



CryoMaster series

Introduction

CryoMaster series liquid nitrogen container combined with the advantages of little nitrogen consumption and medium range storage capacity, meeting different needs of professionals all over the world.

This kind of container provides high efficiency of large capacity sample cryopreservation with light weight and small space occupying. All models include racks, PC cryoboxes and lockable lids.

Key Features

- 1 Equip with racks and box
- 2 Dual-lock construction
- 3 Durable aluminum construction
- 4 Larger storage capacity, less liquid nitrogen consumption
- 5 Compatible with all major storage box brands
- 6 Liquid level monitoring system optional
- 7 Mobile roller bases optional
- 8 5 year vacuum warranty



Real-time Liquid Level Monitoring System

Liquid level monitoring system continuously monitors the temperature inside the container. The liquid level monitoring system matches 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.



Cryomonitor 1000 liquid level monitor (left)

This system with real-time temperature display:

1. High/low temperature alarm
2. Sensor fault audible and visual alarm



Cryomonitor 2000 Automatically Filling System

It is very useful to fill liquid nitrogen automatically for long time sample storage. Cryomonitor 2000 constantly monitors temperature inside the container, controlling liquid filling solenoid valve open and close, supplying liquid nitrogen timely.

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°C~ -200°C
Usage: Sensor put into cabinet, device attached outside cabinet by magnetism. No external power supply.

Technical Parameters

| Model | CryoMaster 75 | CryoMaster 100 | CryoMaster 125 | CryoMaster 600 | CryoMaster 750 | CryoMaster 900 |
|---------------------------------|----------------------------|----------------|----------------|----------------|----------------|----------------|
| Maximum Storage Capacity | | | | | | |
| 1.2 & 2ml Vials (25/box) | 75 | 100 | 125 | 600 | 750 | 900 |
| Number of Racks | 1 | 1 | 1 | 6 | 6 | 6 |
| Boxes Per Rack | 3 | 4 | 5 | 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) | 15 | 20 | 25 | 30 | 35 | 47 |
| Static Evaporation Rate (L/day) | 0.36 | 0.37 | 0.37 | 0.33 | 0.36 | 0.36 |
| Static holdover time (day) | 42 | 54 | 67 | 90 | 97 | 115 |
| Dimensions | | | | | | |
| Neck Opening (mm) | 125 | 125 | 125 | 125 | 125 | 127 |
| Overall Height (mm) | 589 | 670 | 700 | 705 | 748 | 754 |
| Outer Diameter (mm) | 394 | 394 | 394 | 461 | 461 | 416 |
| Weight Empty (kg) | 8.5 | 9.7 | 10.2 | 12.9 | 14.2 | 15.2 |
| Weight Full (KG) | 20.8 | 26.1 | 30.7 | 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 | 120 | 120 | 150 |
| | Number of Racks | | 30 | 30 | 30 | 30 |
| | No. of Blood bags Per Rack | | 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 | |
| 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.