CryoMaster Series

Introduction

CryoMaster Series liquid nitrogen containers combine with the advantages of low liquid nitrogen consumption and medium range storage capacity to meet unique requirements of professional customers all over the world. CryoMaster Series containers provide high efficiency of large capacity sample cryopreservation with light weight and small space occupying. The racks and lockable lids are standard to assure the safety of samples. Mainly apply to medical field/bio-bank/laboratory field.

Key Features

1. Racks and boxes included
2. Dual-lock construction
3. Durable aluminum construction
4. Larger storage capacity, less liquid nitrogen consumption
5. Compatible with main brands standard storage boxes
6. Liquid level monitoring system (optional)
7. Mobile roller bases (optional)
8. 5 year vacuum warranty

Real-time Temperature Monitor

Real-time temperature monitor continuously monitors the temperature inside the container. The real-time temperature monitor 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 two models, CryoMonitor 1000 and Smart Cap.

Cryomonitor 1000 real-time monitor
This system with real-time temperature display:
1.High/low temperature alarm
2.Sensor fault audible and visual alarm

Smart Cap

The Smart Cap is a liquid nitrogen level sensor with a highly integrated IoT module that monitors the liquid nitrogen tank level (0~650mm) and the tank mouth temperature (-200°C~150°C).
Intelligent transmission: IoT 2.4G technology, intelligent matching data optimal transmission path.
Ultra-low power consumption: The built-in power supply works independently for more than two years.
Remote transmission: Effective transmission distance is more than 200 meters, effectively ensuring signal penetration and data stability.

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 accurate data.

Biological samples liquid nitrogen storage → Intelligent data collection module Smart Sensor (wireless sensor) → Intelligent data transfer module Black Box -- (1+n Mode) → Data storage platform Cold Cloud -- (More safety)

※ Monitoring Temperature: +150℃- -200℃
※ Usage: Sensor put into cabinet, device attached outside cabinet by magnetism. No external power supply.

Technical Specification

Model		CryoMaster 100	CryoMaster 600	CryoMaster 750	CryoMaster 900
Maximum Storage Capacity					
1.2 &2ml Vials (25/box)		100	600	750	900
Number of Racks		1	6	6	6
Boxes Per Rack		4	4	5	6
25ml blood bag	25ml blood bag	——	36	36	36
	Number of Racks	——	18	18	18
	No. of Blood bags Per Rack	——	2	2	2
Performance					
LN2 Capacity (L)		10	30	35	50
Static Evaporation Rate (L/day)		0.37	0.33	0.36	0.36
Static holdover time (day)		54	90	97	115
Unit Dimensions					
Neck Opening (mm)		125	125	125	127
Overall Height (mm)		670	705	748	754
Outer Diameter (mm)		394	461	461	416
Weight Empty (kg)		9.7	12.9	14.2	15.2
Weight Full (KG)		26.1	37.5	42.9	53.74

Model		CryoMaster 2400	CryoMaster 3000	CryoMaster 3600	CryoMaster 4800	CryoMaster 6000
Maximum Storage Capacity						
1.2 &2ml Vials	1.2 &2ml Vials (100/box)	2400	3000	3600	4800	6000
	Number of Racks	6	6	6	6	6
	Boxes Per Rack	4	5	6	8	10
25ml blood bag	25ml blood bag	60	90	120	120	150
	Number of Racks	30	30	30	30	30
	No. of Blood bags Per Rack	2	2	3	4	5
50ml blood bag	50ml blood bag	60	60	90	120	150
	Number of Racks	30	30	30	30	30
	No. of Blood bags Per Rack	2	2	3	4	5
Performance						
LN2 Capacity (L)		65	95	115	140	175
Static Evaporation Rate (L/day)		0.78	0.97	0.94	0.96	0.95
Static holdover time (day)		83	98	122	146	184
Unit Dimensions						
Neck Opening (mm)		216	216	216	216	216
Overall Height (mm)		765	790	870	960	1060
Outer Diameter (mm)		681	681	681	681	681
Weight Empty (KG)		38.3	41.3	42.3	48.9	53.8
Weight Full (KG)		91.6	119.2	136.6	163.7	197.3

★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.