

ISOTHERMAL

LIQUID NITROGEN VAPOR STORAGE SYSTEMS

9.4 in LID TEMP.-190°C 5in HIGH SET 10in





CBS "ISOTHERMAL" liquid nitrogen vapor storage systems allow frozen sample storage at liquid nitrogen temperatures without liquid nitrogen contact. This innovative design provides storage temperatures in the -190 degree C range with

absolutely no liquid nitrogen in the sample storage space. The PATENTED system totally eliminates the need to submerge any type of sample in liquid nitrogen. Each vapor storage system includes the advanced 2300 auto-fill/ monitoring control to provide security and ease of operation. Four vapor storage systems are available, with sample storage capacities from 9,100 to 45,000, 2ml vials or 434 to 2,400 blood bags. An extensive selection of inventory racks or bag canisters and frames are available to complete the system. Custom configurations can also be designed to meet any requirements.

ISOTHERMAL VAPOR STORAGE SYSTEM FEATURES:

- Store samples at liquid nitrogen temperatures with no liquid nitrogen contact.
- Same internal usable space as existing liquid nitrogen freezers – no lost storage space.
- Eliminates possibility of sample cross contamination.
- Standard with the advanced 2300 auto-fill/monitoring system.
- Accommodates all standard rack systems.
- Added user safety eliminating contact or splashing of liquid nitrogen.
- Increased interior visibility.
- Minimal interior temperature gradient.
- Round space saving design.
- Stainless steel vessel.
- Castor mounted.
- Advanced lid gasket design.
- Counter balanced lockable lid
- Annular fill and sensor tubes.





Series 2300 Auto-fill/Monitor System

2300 FRONT PANEL DISPLAY

- Four Line LCD Readout
- Liquid Level Inches/Centimeters
- Temperature Display Fahrenheit/Centigrade
- System Status
- Start/Stop Fill
- Report

2300 FEATURES

- RS 485 Communication Port
- Printer Port
- Alarm Remote Relay
- Memory Stores All Functions and Alarms, Time and Date Stamped, with Download to Printer or Computer
- Key Lock Power and Programming
- Self Diagnostic Power Up
- Warm Gas By-Pass
- System Validation with Print Out
- Programmable Fill Timer Allows Pre-Set Fill Cycles by Date and Time
- Programmable Freezer Identification
- Programmable Temperature Report
- Programmable Report Print Out
- Cryomonitor Software for Freezer Function and Alarm Download

2300 ALARMS

- Visual, Audible and Remote
- Low Level
- High Level
- Temperature
- Temperature Sensor
- LN₂ Source/Supply
- Fill Valve/By-Pass Valve Failure
- By-Pass Sensor
- Remote Power Loss





WARRANTY:

3 years - vacuum/electronics

POWER REQUIREMENTS:

120 vac/220 vac 50/60Hz 24 Volt DC

REMOTE ALARM CONTACT:

Dry contact Normally open or normally closed

Isothermal Specifications

Model	V1500	V3000	V5000	V5000EH
Liquid Nitrogen Capacity (Liters)	30	70	93	140
Static Evaporation Rate (Liters/Day)	5	9	11	11
Static Holding Time (Days)	6	8	8	12
External Dimensions:				
Width (in/mm)	26/660	37/939	47/1219	47/1219
Depth (in/mm)	37/939	48/1219	54/1371	54/1371
Height (in/mm)	45/1143	47.5/1206	52/1320	58/1473
Usable Interior Height (in/mm)	29/736	29/736	29/736	34/864
Usable Interior Diameter (in/mm)	21/534	31/787	40/1016	40/1016
Weight Empty (lbs/kg)	327/148	600/272	936/425	997/453
Weight Full (lbs/kg)	383/174	720/327	1100/500	1247/566
Max. Vial Capacity (2ml)	9100	22100	40300	46500
Max. Blood Bag Capacity (50ml)	434	1120	1936	2208

Inventory Control Racking Systems



Racks, Boxes And Box Dividers For All Types Of Vial And Tube Storage.



Canisters (Cassettes) And Frames For Bone Marrow, Cord Blood, And Stem Cell Storage.

Freezer Accessories

- Temperature Chart Recorder
- Cryo Gloves

- LN₂ Transfer HoseLN₂ Gas By-Pass System
- "T" Valve Assembly
- Transfer Hose "Y" Connection
- Supply Tank Switching System
- LN₂ Level Stick





