



Complete Solution For Biobanking

Construction and Intelligent Management For Biobanking

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 Biobank

 Construction and Intelligent Management For Biobanking

Biobank



Biosample library is also called Bio Bank (Biobank), mainly refers to standardized collection, processing, storage and application of health, disease organisms of biological macromolecules, cells, tissues and organs and other samples, as well as related to these biological samples of clinical, pathological, therapeutic, follow-up, informed consent and other information and quality control, information management and application systems. The Biological sample library has the mission of protecting precious resources in the field of life sciences and precision medical research, and has become the key resource and foundation to support the rapid development of precision medicine.

CryoKING, a brand by Biologix, is specialized in research and development, production and sales. CryoKING strives to offer excellent and complete biobanking solutions to global biobanks, and to promote the rapid growth of life science.

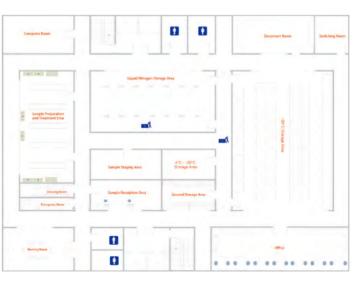
CryoKING products focus and concentrate on standardization, formalization and digitalization of biobank. Its advantage is based on upstream industry, research and market integration, covering the downstream industry to offer complete and one-stop solution for modern biobank. Its overall technology is on the top level in this industry. With the professional design, advanced techniques, safe and efficient management, CryoKING covers every phase of biobanking and offers complete and one-stop service for biobanking products.



Biologix has professional team from life science, automation and software developing field, in order to offer safe, professional and scientific biobank construction plan. Biobank design is conducted according to international relevant standards.







Biobank Design and Infrastructure Solutions

Biobank construction is comprehensive and systemic engineering which is demanding for the specialty of the subject, normative and practical operation of the standard.

Large Scale Biobank

Small Scale Biobank

Medium Scale Biobank





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Biobank Infrastructure of a Hospital - Facilities

System	No.	Components	Specification	Quantity	Unit
	1		Wires, cables and lights	1	Set
	2	Biobank Maintenance	Glass curtain wall reconstruction and glass door	1	Set
Infrastructure	3		Windows and ceiling reconstruction and wall painting	1	Set
	4	Furniture	Work Platform Tables and chairs(for computer and controlled rate freezer)	1	Set
	1	Liquid Nitrogen Tank of Vapor Phase	Equipped with: temperature display and temperature alarm, liquid level display and liquid level alarm, booster cover, rotating liner, automatic filling, anti- overflow, automatic exhaust, automatic fog-removal, remote real-time monitor Application: Long-term storage, anti cross contamination, guaranteed sample activity	1	
	2	Liquid Nitrogen Filling Tank of Self-pressurization	240L Liquid nitrogen filling tank of self-pressurization Application: Automatic filling liquid nitrogen for liquid nitrogen tank of vapor phase	2	
	3	Controlled Rate Freezer	Equipped with: One controlled rate freezer mainframe, one cryogenic vial rack, one spare solenoid valve, one liquid nitrogen filling tank of self-pressurization Use for conventional freezing to ensure sample activity	1	Set
Equipments	4	Dry Shipper Tank for Samples	Equipped with: Dry shipper liquid nitrogen tank, cryogenic box racks Application: Transmit samples to biobank from theatre	1	
	5	Oxygen Content Monitoring System and Ventilation System	Oxygen content monitoring system. Ventilation system are connected with oxygen content monitoring system, and when the oxygen content is below 19%, fans start to work.	1	Set
	6	-86 C Ultra-low Temperature Freezer	Temperature control system of touch screen, platinum resistor temperature sensor, LCD display screen for temperature, controlling precision is 1 °C Sound and light alarm, temperature alarm. Password protection, USB data export, automatically records data every one minute. The computer can display temperature curve and data.	2	
	7	Handheld Scanners	CryoKING scanners can scan 2D barcodes and 1D barcodes; scan Biologix 2D barcoded cryogenic vials.	1	
	8	Laptop Scanners	Scanning software can be updated for free, no user restrictions. Scanner holder for which 2 Cryogenic boxes can be scanned.	1	
	1	Biobanking Management	Storage capacity setting, biobanking management, approval, warn, print, sample export and import, and sample report.	1	
	1	Software	Quality control, follow-up, HIS/LIS connection, temperature control and management, can be customized.	1	
Software	2	Biobanking Monitoring	Short message query and alarm	1	Co+
	2	System and Remote Alarming System	Display liquid nitrogen tank status, temperature, humidity and oxygen content, different colors for normal and alarming status	1	Set
	3	Server	4 core 3.0G processor, memory larger than 8G, 2T hard disk	1	Set
	1	Stainless Steel Racks for Liquid Nitrogen Tanks	1x14, 304 steel, stamping form, LxWxH: 140x140x786mm	24	
Supplies	2	Stainless Steel Racks for Ultra-low Freezers	304 steel, drawer type, can be oriented, LxWxH: 700x1400x300mm, 5 boxes per drawer, 5 drawer in total	40	
	3	2D Barcoded Cryogenic Vials and Boxes	1.5ml 2D barcoded cryogenic vials, multi codes on one vial, 100 vials per box, sterile and enzyme free	1336	Box
Biobank Safety	1	Safety Precaution and Emergency Equipment	Cryogenic glove, protective glasses and protective apron portable oxygen analyzer. Oxygen mask and emergency oxygen cylinder	1	Set

With the rapid growth of life science and medicine, various types of scaled biobanks have been built. High efficient and standard preprocessing, the primary sector of dispensing and storing samples, is demanded.

Sample Pretreatment and Preprocessing

Sample Pretreatment and Preprocessing 7 | Construction and Intelligent Management For Biobanking|

Strict Biobanking operating procedures are demanded: Sample collection \rightarrow Sample pretreatment \rightarrow Put samples into cryogenic vials \rightarrow Scan labels and record information \rightarrow Put cryogenic vials into cryogenic boxes \rightarrow Scan cryogenic boxes and record information \rightarrow Put cryogenic boxes into racks \rightarrow Put racks into freezers or liquid nitrogen tanks \rightarrow Input storage path information \rightarrow Samples are stored into freezers or liquid nitrogen tanks with strict and professional operation. With the rapid growth of biobanks, Biologix will never stop in research and development of biobanking solutions.

★ Multi Coding: Safe, Advanced, High Efficient

In order to make scientific research convenient and guarantee the uniqueness of scientific research achievements, Biologix launched the new concept "Multi Coding" to strengthen information security.

What is "Multi Coding"?

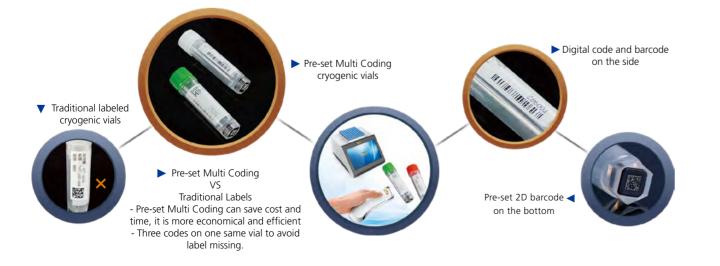
Bottom 2D barcode, side barcode and human readable numbers are all applied on the same vial to realize the identification of samples in multi ways.

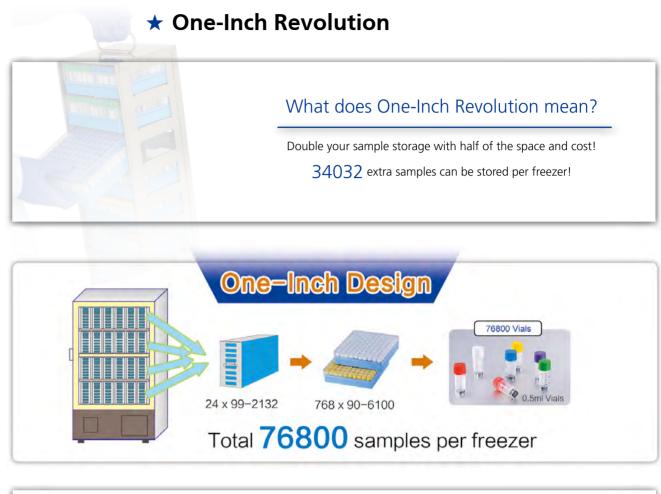
Why we need "Multi Coding"?

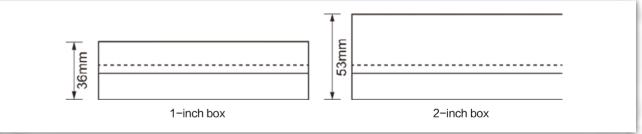
The problems such as label missing, preset barcode damaging, cause data missing and incalculable loss to science research.

What are the advantages of "Multi Coding"?

Multi Coding Identification effectively reduces the sample damage caused by label missing or barcode damaging, and offers different choices to meet different needs of the laboratory situation. CryoKING "Multi Coding Identification" makes research work more secure, efficient and convenient.







10×10(100- well)

23% more samples can be stored compared with $9 \times 9(81 - well)$ cryogenic box



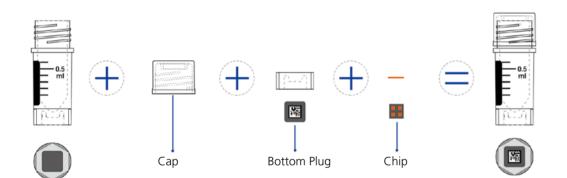
RFID Chip Storage Technology

It integrates the advantages of radio frequency technology, and can automatically collect and identify information on electronic tags in sample collection and management.

• High efficiency of identification: radio frequency technology to read information directly without touching, defrosting or defogging; reduces sample residence time at room temperature.

• Precise orientation: pre-set RFID chip at the bottom of vials can encrypt data; laser etched barcode at the bottom of 2D barcoded cryogenic vials.

 \diamond Ultra-low temperature storage: can be stored in liquid nitrogen at -196 $^\circ$ C .





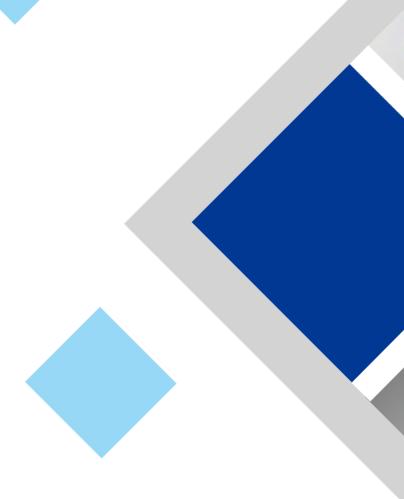
Automated Product Series of SBS Standard

Biologix automatic product series of SBS standard is in accordance with international standard sizes. It has advantages of high automation, standardization and scalability to increase the efficiency of biobanking information management.

Traceability: 2D barcodes on 96-well format cryogenic vials are easy to be read, even in harsh conditions; three barcodes on the side of SBS format rack, and 2D barcode at the bottom; information of cryogenic vials and racks can be scanned and read at one time.

Safety: simple yet powerful mechanical locking function, slide the buttons on both sides to unlock; laser etched 2D barcodes, resistant to DMSO and other organic solvents;

Superior compatibility: SBS format rack fits 96-well format cryogenic vials perfectly for automatic operations.







Cryogenic Boxes

- ◆ Complete cryogenic box line to meet biobanking needs.
- Cardboard, PP, PC are available for storage at ultra-low temperature and liquid nitrogen.
- ◆ 1in, 2in, 3in, 3.75in are all available to fit various cryogenic vials.
- ◆ 25-well, 81-well and 100-well boxes are available for different storage space.

• Separated lid design or hinged lid design are available, alphanumeric labeling enables quick and easy identification.

Cryogenic Vials

Under concepts of "One-Inch Revolution" and "Multi Coding", Biologix offers screw cap microtubes, cryogenic vials, cryogenic vials with multi codes in various capacities, available for storage in ultra-low temperature system and liquid nitrogen system.

Cryogenic vials (not including 2ml & 5ml vials) and screw cap microtubes are all designed with screw thread and sealing rings, available to be stored at ultra-low temperature.

◆ 2ml cryogenic vials are available with either internal or external screw threads, and 5ml cryogenic vials are external threads screw. For external thread vials, no sealing rings. Freezable to -196°C. Six colors for caps.

◆ 2D barcoded cryogenic vials are available with pre-set barcodes or multi codes which can be customized. Can be stored in vapor phase of liquid nitrogen.



-1.5

-1.0

1.5

Sample Pretreatment and Preprocessing 1 12 | Construction and Intelligent Management For Biobanking|

Various Styles to **Meet Different Needs**

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BIOLOGIX

BIOLOGIX

BIOLOGIX

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Cryogenic Racks

Various designs

• Sliding drawer racks, side access drawer racks, frame type racks, vertical type racks are available for freezers and liquid nitrogen system

◆ Made of corrosion-resistant stainless steel or aluminium, and fit different cryogenic boxes

Can be customized





for general users.

Biobanking Storage System

With the trend of global information, big data, biobank and precision medicine are recognized by all countries. In the future, the quantity of samples to be stored will increase geometrically based on the present quantity of billions. Safe low-temperature storage and traceable sample information promote the rapid development of life science and medical industry. Therefore, the safe storage and efficient management become the most urgent

-86°C Ultra Low Temperature Freezers

Safety System

Counterlow heater and received and the service of t Spen and efficient temperature control spen to reduce energy consumption to a half. ◆ Audible and visual alarm: High or low temperature alarm, Power failure alarm, Low battery alarm, Door open alarm, Filter blocking alarm, System failure alarm

> ◆ Keyboard lock and password protected configuration page, delayed start and safe stop interval between restart and being terminated

Intelligent Temperature Control

◆ 7inch touch screen controller

five Advantages

◆ Microprocessor-based temperature controller, -10°C~-86°C adjustable

Imported famous completes split evaporator.

Refrigeration System

◆ Imported famous brand compressor, fan electromotor with Germany EBM

◆ Unique refrigeration circulation and unipolar compressor oil-lubricated technology

♦ China Patent technology of mixture refrigerant, specially single stage refrigeration design

Operator

◆ Stainless steel interior, outer is painted steel panel, 4 units casters for easy handing ◆ Front opening lockable door with new ingenious handle, easy open and close.

- ♦ Vacuum release port
- seal

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Operator Friendly Design

◆ Foaming insulation doors in two layers of patented designs for good heat preservation.

◆ With USB store functions

 \diamond Optional: Chart recorder, CO₂ backup system, storage racks or boxes, remote alarm system

Friendly Design

◆ Adjustable stainless steel shelves with inner insulation doors, double silicon gasket

Biobank Liquid Nitrogen Storage Products

- ◆ Available for vapor and liquid phase
- ◆ Available for different capacities
- ◆ Stable temperature control
- ◆ Advanced temperature monitoring system, liquid level monitoring system and alarming system
- ◆ Automatic liquid nitrogen filling system
- ◆ The microprocessor system keeps data and information forever
- Demist button
- Special design for convenient operation
- ◆ Lockable lid to ensure the safety of samples
- CE certified



High-density of Sample Storage

Store more samples compared with traditional containers. Reduce storage cost.

Uniform Temperature

Special stainless steel vacuum design keeps temperature uniform.

Stable Temperature

Innovative design of neck and lid reduces evaporation. After opening the container, temperature remains below

-150 °C within 48 hours.

Advanced Temperature **Controlling System**

Can display highest and lowest temperatures, tolerance: ±1°C. Users can set alarm according to requirements. Mute temperature alarm set is available.

Auto Liquid Nitrogen Filling System and Liquid Level Monitoring System

Fill liquid nitrogen accurately. The touch screen can display temperatures of different components.

Hot Gas Bypass

Biobanking Storage System 18 17 | Construction and Intelligent Management For Biobanking|

Only the low-temperature liquid nitrogen can be filled.

Operator Friendly Designs

Designs of stainless steel operation platform, integral foldable steps and inner rotating tray are convenient for operation.

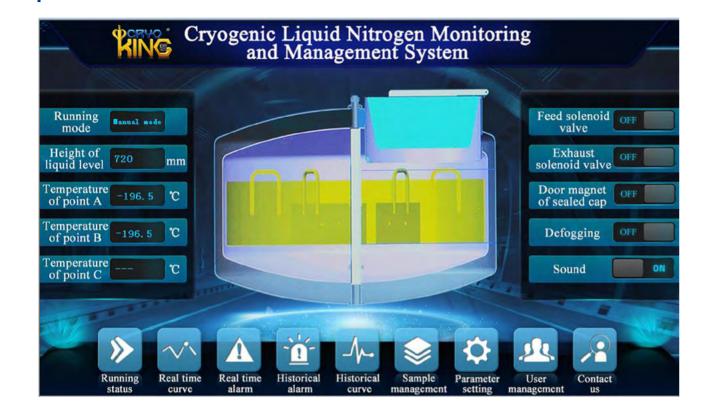
Biobanking Storage System

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Intelligent Monitoring System--CKN-SU2700





- ◆ Automatic filling of liquid nitrogen
- Anti-splash of liquid nitrogen
- Hot gas bypass
- Platinum resistor temperature sensor
- Liquid level sensor
- Automatic records of liquid level, temperature and others
- ♦ Local monitor center
- Cloud-monitoring management center
- ◆ Kinds of fault alarms and self-adaptive function
- Message remote alarm
- Operation authority setting
- Operation/alarm setting
- Audible and visual alarm setting
- Back-up power and UPS power





Biobanking Information Management System

Biobanking information management system is designed to integrate data from various research studies, store and track biospecimens, and it is the essential part in the complete biobanking solutions. Based on the deep integration of hardware and software, it indentifies biospecimens efficiently, and provides high degree of data security and confidentiality, We can supply designed system with your biobanking needs.

Biobanking Intelligent Identification System

With the rapid growth of biobank, many scientific researchers need to rapidly and efficiently identify, store and track biospecimen data. CryoKING biobanking identification system is your best choice.



Efficient



interruption of frozen fog

CryoKING Handheld Infrared Scanner for Individual Vial, 1st Generation

Can read both 1D barcodes and 2D barcodes Infrared identification technique for to read rapidly Can be equipped with professional display software

CryoKING Maestro Laptop Scanner for Entire Box of Vials, 2nd Generation

and entire box of vials rapidly

CryoKING Adept Handheld Scanner for Individual Vials, 2nd Generation

Can read both 1D barcodes and 2D barcodes Wireless technique, infrared identification, can be connected with various electronic devices without data line Imported American barcode scanning module Equipped with professional scanning software



Visit www.BiologixGroup.com and www.cryoKING.com for more information







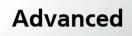






After years of development, Biologix identification instruments now include handheld scanners (for individual vial) and laptop scanners (for entire box of vials), and integrate the optical and infrared techniques. It features intensivism and modularization.





CryoKING Laptop Scanner for Entire Box of Vials, 1st Generation

Advanced image identification technique; accurately scan without the

Can scan an entire box of 200 vials in 5 seconds

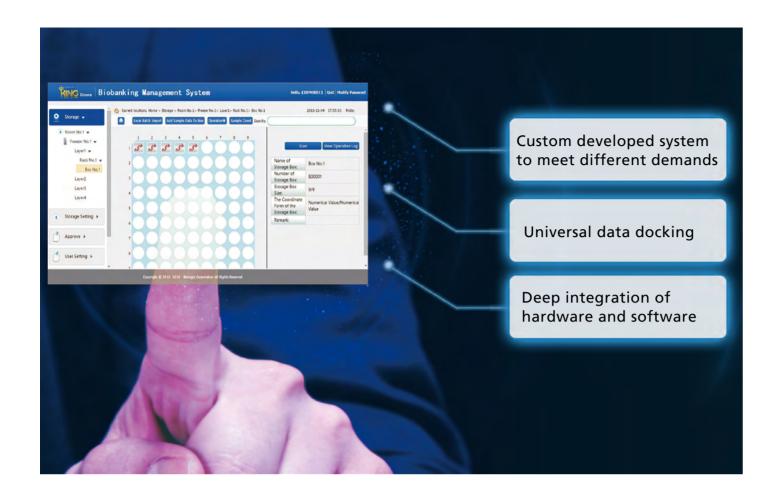
Equipped with PC scanner software for free, and can be paired with international database, such as SQL server、Oracle、MySQL、Postgres、HSQL.

Combines advanced optics and computer technology to scan individual vial

Pre-set 8×12, 9×9 and 10×10 scanning modules to scan various cryogenic boxes under international standards accurately

Pre-set scanning hole to scan 2D barcode on individual vial accurately

Preset inside computer to deal with data, data can be exported out using Wi-Fi, Bluetooth and other connections



Biobanking Efficient Management

Substantial progress and crucial accomplishments of life science researches, medical experiments and researches successful or not depends on superior quality of biospecimens which can be obtained after strict preprocessing, long-term storage, and management in biobank. This requires a precise, efficient and complete management process to protect biobanking resource.

CryoKING Crown Biobanking Management Software

Low level of management efficiency and data security, tedious operation and other problems often happen in the biobanking management. In order to avoid these defects, Biologix, combined with the most advanced technical research, has developed this safe, efficient and advanced biobanking management software.

- Browser/server structure
- Set up on server, users can freely access with browser
- which will be convenient for operation
- Powerful and easy-to-use functions
- Deep integration of hardware and software, excellent cost-effective





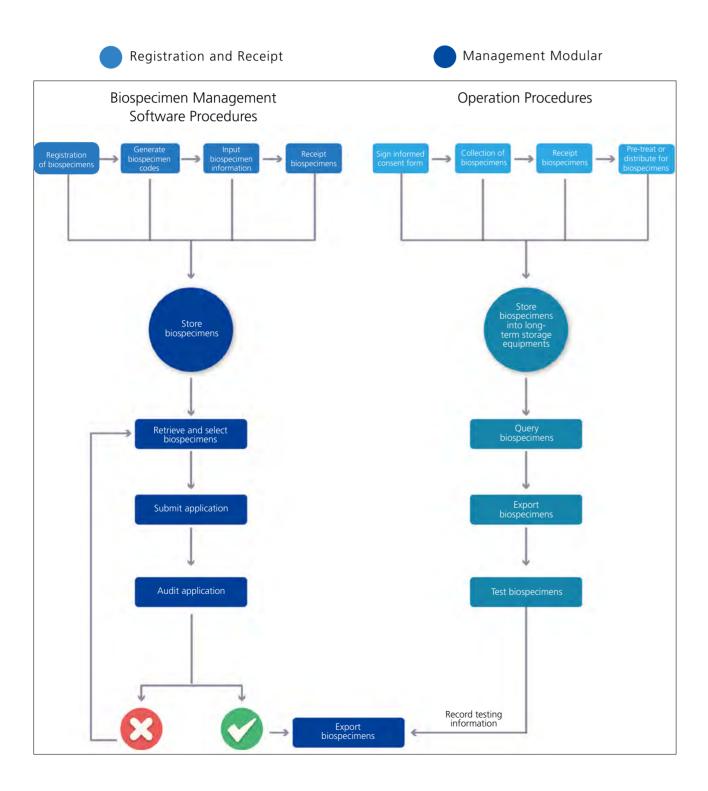


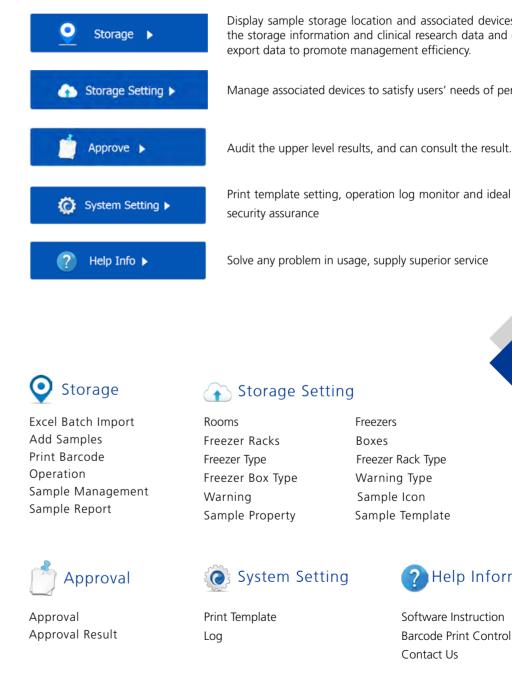
• Visual effective operation interface: each storage unit can be easily found,

• Optional data storage solution: public cloud, private cloud and private server

CryoKING Crown Biobanking Management Software, based on Cloud service, is designed for life science researchers to management samples effectively. It can track and manage samples and data with security and stability.

Functions of CryoKING Crown Biobanking Management Software







Display sample storage location and associated devices, manage together with the storage information and clinical research data and others, batch import and

Manage associated devices to satisfy users' needs of personalized settings.

Print template setting, operation log monitor and ideal data

Freezers

- Boxes
- Freezer Rack Type
- Warning Type
- Sample Icon
- Sample Template

Help Information

Software Instruction Barcode Print Control Download Contact Us

Technical Framework of CryoKING Crown Biobanking Management Software

The database of CryoKING Crown biobanking management software adopts B/S framework, supports multiple browsers. HTML language

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Information and data are accordant with international relevant laws and regulations

Information Query

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Graphic Management

Display sample storage states directly



Approval and Operation Logs

CryoKING database has the perfect approval function, and keep track original data, data changes, operator and changes. Read only.



Permission Settings

CryoKING sets different roles, including buttons, textboxes, lists and so on, according to different situations to enhance data security and sample information privacy.



Batch Import and System Interface

Convenient and fast to import or export data information directly by files.





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Warning Mechanism

When it appears data anomaly status, there will be alert alarm showed in the software to ensure database security.



System Introduction



Login Name and Password, Chinese or English Language



Approval



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Real-time Operating Log

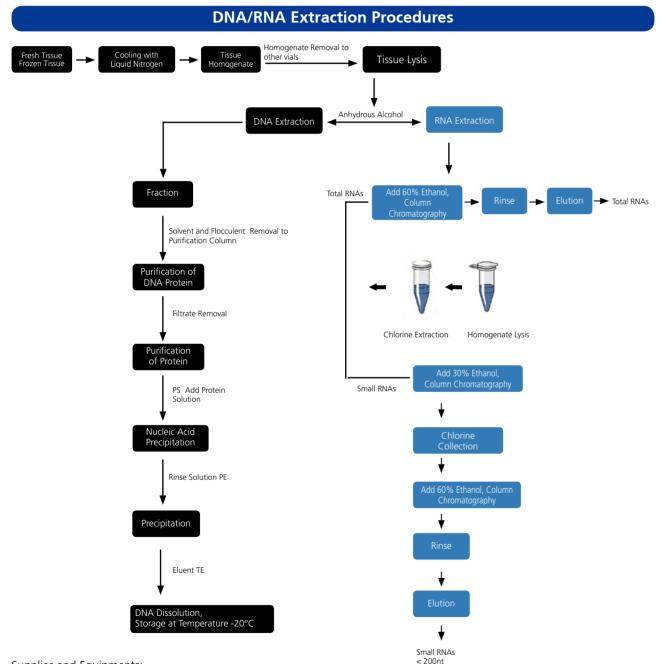


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Construction and Intelligent Management For Biobanking

Biobanking Application

In order to protect biological stability and integrity, besides the strict and canonical sample extraction and application, instruments, supplies and reagents also demand high design and production standards and requirements. Biologix offers advanced instruments and high-purity supplies for sample post processing.



Supplies and Equipments:

Liquid Nitrogen Tank, Cryogenic Vials, EP Vilas, Mortar and pestle, Purification Column, Centrifuge, Pipettes Tips, Sealing Machine, Cryogenic Boxes, Racks, Scanners, Freezers, Biobanking Management Software and more. Visit www.Biologixgroup.com and www.CryoKING.com for more information

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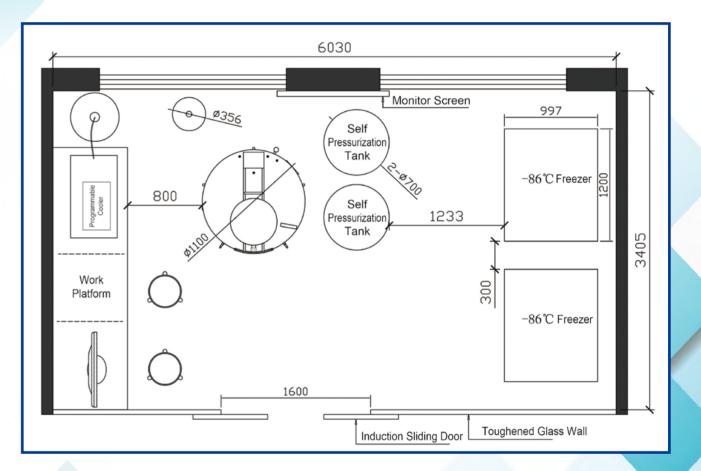
for you.

Consultation, Services and Training

Biologix is concentrated on biobanking services with professional techniques, practice and complete biobanking system. Our skilled technicians will supply your biobanking products and service designed



Application-Biobank Construction



- Design of biobank infrastructure
- Design of Biobanking workflow SOP
- Consultation of operating mechanism
- On-site guidance

Consultation Design

Training and Guidance

Services

- Biobanking planning for short, medium and long term
 - Guidance of biospecimen collection, storage and application
 - Consultation of cryogenic preservation techeniques
 - Regular training for biobanking staff
 - Cooperative research of biospecimen
 - Collaboration services of follow-up research
 - Complete cryogenic supplies
 - Maintenance and repair of storage equipments
 - Installation, trial and upgrade of management software
 - Follow up service and regular maintenance and repair

Consultation, Services and Training

| Construction and Intelligent Management For Biobanking|

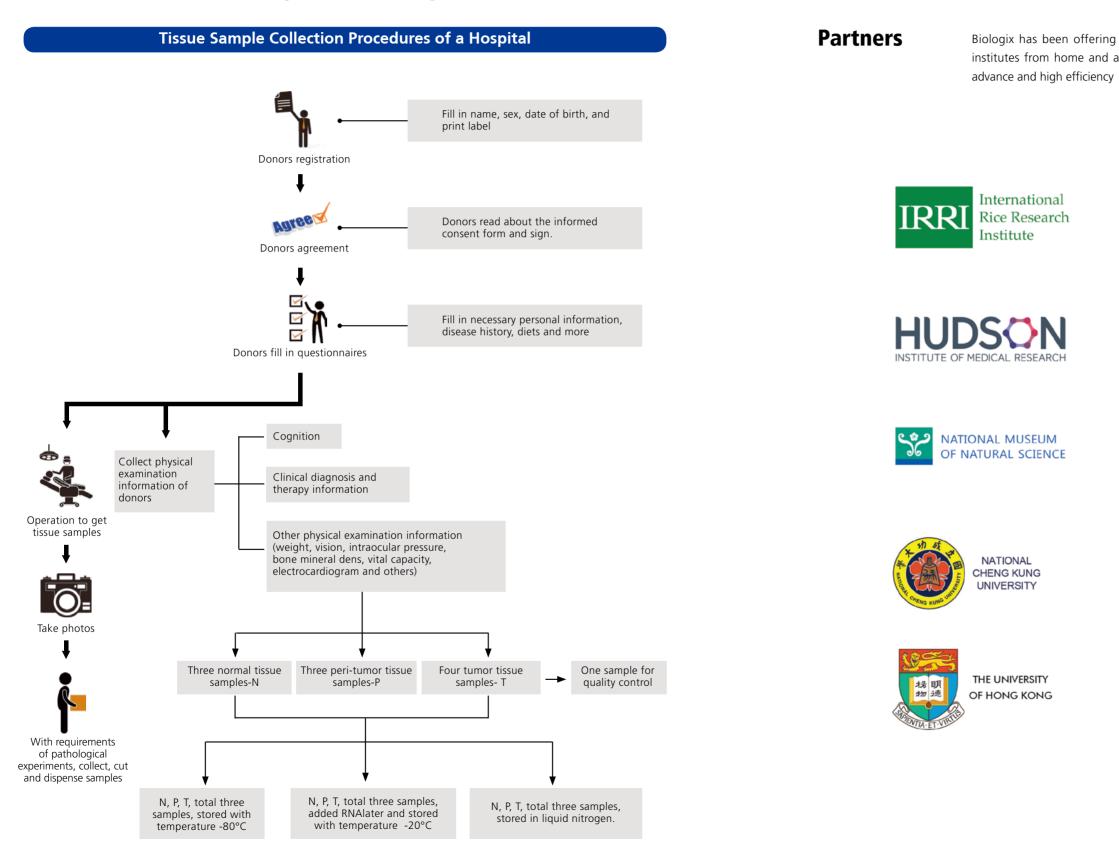
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Small Scale Biobank Infrastructure- Infrastructure Design



Biobank Infrastructure of a Hospital- Partial designs of Procedures



Biologix has been offering the complete biobanking services for many scientific research institutes from home and abroad, and recognized by our customers because of the safety,









RESEARCH INSTITUTE FOR TROPICAL MEDICINE PHILIPPINES



UNIVERSITY OF MACAU

Parameter List

Traditional ---Cryogenic Screw Cap Microtubes (Working Temperature: -86°C ~121°C)

Cat #	Туре	Volume	Height (mm)	Color	Writing Area	Bottom	Sterile	Unit
81-0053	Screw Cap Microtubes	0.5ml	30.0	Clear	No	Conical	No	500 /Bag, 10 Bags/Case
81-0054	Screw Cap Microtubes	0.5ml	31.0	Clear	No	Self-Standing	No	500 /Bag, 10 Bags/Case
81-0055	Screw Cap Microtubes	0.5ml	47.5	Brown	No	Self-Standing	No	500 /Bag, 10 Bags/Case
81-0056	Screw Cap Microtubes	0.5ml	47.5	Clear	No	Self-Standing	No	500 /Bag, 10 Bags/Case
81-0153	Screw Cap Microtubes	1.5ml	46.5	Clear	No	Conical	No	500 /Bag, 10 Bags/Case
81-0154	Screw Cap Microtubes	1.5ml	47.5	Clear	No	Self-Standing	No	500 /Bag, 10 Bags/Case
81-0203	Screw Cap Microtubes	2.0ml	46.1	Clear	No	Conical	No	500 /Bag, 10 Bags/Case
81-0204	Screw Cap Microtubes	2.0ml	47.5	Clear	No	Self-Standing	No	500 /Bag, 10 Bags/Case
81-0205	Screw Cap Microtubes	2.0ml	47.5	Brown	No	Self-Standing	No	500 /Bag, 10 Bags/Case
81-000X	Caps						No	500 /Bag, 10 Bags/Case
81-0006	Caps			Brown			No	500 /Bag, 10 Bags/Case
81-7053	Cryogenic Vials	0.5ml	30.0	Clear	No	Conical	Yes	50 Sets/Bag, 40 Bags/Case
81-7054	Cryogenic Vials	0.5ml	31.0	Clear	No	Self-Standing	Yes	50 Sets/Bag, 40 Bags/Case
81-7055	Cryogenic Vials	0.5ml	47.5	Brown	No	Self-Standing	Yes	50 Sets/Bag, 40 Bags/Case
81-7056	Cryogenic Vials	0.5ml	47.5	Clear	No	Self-Standing	Yes	50 Sets/Bag, 40 Bags/Case
81-7153	Cryogenic Vials	1.5ml	46.5	Clear	No	Conical	Yes	50 Sets/Bag, 40 Bags/Case
81-7154	Cryogenic Vials	1.5ml	47.5	Clear	No	Self-Standing	Yes	50 Sets/Bag, 40 Bags/Case
81-7203	Cryogenic Vials	2.0ml	46.1	Clear	No	Conical	Yes	50 Sets/Bag, 40 Bags/Case
81-7204	Cryogenic Vials	2.0ml	47.5	Clear	No	Self-Standing	Yes	50 Sets/Bag, 40 Bags/Case
81-7205	Cryogenic Vials	2.0ml	47.5	Brown	No	Self-Standing	Yes	50 Sets/Bag, 40 Bags/Case
81-8204	Cryogenic Vials	2.0ml	47.5	Clear	Yes	Self-Standing	Yes	50 Sets/Bag, 40 Bags/Case

X--Cap Color : 0-Clear, 1-Pink, 2-Green, 3-Blue, 4-Yellow, 5-Assorted

Classical -- Patent Design -- Cryogenic Vials (Working Temperature: -196°C ~121°C) \bigotimes N

Cat #	Туре	Thread Type	Volume	Bottom	Side Barcode	Writing Area	Sterile	Unit
88-321X	Cryogenic Vials	Internal	2ml	Self-Standing	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-320X	Cryogenic Vials	External	2ml	Self-Standing	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-350X	Cryogenic Vials	External	5ml	Self-Standing	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-621X	Cryogenic Vials	Internal	2ml	Self-Standing	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-620X	Cryogenic Vials	External	2ml	Self-Standing	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-650X	Cryogenic Vials	External	5ml	Self-Standing	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-600X	Color marker	-	-	-	-	-	-	100 Sets/Bag, 10 Bags/Case

X--Color of Caps or Color markers : 0-White, 1-Red, 2-Green, 3-Blue, 4-Yellow, 5-Purple

CryoKING Cryogenic Vials—Patent Design (Working Temperature: -196°C ~121°C)

Cat #	Thread Type	Volume	Bottom	Bottom Barcode	Side Barcode	Writing Area	Sterile	Unit
88-005X	External	0.5ml	Self-Standing	No	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-010X	External	1.0ml	Self-Standing	No	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-015X	External	1.5ml	Self-Standing	No	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-020X	External	2.0ml	Self-Standing	No	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-021X	Internal	2.0ml	Self-Standing	No	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case

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Cat #	Thread Type	Volume	Bottom	Bottom Barcode	Side Barcode	Writing Area	Sterile	Unit
88-050X	External	5.0ml	Self-Standing	No	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-105X	External	0.5ml	Self-Standing	Yes	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-110X	External	1.0ml	Self-Standing	Yes	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-115X	External	1.5ml	Self-Standing	Yes	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-120X	External	2.0ml	Self-Standing	Yes	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-121X	Internal	2.0ml	Self-Standing	Yes	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-150X	External	5.0ml	Self-Standing	Yes	No	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-605X	External	0.5ml	Self-Standing	No	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-610X	External	1.0ml	Self-Standing	No	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-615X	External	1.5ml	Self-Standing	No	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-720X	External	2.0ml	Self-Standing	No	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-721X	Internal	2.0ml	Self-Standing	No	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-750X	External	5.0ml	Self-Standing	No	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-905X	External	0.5ml	Self-Standing	Yes	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-910X	External	1.0ml	Self-Standing	Yes	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-915X	External	1.5ml	Self-Standing	Yes	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-920X	External	2.0ml	Self-Standing	Yes	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-921X	Internal	2.0ml	Self-Standing	Yes	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case
88-950X	External	5.0ml	Self-Standing	Yes	Yes	Yes	Yes	25 Sets/Bag, 40 Bags/Case

X--Cap Color : 0-White, 1-Red, 2-Green, 3-Blue, 4-Yellow, 5-Purple

CryoKING Combo (Working Temperature: -196°C ~121°C)

Cat #	Volume	Thread Type	Bottom Barcode on Vials	Side Barcode on Vials	Wells	Dimensions(mm)	Unit
89-305X	0.5ml Vials + 1 in Box	External	Yes	No	100-well	133x133x36	
89-310X	1.0ml Vials + 2 in Box	External	Yes	No	100-well	133x133x52	
89-315X	1.5ml Vials + 2 in Box	External	Yes	No	100-well	133x133x52	
89-320X	2.0ml Vials + 2 in Box	External	Yes	No	100-well	133x133x52	100 Cata Mala
89-321X	2.0ml Vials + 2 in Box	Internal	Yes	No	100-well	133x133x52	100 Sets Vials+ 1 Box/Bag,
89-350X	5.0ml Vials + 3.75 in Box	External	Yes	No	81-well	133x133x95	6 Bags/Pack,
89-905X	0.5ml Vials + 1 in Box	External	Yes	Yes	100-well	133x133x36	2 Packs/Case,
89-910X	1.0ml Vials + 2 in Box	External	Yes	Yes	100-well	133x133x52	1200 Sets Vials+ 12 Boxes/Case
89-915X	1.5ml Vials + 2 in Box	External	Yes	Yes	100-well	133x133x52	IZ DOXES/Case
89-920X	2.0ml Vials + 2 in Box	External	Yes	Yes	81-well	133x133x52	
89-921X	2.0ml Vials + 2 in Box	Internal	Yes	Yes	81-well	133x133x52	
89-950X	5.0ml Vials + 3.75 in Box	External	Yes	Yes	81-well	133x133x95	

X--Cap Color : 0-White, 1-Red, 2-Green, 3-Blue, 4-Yellow, 5-Purple



Parameter List

truction and Intelligent Management For Biobanking

96-well SBS Cryogenic Vials (Working Temperature: -196°C ~121°C)

Cat #	Туре	Thread Type	Volume	Bottom	Bottom Barcode	Writing Area	Sterile	Unit
88-403X	Vials	Internal	300µl	Self-Standing	Yes	No	Yes	96 Sets/Bag, 10 Bags/Pack, 2 Packs/Case
88-405X	Vials	Internal	500µl	Self-Standing	Yes	No	Yes	96 Sets/Bag, 10 Bags/Pack, 2 Packs/Case
88-408X	Vials	Internal	750µl	Self-Standing	Yes	No	Yes	96 Sets/Bag, 10 Bags/Pack, 2 Packs/Case
88-410X	Vials	Internal	1000µl	Self-Standing	Yes	No	Yes	96 Sets/Bag, 10 Bags/Pack, 2 Packs/Case

X--Cap Color : 0-White,1-Red,2-Green,3-Blue,4-Yellow,5-Purple

SBS Format Cryogenic Racks (Working Temperature: -196°C ~121°C)

Cat #	Vial Volume	Wells	Color	Dimensions(mm)	Unit
98-4117	300µl & 500µl	96-well	Blue	128x85x35	10/Pack , 2 Packs/Case
98-4217	750µl & 1000µl	96-well	Blue	128x85x54	10/Pack , 2 Packs/Case

SBS Format Combo (Working Temperature: -196°C ~121°C)

Cat #	Description	Bottom Barcode	Side Barcode	Wells	Dimensions(mm)	Unit	
89-403X	300µl Vials+Rack	Yes	No	96-well	128x85x35		
89-405X	500µl Vials+Rack	Yes	No	96-well	128x85x35	96 Sets Vials+1 Rack/Bag,	
89-408X	750µl Vials+Rack	Yes	No	96-well	128x85x54	10 Bags/Pack,2 Packs/Case, 1920 Sets Vials+20 Racks/Case	
89-410X	1000µl Vials+Rack	Yes	No	96-well	128x85x54		

X--Cap Color : 0-White, 1-Red, 2-Green, 3-Blue, 4-Yellow, 5-Purple

Premium Cardboard Cryogenic Boxes (Working Temperature: -196°C ~121°C)

Cat #	Height	Wells	Description	Color	Dimensions(mm)	Unit
90-2281	2 in	81-well	White coating, Plastic coating	White	133x133x52	5 /Bag, 20 Bags/Case
90-5281	2 in	81-well	Rainbow outer coating, matte coating	Assorted Colors	133x133x52	5 /Bag, 20 Bags/Case
90-2200	2 in	100-well	White coating, Plastic coating	White	133x133x52	5 /Bag, 20 Bags/Case
90-5200	2 in	100-well	Rainbow outer coating, matte coating	Assorted Colors	133x133x52	5 /Bag, 20 Bags/Case
90-2381	3 in	81-well	White coating, Plastic coating	White	133x133x76	5 /Bag, 20 Bags/Case
90-2300	3 in	100-well	White coating, Plastic coating	White	133x133x76	5 /Bag, 20 Bags/Case

ID-Color Cardboard Cryogenic Boxes (Working Temperature: -86°C ~121°C)

Cat #	Height	Wells	Divider Material	Dimensions(mm)	Unit
90-6100	1 in	100-well	ABS	133x133x36	5 /Bag, 4 Packs/Case
90-8100	1 in	100-well	PP	133x133x36	5 /Bag, 4 Packs/Case
90-6281	2 in	81-well	ABS	133x133x52	5 /Bag, 4 Packs/Case
90-8281	2 in	81-well	PP	133x133x52	5 /Bag, 4 Packs/Case
90-6200	2 in	100-well	ABS	133x133x52	5 /Bag, 4 Packs/Case
90-8200	2 in	100-well	PP	133x133x52	5 /Bag, 4 Packs/Case
90-8381	3.75 in	81-well	PP	133x133x95	5 /Bag, 4 Packs/Case

PC Cryogenic Boxes (Working Temperature: -196°C ~121°C)

Cat #	Height	Wells	Color	Dimensions(mm)	Unit
98-0113	1 in	100-well	Blue	133x133x36	3 /Bag, 4 Bags/Case
90-9250	2 in	25-well	Assorted Colors	75x75x52	5 /Bag, 6 Bags/Case
90-9009	2 in	81-well	Assorted Colors	133x133x52	5 /Bag, 4 Bags/Case
98-0213	2 in	100-well	Blue	133x133x52	3 /Bag, 4 Bags/Case
98-1213	2 in	81-well	Blue	133x133x52	3 /Bag, 4 Bags/Case
90-9210	2 in	100-well	Assorted Colors	133x133x52	5 /Bag, 4 Bags/Case
90-9381	3.75 in	81-well	Assorted Colors	133x133x95	5 /Bag, 4 Bags/Case
98-0313	3.75 in	81-well	Blue	133x133x95	3 /Bag, 4 Bags/Case

PP Cryogenic Boxes (Working Temperature: -86°C ~121°C)

Cat #	Height	Wells	Color	Dimensions(mm)	Unit
90-9025	2 in	25-well	Assorted Colors	75x75x52	5 /Bag, 6 Bags/Case
90-9081	2 in	81-well	Assorted Colors	133x133x52	5 /Bag, 4 Bags/Case
90-9100	2 in	100-well	Assorted Colors	141x154x55	5 /Bag, 4 Bags/Case
90-9200	2 in	100-well	Assorted Colors	133x133x52	5 /Bag, 4 Bags/Case

Cryogenic Racks (Biologix offer custom designed racks)

Cat #	Туре	Material	Volume	Dimensions(mm)(DxWxH)	Storage box size(mm)
99-1216	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 4	564 x 141 x 229	133 x 133 x 52
99-1220	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 5	564 x 141 x 285	133 x 133 x 52
99-1224	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 6	564 x 141 x 341	133 x 133 x 52
99-1124	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 6	564 x 141 x 245	133 x 133 x 36
99-1128	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 7	564 x 141 x 285	133 x 133 x 36
99-1132	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 8	564 x 141 x 325	133 x 133 x 36
99-7216	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 4	564 x 141 x 229	133 x 133 x 52
99-7220	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 5	564 x 141 x 285	133 x 133 x 52
99-7224	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 6	564 x 141 x 341	133 x 133 x 52
99-7124	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 6	564 x 141 x 245	133 x 133 x 36
99-7128	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 7	564 x 141 x 285	133 x 133 x 36
99-7132	Sliding Drawer	Corrosion-resistant Stainless Steel	4 x 8	564 x 141 x 325	133 x 133 x 36
99-5212	Side Access Drawer	Corrosion-resistant Stainless Steel	3 x 4	420 x 140 x 240	133 x 133 x 52
99-5215	Side Access Drawer	Corrosion-resistant Stainless Steel	3 x 5	420 x 140 x 300	133 x 133 x 52
99-5216	Side Access Drawer	Corrosion-resistant Stainless Steel	4 x 4	560 x 140 x 240	133 x 133 x 52
99-5220	Side Access Drawer	Corrosion-resistant Stainless Steel	4 x 5	560 x 140 x 300	133 x 133 x 52
99-2118	Frame Type	Corrosion-resistant Stainless Steel	3 x 6	420 x 137 x 244	133 x 133 x 36
99-2121	Frame Type	Corrosion-resistant Stainless Steel	3 x 7	420 x 137 x 284	133 x 133 x 36
99-2120	Frame Type	Corrosion-resistant Stainless Steel	4 x 5	560 x 137 x 204	133 x 133 x 36
99-2124	Frame Type	Corrosion-resistant Stainless Steel	4 x 6	560 x 137 x 244	133 x 133 x 36
99-2128	Frame Type	Corrosion-resistant Stainless Steel	4 x 7	560 x 137 x 284	133 x 133 x 36

Parameter List

[Construction and Intelligent Management For Biobanking]

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Cat #	Туре	Material	Volume	Dimensions(mm)(DxWxH)	Storage box size(mm)
99-2132	Frame Type	Corrosion-resistant Stainless Steel	4 x 8	560 x 137 x 315	133 x 133 x 36
99-2212	Frame Type	Corrosion-resistant Stainless Steel	3 x 4	422 x 137 x 229	133 x 133 x 52
99-2215	Frame Type	Corrosion-resistant Stainless Steel	3 x 5	422 x 137 x 284	133 x 133 x 52
99-2216	Frame Type	Corrosion-resistant Stainless Steel	4 x 4	560 x 137 x 229	133 x 133 x 52
99-2220	Frame Type	Corrosion-resistant Stainless Steel	4 x 5	560 x 137 x 284	133 x 133 x 52
99-2224	Frame Type	Corrosion-resistant Stainless Steel	4 x 6	560 x 137 x 339	133 x 133 x 52
99-2230	Frame Type	Corrosion-resistant Stainless Steel	5 x 6	700 x 137 x 339	133 x 133 x 52
99-6206	Vertical Type	Corrosion-resistant Stainless Steel	1 x 6	338 x 140 x 140	133 x 133 x 52
99-6207	Vertical Type	Corrosion-resistant Stainless Steel	1 x 7	394 x 140 x 140	133 x 133 x 52
99-6208	Vertical Type	Corrosion-resistant Stainless Steel	1 x 8	450 x 140 x 140	133 x 133 x 52
99-6209	Vertical Type	Corrosion-resistant Stainless Steel	1 x 9	506 x 140 x 140	133 x 133 x 52
99-6210	Vertical Type	Corrosion-resistant Stainless Steel	1 x 10	562 x 140 x 140	133 x 133 x 52
99-6211	Vertical Type	Corrosion-resistant Stainless Steel	1 x 11	618 x 140 x 140	133 x 133 x 52
99-6212	Vertical Type	Corrosion-resistant Stainless Steel	1 x 12	674 x 140 x 140	133 x 133 x 52
99-6213	Vertical Type	Corrosion-resistant Stainless Steel	1 x 13	730 x 140 x 140	133 x 133 x 52
96-1216	Sliding Drawer	Aluminum	4 x 4	564 x 141 x 229	133 x 133 x 52
96-1220	Sliding Drawer	Aluminum	4 x 5	564 x 141 x 285	133 x 133 x 52
96-1224	Sliding Drawer	Aluminum	4 x 6	564 x 141 x 341	133 x 133 x 52
96-1124	Sliding Drawer	Aluminum	4 x 6	564 x 141 x 245	133 x 133 x 36
96-1128	Sliding Drawer	Aluminum	4 x 7	564 x 141 x 285	133 x 133 x 36
96-1132	Sliding Drawer	Aluminum	4 x 8	564 x 141 x 325	133 x 133 x 36
96-7216	Sliding Drawer	Aluminum	4 x 4	564 x 141 x 229	133 x 133 x 52
96-7220	Sliding Drawer	Aluminum	4 x 5	564 x 141 x 285	133 x 133 x 52
96-7224	Sliding Drawer	Aluminum	4 x 6	564 x 141 x 341	133 x 133 x 52
96-7124	Sliding Drawer	Aluminum	4 x 6	564 x 141 x 245	133 x 133 x 36
96-7128	Sliding Drawer	Aluminum	4 x 7	564 x 141 x 285	133 x 133 x 36
96-7132	Sliding Drawer	Aluminum	4 x 8	564 x 141 x 325	133 x 133 x 36
96-5212	Side Access Drawer	Aluminum	3 x 4	420 x 140 x 240	133 x 133 x 52
96-5215	Side Access Drawer	Aluminum	3 x 5	420 x 140 x 300	133 x 133 x 52
96-5216	Side Access Drawer	Aluminum	4 x 4	560 x 140 x 240	133 x 133 x 52
96-5220	Side Access Drawer	Aluminum	4 x 5	560 x 140 x 300	133 x 133 x 52
96-2118	Frame Type	Aluminum	3 x 6	420 x 137 x 244	133 x 133 x 36
96-2121	Frame Type	Aluminum	3 x 7	420 x 137 x 284	133 x 133 x 36
96-2120	Frame Type	Aluminum	4 x 5	560 x 137 x 204	133 x 133 x 36
96-2124	Frame Type	Aluminum	4хб	560 x 137 x 244	133 x 133 x 36
96-2128	Frame Type	Aluminum	4 x 7	560 x 137 x 284	133 x 133 x 36
96-2132	Frame Type	Aluminum	4 x 8	560 x 137 x 315	133 x 133 x 36
96-2212	Frame Type	Aluminum	3 x 4	422 x 137 x 229	133 x 133 x 52
96-2215	Frame Type	Aluminum	3 x 5	422 x 137 x 284	133 x 133 x 52
96-2216	Frame Type	Aluminum	4 x 4	560 x 137 x 229	133 x 133 x 52
96-2220	Frame Type	Aluminum	4 x 5	560 x 137 x 284	133 x 133 x 52
96-2224	Frame Type	Aluminum	4 x 6	560 x 137 x 339	133 x 133 x 52
96-2230	Frame Type	Aluminum	5 x 6	700 x 137 x 339	133 x 133 x 52
96-6206	Vertical Type	Aluminum	1 x 6	338 x 140 x 140	133 x 133 x 52
96-6207	Vertical Type	Aluminum	1 x 7	394 x 140 x 140	133 x 133 x 52
96-6208	Vertical Type	Aluminum	1 x 8	450 x 140 x 140	133 x 133 x 52
96-6209	Vertical Type	Aluminum	1 x 9	506 x 140 x 140	133 x 133 x 52

Cat #	Туре	Material	Volume	Dimensions(mm)(DxWxH)	Storage box size(mm)
96-6210	Vertical Type	Aluminum	1 x 10	562 x 140 x 140	133 x 133 x 52
96-6211	Vertical Type	Aluminum	1 x 11	618 x 140 x 140	133 x 133 x 52
96-6212	Vertical Type	Aluminum	1 x 12	674 x 140 x 140	133 x 133 x 52
96-6213	Vertical Type	Aluminum	1 x 13	730 x 140 x 140	133 x 133 x 52

CryoKING Scanners

Cat #	Description	Туре
CKS-0101	CryoKING Wired Handheld Scanner	Individual Vial
CKS-0201	CryoKING Adept	Individual Vial
CKS-1101	CryoKING Scanner	Entire Box
CKS-1102	CryoKING Maestro Laptop Scanner	Entire Box or Individual Vial

CryoKING Crown Biobank Management Software

Cat #	Туре	Description
CKC-1101	CryoKING Crown Silver Public Cloud	Storage Space Setting, Sample Management, Approval Setting, Alarm Setting , Printing Management, Sample Date Import and Export, Sample Data Analysis.
CKC-1201	CryoKING Crown Silver Private Cloud / Private Server	Storage Space Setting, Sample Management, Approval Setting, Alarm Setting , Printing Management, Sample Date Import and Export, Sample Data Analysis.
CKC-1301	CryoKING Crown Silver Service Fee	Service in storage space setting, sample date importing and priting setting, etc.
CKC-2101	CryoKING Crown Glod Public Cloud	Storage Space Setting, Sample Management, Approval Setting, Alarm Setting, Printing Management, Sample Date Import and Export, Sample Data Analysis, Quality Control Management, Follow-up Management, HIS/LIS Docking, Temperature Control Management, and other customs demand setting.
CKC-2201	CryoKING Crown Gold Private Cloud / Private Server	Storage Space Setting, Sample Management, Approval Setting, Alarm Setting, Printing Management, Sample Date Import and Export, Sample Data Analysis, Quality Control Management, Follow-up Management, HIS/LIS Docking, Temperature Control Management, and other customs demand setting.

Ultra Low Temperature Freezers

Cat #	Capacity (L)	Input Power (W)	Temperature	External Size (WxDxH mm)	Internal Size (WxDxH mm)	Weight (N.t)
CKF-UW138	138	1050	-10~-86°C	1320x890x1009	490x470x570	215
CKF-UW328	328	1050	-10~-86°C	2005x1035x1120	1140x410x552	260
CKF-UW438	438	1050	-10~-86°C	2005x890x1009	1270x540x590	258
CKF-UL668	668	1950	-10~-86°C	2033x1190x1037	1200x815x610	390
CKF-UL100	100	1000	-10~-86°C	1066x742x820	450x439x514	120
CKF-UL290	290	1050	-10~-86°C	755x846x1797	470x588x1047	227
CKF-UL340	340	1050	-10~-86°C	755x846x1982	470x578x1250	300
CKF-UL508	508	2000	-10~-86°C	1200x897x1999	Up: 880x504x570 Down: 880x504x514	375
CKF-UL538	538	2000	-10~-86°C	842x989x2023	662x600x1344	320
CKF-UL540	540	1950	-10~-86°C	840x918x1984	695x625x1330	330
CKF-UL398	398	1000	-10~-86°C	785x1041x1947	440x696x1266	252
CKF-UL528	528	1050	-10~-86°C	930x1041x1947	585x696x1266	283
CKF-UL678	678	1550	-10~-86°C	1090x998x1968	750x696x1268	380
CKF-UL778	778	1550	-10~-86°C	1205x998x1968	865x696x1268	390
CKF-UL858	858	1550	-10~-86°C	1218x997x1998	877x696x1378	440
CKF-UL1008	1008	1950	-10~-86°C	1363x997x1998	1022x696x1378	480
CKF-UL828	828	1900	-10~-86°C	996x1230x1997	930x710x1308	420
CKF-UW258	258	9500	-10~-86°C	2251x1034x1117	1140x410x552	330

Parameter List



| Construction and Intelligent Management For Biobanking|

Liquid Nitrogen Containers

Cat#	Ck	(D-V035S	013	Cł	(D-V055	5013	CKD-V130S013				
			Unit parame	eter							
Liquid nitrogen capacity under the tray (L)		55			80			265			
Liquid Nitrogen Capacity (L)		350			587		1340				
Neck diameter (mm)		326			445			635			
Inner usable height (mm)		600			600			620			
Outer diameter (mm)		875			1104			1565			
Height (mm)		1326			1321			1398			
Empty weight (kg)		219			328			851			
Operation height (mm)		1263			1266			997			
Full Weight (kg)		502			802			1934			
Door width ≥ (mm)		895			1124			1585			
		Μ	lax. storage c	apacity							
1.2ml,1.8ml,2ml internal thread cryogenic vials		13000			26000			58500			
Racks with 5×5 boxes		4			8		18				
Racks with 10×10 boxes		12			24		54				
5×5 boxes		40			80		180				
10×10 boxes		120			240			540			
Boxes per rack		10			10		10				
		Max.	straw holding	g capacity							
0.5ml straw		111312			203040			480168			
0.25ml straw		254592			468544		1101000				
Ø76 racks		52			112		234				
Ø63 racks		8			0		42				
Ø38 racks		28			24			54			
Rack layers		4			4			4			
Layer height		135			135			135			
		Max. blo	ood bag hold	ling capacity	/						
Blood bag types	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames		
25ml (91-5025)	1296	6	216	2376	6	396	4716	6	786		
50ml (91-5050)	792	6	132	1416	6	236	2916	6	486		
200ml (91-5200)	168	3	56	336	3	112	666	3	222		
250ml (91-5250)	300	3	100	552	3	184	1170	3	390		
500ml (91-5500)	192	3	64	408	3	136	828	3	276		
700ml (91-5700)	96	3	32	204	3	68	396	3	132		

Cat#	CKE)-V045	5013	CKD	-V0759	5013	CKE	D-V085	S013	СКІ	CD-V160S013			
'			Uni	t param	eter									
Liquid nitrogen capacity under the pallet (L)		55		80				135			300			
Liquid nitrogen capacity (L)		460			783			890			1660			
Neck diameter (mm)		326			445			465			635			
Inner usable height (mm)		828			828			773						
Outer diameter (mm)		875			1104			1190						
Height (mm)		1558			1591			1559			1589			
Empty weight (kg)		277			372			441			914			
Operation height (mm)		1212			1216			980			967			
Full Weight (kg)		649			1005			1160			2255			
Door width \geq (mm)		895			1124			1210			1585			
			Max. s	torage c	apacity									
1.2ml,1.8ml,2ml internal thread cryogenic vials		18200			36400			42900			76050			
Racks with 5×5 boxes		4			8		4			18				
Racks with 10×10 boxes		12			24		32			54				
5×5 boxes		56			112		52							
10×10 boxes		168			336		416							
Boxes per rack		14			14		13				13			
			Max. stra	w holdin	g capaci	ty								
0.5ml straw		131220)		253800)		304920)		60021	C		
0.25ml straw		301120)	585680			699360			1376250				
Ø76 racks		52		112			120			234				
Ø63 racks		8		0			16			42				
Ø38 racks		12			24			40			54			
Rack layers		5			5			5			5			
Layer height		135			135			135			135			
		Ma	ax. blood	bag holo	ling cap	acity								
Blood bag types	Total Bags	Bags/ Frame	No. Frames											
25ml (91-5025)	1728	6	216	3168	8	396	3360	7	480	5502	7	786		
50ml (91-5050)	1056	6	132	1888	8	236	2072	7	296	3402	7	486		
200ml (91-5200)	280	3	56	560	5	112	544	4	136	888	4	222		
250ml (91-5250)	500	3	100	920	5	184	944	4	236	1560	4	390		
500ml (91-5500)	320	3	64	680	5	136	640	4	160	1104	4	276		
700ml (91-5700)	128	3	32	272	4	68	320	4	80	528	4	132		

Parameter List



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Cat#	СКІ	D-V100S	013	СК	D-V1809	5013	СК	D-V180	5014			
			Unit parame	ter								
Liquid nitrogen capacity under the tray (L))		135			320			320				
Liquid nitrogen capacity (L)		1014			1880		1880					
Neck diameter (mm)	465 635							635				
Inner usable height (mm)	900 900							900				
Outer diameter (mm)		1190			1565			1565				
Height (mm)		1704			1883			1883				
Empty weight (kg)		495			985			985				
Operation height (mm)		950			1097			1097				
Full weight (kg)		1314			2504			2504				
Door width ≥ (mm)		1210			1585			1585				
		M	ax. storage ca	pacity								
1.2ml,1.8ml,2ml internal thread cryogenic vials		49500			87750		94875					
Racks with 5×5 boxes		4			18		13					
Racks with 10×10 boxes		32			54		60					
5×5 boxes		60			270		195					
10×10 boxes		480			810		900					
Boxes per rack		15			15		15					
		Max.	straw holding	g capacity								
0.5ml straw		365904			720252			671166				
0.25ml straw		839232			1651500)	1543884					
Ø76 racks		120			234		232					
Ø63 racks		16			42		24					
Ø38 racks		40			54			39				
Rack layers		6			6			6				
Layer height		135			135			135				
		Max. blo	od bag hold	ing capacit	ý							
Blood bag types	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames			
25ml (91-5025)	4320	9	480	7074	9	786	7758	9	862			
50ml (91-5050)	26564	9	296	4374	9	486	4905	9	545			
200ml (91-5200)	680	5	136	1110	5	222	1290	5	258			
250ml (91-5250)	1180	5	236	1950	5	390	2095	5	419			
		5										

700ml (91-5700)

Cat#	СК	D-V190	S014	CKI	D-V2009	5014	СК	D-V210	S014	CK	D-V220	S014				
				Jnit para	imeter											
Liquid nitrogen capacity under the tray (L)		262			262			262			262					
Liquid nitrogen capacity (L)		1946			2041			2156			2270					
Neck diameter (mm)		635			635			635			635					
Inner usable height (mm)		830			880			940								
Outer diameter (mm)		1685			1685			1685			1685					
Height (mm)		1509			1559			1619								
Empty weight (kg)		860			880			900			920					
Operation height (mm)		950			1000			1060			1120					
Full weight (kg)		2432			2529			2642			2754					
Door width ≥ (mm)		1705			1705			1705			1705					
			Ma	x.storage	capacit	у										
1.2ml,1.8ml,2ml internal thread cryogenic vials		105700			113250	D	120800				128350					
Racks with 5×5 boxes		14			14			14		14						
Racks with 10×10 boxes		72			72			72			72			72		
5×5 boxes		196		210			224			238						
10×10 boxes		1008		1080			1152			1224						
Boxes per rack		14			15 1		16			17						
			Max. s	traw hole	ding cap	acity										
0.5ml straw		65682	0		788184	4		788184	1		91954	48				
0.25ml straw		151364	10	1816368			1816368			2119096						
Ø76 racks		282		282			282			282						
Ø63 racks		16		16			16			16						
Ø38 racks		44			44			44			44					
Rack layers		5			6		6			7						
Layer height		135			135			135			135					
			Max. bloc	od bag h	olding c	apacity										
Blood bag types	Total Bags	Bags/ Frame	No. Frames													
25ml (91-5025)	8432	8	1054	8432	8	1054	9486	9	1054	10540	10	1054				
50ml (91-5050)	5232	8	654	5232	8	654	5886	9	654	6540	10	654				
200ml (91-5200)	1510	5	302	1510	5	302	1510	5	302	1812	6	302				
250ml (91-5250)	2550	5	510	2550	5	510	2550	5	510	3060	6	510				
500ml (91-5500)	1800	5	360	1800	5	360	1800	5	360	2160	6	360				
700ml (91-5700)	930	5	186	930	5	186	930	5	186	930	5	186				

| Construction and Intelligent Management For Biobanking|



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