Haier Biomedical
Intelligent Protection of Life Science

Liquid Nitrogen Storage Systems

Medium Sized Storage Series

Key Features

- Durable aluminum construction
- Compatible with all major cryogenic box brands
- Large opening diameter and large capacity
- Ultra-low evaporation loss
- 5 year vacuum warranty
- 65 litre to 175 litre capacity
- Lockable

YDS-175-216-F

YDS-140-216-F

YDS-65-216-F

YDS-95-216-F

YDS-115-216-F

Product Description

- Ultra-low temperature liquid nitrogen environment with ultra-low evaporation loss;
- Superior insulation and ultra high vacuum technology;
- Suitable for multi-purpose use and compatible with 2ml and 5ml ampoules and 25ml\50ml blood bag storage;

Product List

Model		Description	Accessories	
			Standard (included)	Optional
Aluminium Alloy Series for Storage	YDS-65-216	65L, neck opening diameter 216mm	• Includes a locking cover SG-216, • Includes a cork with neck opening diameter of 216mm •	• 4-layer Square Canister (FTT-4-99) • Trolley YSC-M • Level Monitoring System ZTC-100A • Level Measuring Scale • SmartCap LT-216 • Relay Module SW-300 (Required for cork networking)
	YDS-65-216-F	65L, neck opening diameter 216mm	• Includes a locking cover SG-216 • Includes a cork with neck opening diameter of 216mm • Includes 6 4-layer square canisters (FTT-4-99) • Includes 9*9 cryogenic boxes (may be changed for 10*10)	• Trolley YSC-M • Level Monitoring System ZTC-100A • Level Measuring Scale • SmartCap LT-216 • Relay ModuleSW-300 (Required for cork networking)
	YDS-95-216	95L, neck opening diameter 216mm	• • Includes a locking cover SG-216 • Includes a cork with neck opening diameter of 216mm •	• 5-layer Square Canister (FTT-5-99) • Trolley YSC-M • Level Monitoring System ZTC-100A • Level Measuring Scale • SmartCap LT-216
	YDS-95-216-F	95L, neck opening diameter 216mm	• Includes a locking cover SG-216 • Includes a cork with neck opening diameter of 216mm • Includes 6 5-layer square canisters (FTT-5-99) • Includes 9*9 cryogenic boxes (may be changed for 10*10)	• Trolley YSC-M • Level Monitoring System ZTC-100A • Level Measuring Scale • SmartCap LT-216 • Relay Module SW-300 (Required for cork networking)
	YDS-115-216	115L, neck opening diameter 216mm	• Includes a locking cover SG-216 • Includes a cork with neck opening diameter of 216mm •	• 6-layer Square Canister (FTT-6-99) • Trolley YSC-M • Level Monitoring System ZTC-100A • Level Measuring Scale • SmartCap LT-216 • Relay Module SW-300 (Required for cork networking)
	YDS-115-216-F	115L, neck opening diameter 216mm	• Includes a locking cover SG-216 • Includes a cork with neck opening diameter of 216mm • Includes 6 6-layer square canisters (FTT-6-99) • Includes 9*9 cryogenic boxes (may be changed for 10*10)	• Trolley YSC-M • Level Monitoring System ZTC-100A • Level Measuring Scale • SmartCap LT-216 • Relay ModuleSW-300 (Required for cork networking)
	YDS-140-216	140L, neck opening diameter 216mm	• Includes a locking cover SG-216 • Includes a cork with neck opening diameter of 216mm	• 8-layer Square Canister (FTT-8-99) • Trolley YSC-M • Level Monitoring System ZTC-100A • Level Measuring Scale • SmartCap LT-216 • Relay Module SW-300 (Required for cork networking)
	YDS-140-216-F	140L, neck opening diameter 216mm	• Includes a locking cover SG-216 • Includes a cork with neck opening diameter of 216mm • Includes 6 8-layer square canisters (FTT-8-99) • Includes 9*9 cryogenic boxes (may be changed for 10*10)	• Trolley YSC-M • Level Monitoring System ZTC-100A • Level Measuring Scale • SmartCap LT-216 • Relay Module SW-300 (Required for cork networking)
	YDS-175-216	175L, neck opening diameter 216mm	• Includes a locking cover SG-216 • Includes a cork with neck opening diameter of 216mm	• 10-layer Square Canister (FTT-10-99) • Trolley YSC-M • Level Monitoring System ZTC-100A • Level Measuring Scale • SmartCap LT-216 • Relay Module SW-300 (Required for cork networking)
	YDS-175-216-F	175L, neck opening diameter 216mm	• Includes a locking cover SG-216 • Includes a cork with neck opening diameter of 216mm • Includes 6 10-layer square canisters (FTT-10-99) • Includes 9*9 cryogenic boxes (may be changed for 10*10)	• Trolley YSC-M • Level Monitoring System ZTC-100A • Level Measuring Scale • SmartCap LT-216 • Relay Module SW-300 (Required for cork networking)

Specifications

Model	YDS-65-216	YDS-65-216-F	YDS-95-216	YDS-95-216-F	YDS-115-216	YDS-115-216-F	YDS-140-216	YDS-140-216-F	YDS-175-216	YDS-175-216-F
Product Images										
Maximum storage capacity										
Number of holders	-	6	-	6	-	6	-	6	-	6
Number of 2.0ml cryovials (100/box)	-	2400	-	3000	-	3600	-	4800	-	6000
Number of boxes in (2ml each holder)	-	4	-	5	-	6	-	8	-	10
Number of 5.0ml cryovials (36/box)	-	648	-	864	-	1080	-	1296	-	1728
Number of boxes in (5ml each holder)	-	3	-	4	-	5	-	6	-	8
Performance										
Volume of LN2 (L)	65	65	95	95	115	115	140	140	175	175
Static Evaporation Rate* (L/day)	0.78	0.78	0.97	0.97	0.94	0.94	0.96	0.96	0.95	0.95
Duration of Normal Operation* (Day)	44	44	66	66	80	80	94	94	126	126
Dimensions										
Neck Opening Diameter (mm)	216	216	216	216	216	216	216	216	216	216
Height (mm)	712	712	774	774	846	846	946	946	1060	1060
Outer Diameter (mm)	681	681	681	681	681	681	681	681	681	681
Empty Weight (KG)	38.3	38.3	41.3	41.3	42.3	42.3	48.9	48.9	53.8	53.8
Gross Weight (KG)	60.8	64.28	65.9	70.16	69.2	75.52	80.1	87.1	89.3	96.3

* Static evaporation and static holding time is theoretical value. Actual evaporation and holding time is affected by usage, atmospheric conditions, and manufacturing tolerances.
* Duration of normal operation is for reference only to estimate container performance under normal operating conditions. Actual duration may differ due to different atmospheric conditions, usage history, manufacturing tolerances, and particular circumstances.

Accessories and Consumables

Accessories	Model	Product Images	Applicable Model	Standard Equipped or Optional	Exterior Dimensions (mm)	Gross Weight (kg)	Other Description
Square Canister	Square Canister FTT-4-99		YDS-65-216	Optional	142×144×565	0.88	Used to store 2ml cryogenic boxes (9*9); four layers in total, including 9x9 cryogenic boxes; suitable for YDS-65-216 (including plastic cryogenic boxes)
	Square Canister FTT-5-99		YDS-95-216	Optional	142×144×630	0.95	Used to store 2ml cryogenic boxes (9*9); five layers in total, including 9x9 cryogenic boxes: suitable for YDS-95-216\YDS-25H-216 (including plastic cryogenic boxes)
	Square Canister FTT-6-99		YDS-115-216	Optional	142×144×690	1.076	Standard accessories include no canister; including protective jacket and excluding locking cover; maximum 6 canisters are optional

Accessories and Consumables

Accessories	Model	Product Images	Applicable Model	Standard Equipped or Optional	Exterior Dimensions (mm)	Gross Weight (kg)	Other Description
Square Canister	Square Canister FTT-8-99		YDS-145-216	Optional	142×144×795	1.30	Used to store 2ml cryogenic boxes (9*9); 8 layers in total, including 9x9 cryogenic boxes; suitable for YDS-145-216 (including plastic cryogenic boxes)
	Square Canister FTT-10-99		YDS-175-216- F	Optional	142×144×565	2.10	10 layers in total, including 9x9 cryogenic boxes; suitable for YDS-175-216- F
Level Monitoring system	Level Monitoring System ZTC-100A		Suitable for both YDS series and YDZ series	Optional	95×155×35	0.50	Using platinum resistor to measure the temperature, and setting single-point level alarm through the temperature: with buzzer alarm function available
Stainless Steel Trolley	Trolley YSC-M		Suitable for 65-175L series of products; configured with 5 universal casters	Optional	825×830×370	16	Suitable for series products with neck opening diameter of 50mm and capacity of no less than 50L
Cork	Cork with neck opening diameter of 216mm		Suitable for tanks with opening diameter of 216	Optional	220×220×210	0.51	Suitable for neck opening diameter of 216mm
Locking Cover	Locking Cover SG-216		Suitable for locking cover with opening diameter of 216	Optional	280×280×150	1.10	Suitable for neck opening diameter of 216mm
Cryogenic Gloves	Special for low temperature, 320mm in length		Universal	Optional	320×150×10	0.08	Overall length 320mm
	Special for low temperature, 450mm in length		Universal	Optional	450×180×10	0.10	Overall length 450mm
	Special for low temperature, 720mm in length		Universal	Optional	720×200×20	0.12	Overall length720mm
Level Measuring Scale	Level Measuring Scale (600mm)		Suitable for aluminum containers below 20L (measuring length: 600mm)	Optional	60	0.12	Suitable for aluminium containers with capacity of no less than 20L (measuring length 600mm)
	Level Measuring Scale (1000mm)		Suitable for aluminum containers below 20L (measuring length: 1000mm)	Optional	100	0.18	Suitable for aluminium containers with capacity of no less than 20L (measuring length 1000mm)

Level and Temperature Monitor

Liquid level monitor tracks LN₂ liquid level and temperature continuously and reliably inside the tank and informs users to refill LN₂. It is suitable for institutes requiring long term cryopreservation.

The monitor offers real-time temperature and LN₂ liquid level display, and audible/visual alarms for high temperature, sensor failure, and low liquid level.

Different configurations available, details on request.