

# Medium Sized Storage Series (Square Racks)



## Scope of Application:

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

## Innovative Design

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

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# Medium Sized Storage Series (Square Racks)

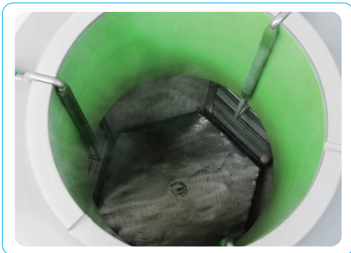
## Key Features

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

## Product Advantages

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

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



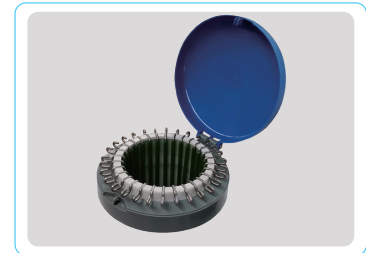
### Advanced Vacuum Technology and Superinsulation Technology

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<sub>2</sub> storage tanks.



### Liquid Nitrogen Temperature Detector

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

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

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



ZTC-100A

# Medium Sized Storage Series (Square Racks)

## Technical Parameters

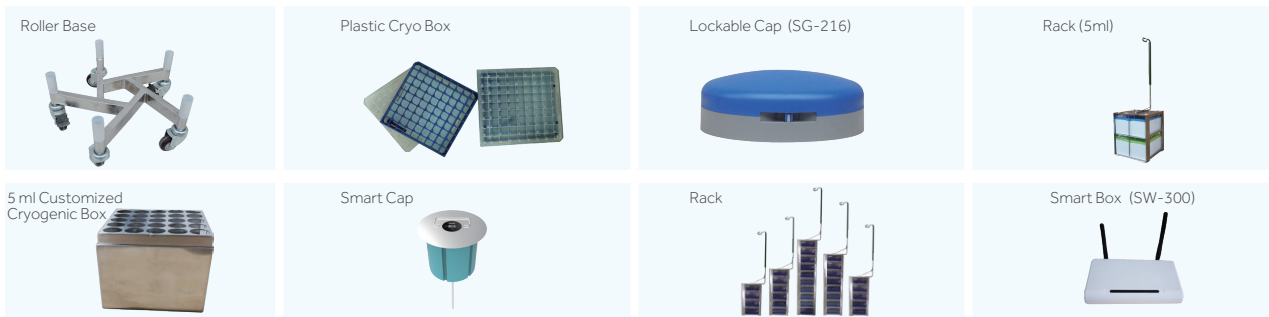


Model	YDS-65-216-F	YDS-95-216-F	YDS-115-216-F	YDS-140-216-F	YDS-175-216-F
<b>Maximum Storage Volume</b>					
No. of Rack	6	6	6	6	6
No. 2ml Cryovials (100/box)	2400	3000	3600	4800	6000
No. of Boxes in (2ml each Rack)	4	5	6	8	10
No. 5ml Cryovials (81/box)	—	972	1458	1944	2430
No. of Boxes in (5ml each Rack)	—	2	3	4	5
<b>Performance</b>					
Volume of LN2 (L)	65	95	115	145	175
Static Evaporation Rate* (L/Day)	0.78	0.90	0.90	0.94	0.94
Static Holding Time** (Day)	83	105	127	154	186
<b>Dimensions</b>					
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 evaporation and static holding time are theoretical values. Actual evaporation and holding time are affected by usage, atmospheric conditions and manufacturing tolerances.

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

## Accessories

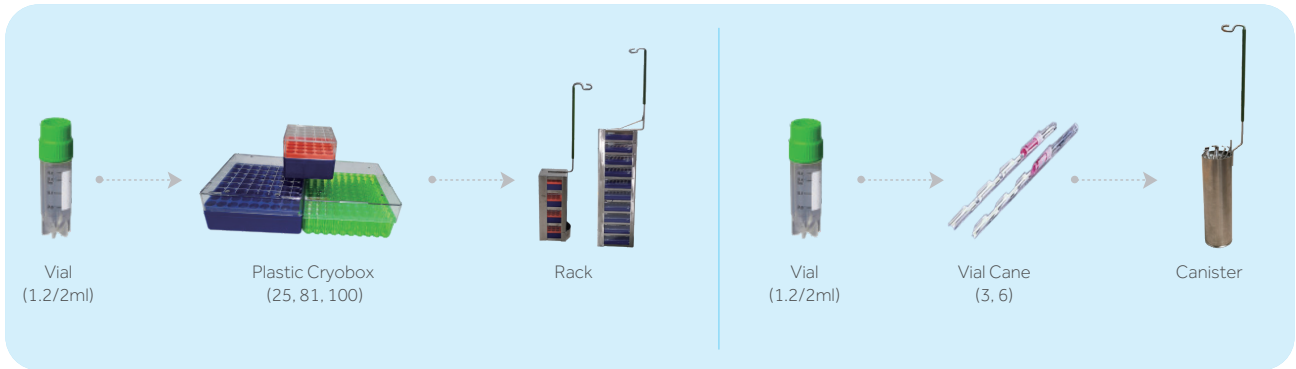


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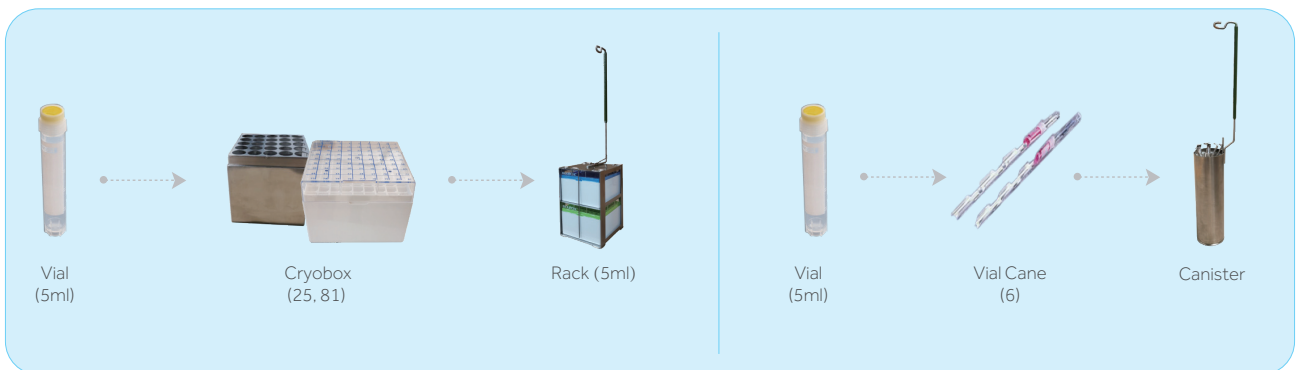
## Biological Sample Library-YDS Series



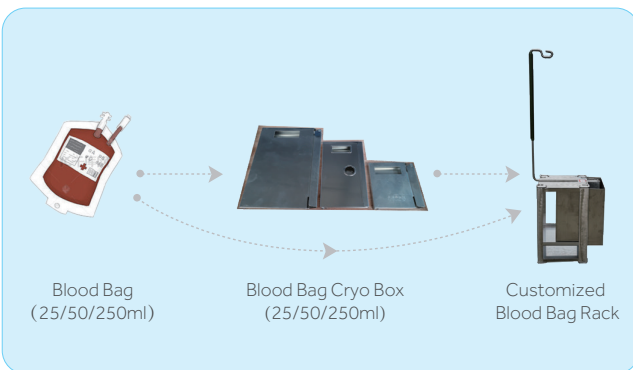
### Storage Example of 2ml Internally Threaded Vial



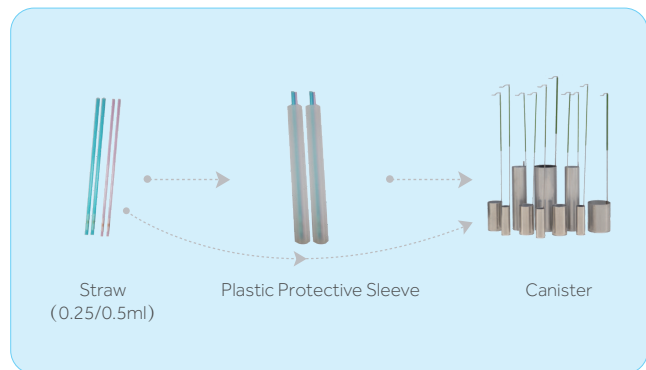
### Storage Example of Tall 5ml Cryovials



### Blood Bag Storage Example



### Straw Storage Example



# Medium Sized Storage Series (Square Racks)

## Product List



Model	Product	Model	Description and Accessories
YDC-3000H	Cryogenic transfer vehicle	YDC-3000H	Include level and temperature monitoring controller, with rechargeable battery and storage drawers
BioT Air	cryovial transfer flask	BioT Air	It can store 55pcs of 2ml cryovial
YDS-65-216	Liquid Nitrogen Container	YDS-65-216-F	Includes 6 racks (4 layers), 9*9 cryoboxes, lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-65-216	Includes lockable cap, no rack, no protective jacket
	Rack	FTT-81-4	Used to store 2ml cryo boxes (9*9), 4 layers in total, 9*9 cryo boxes included, suitable for YDS-65-216 (plastic cryo boxes included)
	Roller Base	YSC-M(2019)	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-216-340	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-65-216
	Cork (216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
YDS-95-216	Liquid Nitrogen Container	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 protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-95-216-F	Includes 6 racks (5 layers), 9*9 cryoboxes, lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-95-216	Includes lockable cap, no rack, no protective jacket
	Rack	FTT-81-5	Used to store 2ml cryo boxes (9*9), 5 layers in total, 9*9 cryo boxes included, suitable for YDS-95-216 (plastic cryo boxes included)
	Rack	FTT-81-2(5.0)	Used to store 5ml cryo boxes (9*9), 2 layers in total, 9*9 cryo boxes included, suitable for YDS-65-216\95-216 (plastic cryo boxes included)
	Roller Base	YSC-M(2019)	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-216-370	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-95-216
	Cork (216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
Lockable Cap	SG-216	Suitable for container with 216mm neck opening	
YDS-115-216	Liquid Nitrogen Container	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 protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-115-216-F	Includes 6 racks (6 layers), 9*9 cryoboxes, lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-115-216	Includes lockable cap, no rack, no protective jacket
	Rack	FTT-81-6	Used to store 2ml cryo boxes (9*9), 6 layers in total, 9*9 cryoboxes included, suitable for YDS-115-216 (plastic cryo boxes included)
	Rack	FTT-81-3(5.0)	Used to store 5ml cryo boxes (9*9), 3 layers in total, 9*9 cryoboxes included, suitable for YDS-115-216 (plastic cryo boxes included)
	Roller Base	YSC-M(2019)	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-216-450	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-115-216
	Cork (216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
Lockable Cap	SG-216	Suitable for container with 216mm neck opening	
YDS-140-216	Liquid Nitrogen Container	YDS-140-216-F (5.0)	Includes 6 racks for 5ml, 4 layers in total, 24pcs of 5ml 9*9 cryo boxes and lockable cap included, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-140-216-F	Includes 6 racks (8 layers), 9*9 cryoboxes, lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-140-216	Includes lockable cap, no rack, no protective jacket
	Rack	FTT-81-8	Used to store 2ml cryo boxes (9*9), 8 layers in total, 9*9 cryoboxes included, suitable for YDS-145-216 (plastic cryo boxes included)
	Rack	FTT-81-4(5.0)	Used to store 5ml cryo boxes (9*9), 4 layers in total, 9*9 cryo boxes included, suitable for YDS-145-216 (plastic cryo boxes included)
	Roller Base	YSC-M(2019)	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-216-570	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-145-216
	Cork (216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
Lockable Cap	SG-216	Suitable for container with 216mm neck opening	

Model	Product	Model	Description and Accessories
YDS-175-216	Liquid Nitrogen Container	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 protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-175-216-F	Includes 6 racks (10 layers), 9*9 cryoboxes, lockable cap, no protective jacket, roller base is optional
	Liquid Nitrogen Container	YDS-175-216	Includes lockable cap, no rack, no protective jacket
	Rack	FTT-81-10	Used to store 2ml cryo boxes (9*9), 10 layers in total, 9*9 cryo boxes included, suitable for YDS-175-216 (plastic cryo boxes included)
	Rack	FTT-81-5(5.0)	Used to store 5ml cryo boxes (9*9), 5 layers in total, 9*9 cryo boxes included, suitable for YDS-175-216 (plastic cryo boxes included)
	Roller Base	YSC-M(2019)	Suitable for all 65L-175L aluminium tank, equipped with 5 universal wheels
	Smart Cap	LT-216-670	Used to monitor level and temperature for containers with 216mm neck opening, data can be transmitted to cloud platform, suitable for YDS-175-216 / competitors' products
	Cork(216)	GS175-216	Suitable for all aluminium tank with neck opening 216mm
	Lockable Cap	SG-216	Suitable for container with 216mm neck opening
Other Racks	Blood Bag Rack	DCJ-250-1FT6	Used to store 250ml blood bag, 7 bags per layer, 1 layer in total, blood bag cryo boxes included, suitable for YDS-95-216 (6 racks)
	Blood Bag Rack	DCJ-250-1T30	Used to store 250ml blood bag, 1 bag per layer, 1 layer in total, blood bag cryo boxes included, suitable for YDS-95-216 (30 racks)
	Blood Bag Rack	DCJ-250-2FT6	Used to store 250ml blood bag, 7 bags per layer, 2 layers in total, blood bag cryo boxes included, suitable for YDS-175-216 (6 racks)
	Blood Bag Rack	DCJ-250-2T30	Used to store 250ml blood bag, 7 bags per layer, 2 layers in total, blood bag cryo boxes included, suitable for YDS-175-216 (6 racks)
	Blood Bag Rack	DCJ-50-1FT6	Used to store 50ml blood bag, 14 bags per layer, 1 layer in total, blood bag cryo boxes included, suitable for YDS-95-216 (6 racks)
	Blood Bag Rack	DCJ-50-2T30	Used to store 50ml blood bag, 1 bag per layer, 2 layers in total, blood bag cryo boxes included, suitable for YDS-95-216 (30 racks)
	Blood Bag Rack	DCJ-50-3T30	Used to store 50ml blood bag, 1 bag per layer, 3 layers in total, blood bag cryo boxes included, suitable for YDS-115-216 (30 racks)
	Blood Bag Rack	DCJ-50-2FT6	Used to store 50ml blood bag, 14 bags per layer, 2 layers in total, blood bag cryo boxes included, suitable for YDS-115-216 (6 racks)
	Blood Bag Rack	DCJ-50-4T30	Used to store 50ml blood bag, 1 bag per layer, 4 layers in total, blood bag cryo boxes included, suitable for YDS-145-216 (30 racks)
	Blood Bag Rack	DCJ-50-3FT6	Used to store 50ml blood bag, 14 bags per layer, 3 layers in total, blood bag cryo boxes included, suitable for YDS-175-216 (6 racks)
	Blood Bag Rack	DCJ-50-5T30	Used to store 50ml blood bag, one bag per layer, 5 layers in total, blood bag cryo boxes included, suitable for YDS-175-216 (30 racks)
	Rack (vertical type)	FDCJ-81-6(115)	Used to store 2ml cryo boxes (9*9), 6 layers in total, suitable for YDS-115-216 (plastic cryoboxes included)
	Rack (vertical type)	FDCJ-81-8(145)	Used to store 2ml cryo boxes (9*9), 8 layers in total, suitable for YDS-145-216 (plastic cryoboxes included)
	Rack (vertical type)	FDCJ-81-10(175)	Used to store 2ml cryo boxes (9*9), 10 layers in total, suitable for YDS-175-216 (plastic cryoboxes included)

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