## LN2 Containers\_



#### Features :

- · High strength and lightweight aluminum construction
- Ultra-low evaporation losses
- · Numbered index location points for canisters
- Mobile roller bases optional
- Lockable lids
- Straw storage
- LN2 pump optional

### **Important Accessories**

- 1. 600mm Liquid Level Ruler
- 2. 1000mm Liquid Level Ruler
- 3. LN2 Dispenser

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# LN2 Containers

### **Technical Parameters**

Model	230	350	650	1050	1080
	Maxin	num storage capaci	ty		
Number of Canisters (EA)	3	6	6	6	6
Number of Straws (monolayer) (0.5ML*EA)	90	792	792	792	2244
Number of Straws (monolayer) (0.25ML*EA)	204	1788	1788	1788	5022
		Performance			
Liquid Nitrogen Capacity (L)	2	3.15	6	10	10
Static Evaporation (L/day)*	0.06	0.10	0.10	0.10	0.18
Working Duration (whole day)**	21	20	38	63	35
	L	Jnit Dimensions			
Neck Opening in. (MM)	30	50	50	50	80
Overall Height in. (MM)	378	429	476	536	540
External Diameter (MM)	224	224	300	300	300
Canister External Diameter (MM)	19	38	38	38	63
Canister Height in. (MM)	120	120	120	120	120
Weight Empty Ib. (KG)	2.9	3.5	5	6.3	6.5
Weight Liquid Full* lb. (KG)	4.5	6	9.9	14.5	14.7

Model	10125	1350	1550	15125	2050	3050
	Max	timum storage c	apacity			
Number of Canisters (EA)	1	6	6	1	6	6
Number of Straws (monolayer) (0.5ML*EA)	_		792		792	792
Number of Straws (monolayer) (0.25ML*EA)	_	_	1788		1788	1788
Number of Straws (bilayer) (0.5ML*EA)	1508	1284		1508	1284	1284
Number of Straws (bilayer) (0.25ML*EA)	3324	2832		3324	2832	2832
		Performance				
Liquid Nitrogen Capacity (L)	10	13	15	15	20	30
Static Evaporation (L/day)*	0.30	0.10	0.10	0.30	0.10	0.11
Working Duration (whole day)**	21	82	94	31	126	172
		Unit Dimensior	is			
Neck Opening in. (MM)	125	50	50	125	50	50
Overall Height in. (MM)	546	610	575	585	656	655
External Diameter (MM)	300	310	394	394	394	461
Canister External Diameter (MM)	97	38	38	97	38	38
Canister Height in. (MM)	276	276	120	276	120/276	120/276
Weight Empty Ib. (KG)	6.9	6.6	8.2	10.2	11.7	12
Weight Liquid Full* lb. (KG)	15.1	17.3	20.5	22.5	28.1	36.6

3080 30125 3550 3580 35125 47127 Model storage cap Ma itv Number of Canisters (EA) 6 6 6 6 6 6 2244 5022 792 1788 2244 5022 5124 11952 5124 11952 Number of Straws (monolayer) (0.5ML\*EA) 5124 11952 Number of Straws (monolayer) (0.25ML\*EA) 3624 3624 Number of Straws (bilayer) (0.5ML\*EA) 9048 1284 9048 9048 8460 19944 8460 19944 19944 Number of Straws (bilayer) (0.25ML\*EA) 2832 Performanc Liquid Nitrogen Capacity (L) 30 30 35 35 47 35 0.18 0.28 0.19 0.29 Static Evaporation (L/day)\* Working Duration (whole day)\*\* 105 67 200 116 76 90 Unit Dimension Neck Opening in. (MM) 80 125 50 80 125 127 Overall Height in. (MM) 754 655 659 698 700 461 461 461 461 461 External Diameter (MM) 461 Canister External Diameter (MM) Canister Height in. (MM) 97 63 97 38 63 97 120/276 120/276 120/276 120/276 120/276 120/276 Weight Empty Ib. (KG) 14.2 14.3 15.4 12.4 14 14.5 Weight Liquid Full\* lb. (KG) 37 38.9 42.7 42.9 43.2 54

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Model	20250	30250	30280	302125	35250
	Maxi	mum storage capa	city		
Number of Canisters (EA)	6	6	6	6	6
Number of Straws (monolayer) (0.5ML*EA)	792	792	2244	5124	792
Number of Straws (monolayer) (0.25ML*EA)	1788	1788	5022	11952	1788
Number of Straws (bilayer) (0.5ML*EA)	1284	1284	3624	9048	1284
Number of Straws (bilayer) (0.25ML*EA)	2832	2832	8460	19944	2832
		Performance			
Liquid Nitrogen Capacity (L)	20	30	30	30	35
Static Evaporation (L/day)*	0.18	0.17	0.23	0.34	0.17
Working Duration (whole day)**	70	111	82	56	129
		Unit Dimensions			
Neck Opening in. (MM)	50	50	80	125	50
Overall Height in. (MM)	656	656	656	659	695
External Diameter (MM)	394	461	461	461	461
Canister External Diameter (MM)	38	38	63	97	38
Canister Height in. (MM)	120/276	120/276	120/276	120/276	120/276
Weight Empty Ib. (KG)	11.5	12.5	13	14.6	14.1
Weight Liquid Full* lb. (KG)	27.9	37.1	37.6	38.9	42.8

Model	35280	352125	50250	50280	502125
	Maxi	imum storage capac	ity		
Number of Canisters (EA)	6	6	6	6	6
Number of Straws (monolayer) (0.5ML*EA)	2244	5124	792	2244	5124
Number of Straws (monolayer) (0.25ML*EA)	5022	11952	1788	5022	11952
Number of Straws (bilayer) (0.5ML*EA)	3624	9048	1284	3624	9048
Number of Straws (bilayer) (0.25ML*EA)	8460	19944	2832	8460	19944
		Performance			
Liquid Nitrogen Capacity (L)	35	35	50	50	50
Static Evaporation (L/day)*	0.23	0.35	0.20	0.26	0.37
Working Duration (whole day)**	96	63	157	121	85
		Unit Dimensions			
Neck Opening in. (MM)	80	125	50	80	125
Overall Height in. (MM)	698	700	770	766	753
External Diameter (MM)	461	461	461	461	461
Canister External Diameter (MM)	63	97	38	63	97
Canister Height in. (MM)	120/276	120/276	120/276	120/276	120/276
Weight Empty Ib. (KG)	14.3	14.8	19.3	20.1	21
Weight Liquid Full* lb. (KG)	43	43.5	60.3	61.1	62

- \* Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the condition of container usage, atmospheric conditions, and manufacturing tolerances.
- ★ ★ Normal Working Duration is just an arbitrary reference, applying to estimate container performance under normal operating conditions. Actual working time may vary due to current atmospheric conditions, container usage history, manufacturing tolerances and individual patterns of usage. Divide static holding days by 1.6, and you get empirical value.

# LN2 Containers





#### **FEATURES :**

- Equip with racks and box
- Dual-lock construction ٨
- Durable aluminum construction
- Larger storage capacity, less liquid nitrogen Consumption ۵
- Compatible with all major storage box brands
- Liquid level monitoring system optional ۵
- Mobile roller bases optional

### Real-time Liquid Level Monitoring System

Liquid level monitoring system continuously monitors the temperature inside the container. The liquid level monitoring system matchs all Cryomaster models, optimal choice for long time monitoring of samples storage. It realizes reminding users to add liquid nitrogen timely too. There are Cryomonitor 1000/2000 models.



This system with real-time temperature display and noise reduction function, providing 3 types of alarms:

- 1. High/low temperature alarm
- 2. Sensor fault audible and visual alarm
- 3. Low set value audible and visual alarm

Cryomonitor 1000 liquid level monitor (left)

### Automatically Filling System

It is very useful to fill liquid nitrogen automatically for long time sample storage in vapour phase. At the same time, it prevents users from adding liquid nitrogen frequently in liquid phase. Cryomonitor 2000 constantly monitors temperature inside the container, controlling liquid inputting solenoid value open and close, supplying liquid nitrogen timely which applies to the long-term samples storage. It may be not is not very economical for liquid nitrogen usage, however it provides users with precise control of the liquid nitrogen usage and more the 8 weeks liquid nitrogen supplement capability.

Cryomonitor 2000 liquid level monitor (right)



### Ultra Low-power Consumption Liquid Level Monitoring System

Data collected by Smart Sensor, and then transferred to cloud storage by Black Box. Users only have to log on Cold Cloud to query and download data. This system is the latest monitoring product easy installation and accur ate data.







Biological samples Intelligent data collection module liquid nitrogen storage Smart Sensor (wireless sensor)

- Monitoring Temperature: +150°C- -200°C
  Sensor put into cabinet, device attached outside
  cabinet by magnetismNo external power supply
- Intelligent data transfer module Black Box -- (1+n Mode)





Data storage platform Cold Cloud -- (More safety)

## LN2 Containers





# **Technical Parameters**

Model	50600	50750	50900
		Maximum storage capacity	
Number of Racks (EA)	6	6	6
1.2&2ml Vials (25/box)	600	750	900
Number of Boxes per Rack (EA)	4	5	6
		Performance	
Liquid Nitrogen Capacity (L)	31.5	35	47
Static Evaporation (L/day)*	0.28	0.29	0.33
Capacity (L)	31.5	35	47
Working Duration (whole day)**	71	76	90
1		Unit Dimensions	
Neck Diameter (mm)	125	125	127
Overall Height (mm)	659	700	753
External Diameter (mm)	461	461	461
Weight Empty (kg)	14.3	14.5	15.4
Weight Liguid Full* (kg)	38.9	43.2	53.9

Model	502400	503000	503600	504800	506000			
	Maximum storage capacity							
Square Canisters (EA)	6	6	6	6	6			
1.2&2ML Vials (100/box)	2400	3000	3600	4800	6000			
Number of Boxes per Canister (EA)	4	5	6	8	10			
5ML Vials (36/box)	648	864	1080	1296	1728			
Number of Boxes per Canister (5ML*EA)	3	4	5	6	8			
	Performance							
Liquid Nitrogen Capacity (L)	65	95	115	140	175			
Static Evaporation (L/day)*	0.79	0.81	0.83	0.87	0.87			
Capacity (L)	55	85	105	130	165			
Working Duration (whole day)**	44	66	80	94	126			
	Unit Dimensions							
Neck Opening in. (MM)	216	216	216	216	216			
Overall Height in. (MM)	710	726	796	910	1026			
External Diameter in. (MM)	681	681	681	681	681			
Weight Empty Ib. (KG)	27.5	34.5	38.5	42.5	55			
Weight Liquid Full* Ib. (KG)	80.8	112.4	132.8	157.3	198.5			

\* Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the condition of container usage, atmospheric conditions, and manufacturing tolerances.

\*\* Normal Working Duration is an arbitrary reference, applying to estimate container performance under normal operating conditions. Actual working time may vary due to atmospheric conditions, container usage history, manufacturing tolerances and individual patterns of usage. Divide static holding days by 1.6, and you get empirical value.