryotube box to achieve the maximum storage capacity, please specify this requirement clearly when placing your order.

Biobank Series for Large Scale Storage



Visualized Data Management

Intelligent LCD large screen allows quick sample location, storage and retrieval



Intelligent Measuring and Control Terminal

It offers accurate monitoring for temperature and liquid level in real time, and supports operations on PC and APP (optional)



More Stable Container Performance

Integrating manual and automatic refilling, it makes greater convenience and less effort



Suitable for Both Gas and Liquid Phases

Samples are stored more safely when the gas-phase mode is used

Product Model	YDD-350-326/PM	YDD-370-326/PM	YDD-450-326/PT	YDD-550-445/PM	YDD-750-445/PM	YDD-850-465/PM	YDD-1000-465/PT	YDD-1300-635/PM	YDD-1600-635/PM	YDD-1800-635/PT
2ml vials (Internal thread)*	13000	15600	21000	27000	37800	42900	51000	58500	76050	94875
Volume of LN ₂ (L)	350	370	480	587	783	890	1014	1340	1660	1880
Inside Neck Diameter (mm)	326	326	326	445	445	465	465	635	635	635
Height (mm)	1263	1370	1570	1266	1486	1499	1619	1340	1534	1661
Outside Diameter (mm)	875	875	875	1104	1104	1190	1190	1565	1565	1565
Door Width Requirements (mm)	895	895	895	1124	1124	1210	1210	1585	1585	1585
Empty Weight (kg)	245	283	308	328	372	441	495	851	914	985
Full Weight (kg)	528	582	696	802	1005	1160	1314	1934	2255	2504

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Intelligent Liquid Nitrogen Biological Container



Fully-open Design

The design of fully-open top makes sample storage and retrieval more convenient



Intelligent Measuring and Control Terminal

It offers accurate monitoring for temperature and liquid level in real time, and supports operations on PC and APP (optional)



Effectively Reducing Frost and Ice Formation

Brand-new venting structure within the cover plate



Dual-Lock and Dual-Control

Safer sample storage

Product Model	2ml Vials (Internal Thread)*		Volume of LN (L)	Exterior Dimensions (W*D*H)(mm)	Inside Neck Diameter (mm)	Empty Weight (kg)	Full Weight (kg)
	Vapor Phase	Liquid Phase					
CryoBio 11Z	11000	13000	200	730×1035 ×1190	610	209	357
CryoBio 20Z	20350	24050	340	910×1170×1190	790	301.5	543
CryoBio 34Z	33550	42900	550	1100×1410×1190	1000	400	821

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Self-Pressurized Series for LN₂ Storage and Supply



Stainless Steel Structure

It features high strength while effectively reducing the evaporation loss rate



Multiple Capacity Options

10 models are available, meeting storage capacity requirements ranging from 5 L to 500 L



Performance Upgrade

Faster pressure relief and more stable pressure during automatic refilling



Digital Liquid Level Gauge

Support remote data transmission



Liquid Nitrogen Supply and Storage Series · Type P

A pressure vessel passed the EU CE (PED) certification

Product Model	YDZ-30	YDZ-50	YDZ-100 YDZ-100K	YDZ-150	YDZ-200 YDZ-200K	YDZ-240K	YDZ-300 YDZ-300K	YDZ-500K	Type P	YDZ-100/1.5	YDZ-240/1.5
Volume of LN ₂ (L)	30	50	100	150	200	240	300	500	Volume of LN ₂ (L)	100	240
Height (mm)	900	1009	1179	1208	1288	1405	1484	1607	Height (mm)	1270	1500
Outside Diameter (mm)	454	506	606	706	758	758	858	1008	Outside Diameter (mm)	606	756
Full Weight (kg)	38	54	86	107	145	159	193	273	Full Weight (kg)	80	163
Full Weight (kg)	62.2	94.4	166.8	228	307	353	435	677	Full Weight (kg)	161	360

Sample Transfer Series



Lightweight and Portable
Easy to move and carry, ensuring worry-free transportation



Temperature and Liquid Level Monitoring
Real-time monitoring and one-touch data export



Suitable for Both Gas and Liquid Phases
Samples are stored more safely when the gas-phase mode is used



Compatibility with Multiple Specifications
It can meet the requirements for sample storage of multiple specifications

Product Model	2ml Vials (Internal Thread)*	50ml Blood Bag Boxes(ea)	Dimensions (L*W*H)(mm)	Frozen Storage Space (L*W*H)(mm)	Liquid Nitrogen Under Tray (L)	Product Model	O.D. (mm)	I.D. (mm)	Depth (mm)	Height (mm)	Total Empty Weight of Tank (kg)	Liquid Nitrogen Volume (L)	Internal Freezing Tube Capacity (2ml)(pcs)*
YDC-1500H	1500	52	845×523×1095	450×335×163	16	BioT Air	156	125	190	235	2.8	2	55
YDC-3000H	3000	105	1295×523×1095	900×335×163	33	Bio-2T	156	125	190	262	3	2	54

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Dryshipper Series for Transportation (Round Canisters)



Liquid Nitrogen Adsorption Function
A liquid nitrogen absorbent is provided inside. During gas-phase storage, no liquid ammonia will spill even if the container tips over



Compartmentalized Storage
A special stainless steel mesh screen is provided inside to divide the storage space and protect sample safety



Multiple Capacity Options
5 capacities are available, meeting different transportation and storage requirements

Product Model	YDH-3	YDH-6-80	YDH-10-125	YDH-10-125	YDH-15-216	YDH-25-216
No. of 2.0 ml Cryovials*	—	—	—	100	300	500
No. of 5.0 ml Cryovials	—	—	—	50	81	162
No. of Straws (0.5ml / EA)	132	374	854	—	—	—
No. of Straws (0.25ml / EA)	298	837	1140	—	—	—
Liquid Nitrogen Volume (L)	1.3	2.9	3.4	3.4	6	9
Static Holding Time in liquid Phase(Day)	20	37	23	23	10	29
Static Holding Time in Vapor Phase(Day)	8	14	8	8	4	10
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
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

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Smart Series (Square Racks)



Smart Series (Square Racks)^{1.0}

Smart Series (Square Racks)^{2.0}



Low Energy Consumption
Advanced technology is adopted to reduce liquid ammonia consumption and offer more stable container performance



Suitable for Both Gas and Liquid Phases
Samples are stored more safely when the gas-phase mode is used



Automatic Refilling
Smart liquid nitrogen container with autorefill overcomes limitations and enables automatic refilling



Intelligent Measuring and Control Terminal
It offers accurate monitoring for temperature and liquid level in real time, and supports operations on PC and APP (optional)

Product Model	YDS-65-216	YDS-95-216	YDS-115-216	YDS-145-216	YDS-175-216
2ml Storage Vials (100/box)*	2400	3000	3600	4800	6000
Liquid Nitrogen Volume (L)	65	95	115	145	175
Neck Opening (mm)	216	216	216	216	216
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

Product Model	Volume of LN ₂ (L)	Inside Neck Diameter (mm)	Height (mm)	Outside Diameter (mm)	Empty Weight (kg)	2ml Vials (Internal Thraed)* (Maximum)*
CryoBio6S	175	216	1490	681	78	6000

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Medium Sized Storage Series (Square Racks)



Performance Upgrade
Low consumption, high strength, light weight and excellent thermal insulation



High Compatibility
Compatible with mainstream cryogenic storage box brands and suitable for blood bag storage



Multiple Capacity Options
5 capacities are available, meeting different storage requirements

Product Model	YDS-65-216	YDS-95-216	YDS-115-216	YDS-145-216	YDS-175-216
No. 2.0 ml Cryovials (100 / Box)*	2400	3000	3600	4800	6000
Volume of LN ₂ (L)	65	95	115	145	175
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

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Small Sized Storage Series (Square Racks)



Multiple Capacity Options
5 capacities are available, meeting different storage requirements



Performance Upgrade
Low consumption, high strength, light weight and excellent thermal insulation

Product Model	YDS-10-125	YDS-30-125	YDS-35-125	YDS-47-127	YDS-50B-125
1.2&2 ml Cryovials (25 per box)	100	600	750	1110	900
5 ml Cryovials (25 per box)	50	300	300	—	450
Volume of LN ₂ (L)	10	30	35	47	50
Opening Diameter (mm)	125	125	125	127	125
Height (mm)	625	725	765	740	830
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

High Capacity Series for Storage or Transport (Round Canisters)



Multiple Capacity Options
24 models are available, meeting different storage requirements



Multi-functional Use
Storage type and transport type



Ultra-Long Storage Period
Straw storage, narrow neck opening, and high thermal efficiency

Model	YDS-2-30	YDS-2-35	YDS-3	YDS-6	YDS-10	YDS-10-80	YDS-10-125	YDS-13	YDS-15	YDS-20	YDS-30
Volume of LN ₂ (L)	2	2	3	6	10	10	10	13	15	20	30
No. of Straws (Single Layer) (0.5ml each canister)	90	165	792	792	792	2244	854	—	792	792	792
No. of Straws (Single Layer) (0.25ml each canister)	204	330	1788	1788	1788	5022	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
Opening Diameter (mm)	30	35	50	50	50	80	125	50	50	50	50
Height (mm)	415	435	445	495	565	567	625	635	600	680	725
Outside Diameter (mm)	223	204	223	300	300	300	300	310	394	394	462
Empty Weight (kg)	2.8	2.6	3.1	4.8	6.1	6.2	6.3	6.3	8.5	9.5	12.9
Full Weight (kg)	4.5	4.4	6	9.9	14.5	14.7	15.1	17.3	20.5	28.1	36.6

Model	YDS-30-80	YDS-30-125	YDS-35	YDS-35-80	YDS-35-125	YDS-47-127-10
Volume of LN ₂ (L)	30	30	35	35	35	47
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
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
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

Model	YDS-20B	YDS-30B	YDS-35B	YDS-35B-80	YDS-35B-125	YDS-50B	YDS-50B-125
Volume of LN ₂ (L)	20	30	35	35	35	50	50
No. of Straws (Single Layer) (0.5ml each canister)	792	792	792	2244	5124	792	5124
No. of Straws (Single Layer) (0.25ml each canister)	1788	1788	1788	5022	11640	1788	11640
No. of Straws (Double Layer) (0.5ml each canister)	1284	1284	1284	3624	9048	1284	9048
No. of Straws (Double Layer) (0.25ml each canister)	2832	2832	2832	8460	20760	2832	20760
Opening Diameter (mm)	50	50	50	80	125	50	125
Height (mm)	680	725	765	768	765	825	830
Outside Diameter (mm)	394	462	462	462	462	462	462
Empty Weight (kg)	9.5	12.9	14.2	14.5	14.6	17.2	17.3
Full Weight (kg)	27.9	37.1	42.8	43	43.5	60.3	62

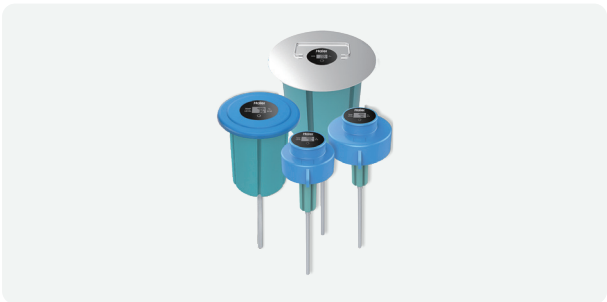
Intelligent Accessories

Cryosmart Level Monitoring System



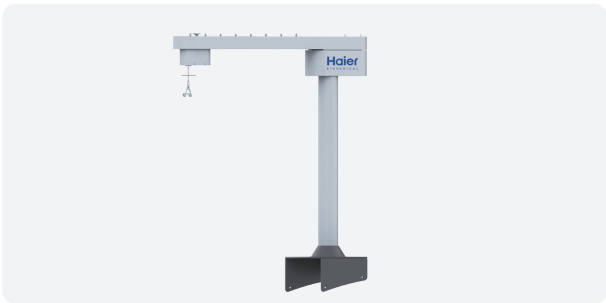
- Remote alarm, accurate and real-time monitoring for temperature and liquid level, data record
- Remote monitoring via PC and mobile APP (optional)

Smart Cap



- Accurate measuring of liquid level and temperature, remote alarm, data record and storage, multiple specifications and models

Manual & Fixed Auxiliary Lifting Device



- Convenient and labor-saving, with 340° free rotation and a laser positioning system that ensures error-free sample extraction.
- It occupies no additional space

Show Case



**BioGrad Biological Laboratory,
UK**



**TÜSEB
in Turkey**



**Some Biotechnology Companies
in Miami, Ohio, and Other Regions**



**PROTECTIA
in Argentina**



**A Leading Local Hospital
in India**



**NX Wanbishi Archives
in Japan**



**Griffith University
in Australia**



Oxford



**University
of Cambridge**



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in Vietnam**



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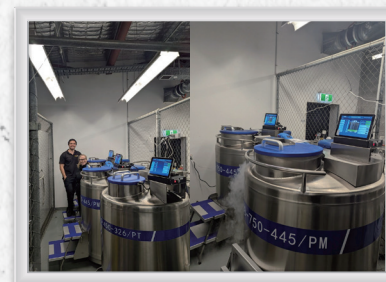
**University
of Sydney**



**Ministry
of Agriculture**



**Imperial College London
(ICL)**



Griffith University



**Centre for Childhood Cancer Research
in Australia**



**the South African National Blood Service
(SANBS)**