



-80°C -40°C -20°C RT



BiO.Li.X!

SAB Series - Automated Bio-Libraries

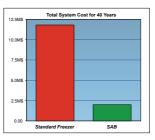
The SAB Series combines sample safety, sample density, and power efficiency design principles of the BiOLiX! products, but also accommodates the very specific operational needs of collections with diverse and unpredictable tube and rack types. The SAB also provides an extremely easy pathway to transition manual freezer repository into automation operations.

Biobanking is becoming ever more complex with growing sample types, methods, and organizations. Centralization of collections and services is often a key component of biobanking operations. Large sample collections with diverse sample types and non-standardized labware present a challenge to operational and cost efficiency. LiCONiC Instruments is a leader in dedicated, application driven, sample storage automation. The SAB series of the BiOLiX! Bio-Library Sample Storage product family specifically addresses the need of this rapidly growing sample management sector.

Energy Efficiency

The SAB series delivers an industry leading return on investment by all standards. Through the utilization of a compressible shelf storage system, which is maintained within a chest freezer, our proprietary refrigeration design reduces power consumption to a fraction of the nearest competitor.





Main Features

- Temperature range -25°C to -80°C
- Semi-automated / high throughput store and retrieve
- Large sample capacity
- Exceptional frost control
- Individual sample tracking and picking option

SAB Series Product Overview

The SAB-ULT series is designed for biobanking applications where the primary objective of the storage is long term sample safety and efficiency for storage processes and capacity. This series offers the same advantages as other LiCONiC store lines but caters to the needs of large legacy collections and long term collection arrangements where odd and variable sized containers and rack sizes are frequently encountered. The SAB-ULT series simplifies the sample storage/retrieval process and ensures that sample intergrity is maintained in perpetuity. The SAB-ULT series is designed for the unique challanges of large biobank sample collections. Examples of appropriate applications:

- Genetic or disease based population cohort studies
- Forensic samples studies
- Cellomic samples
- Genomic samples
- Transitioning large collections from manual to automated storage
- Core facility receiving many odd or unpredictable sample storage
- container varieties

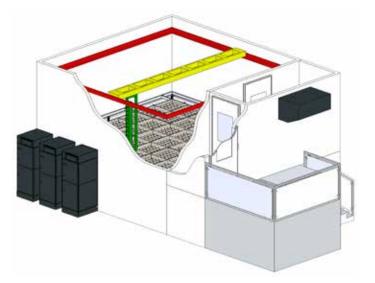
Full rack or picked individual sample retrieval options available.



The SAB storage area is flexibly configurable to accommodate many container varieties simultaneously, and to be changeable over time to adapt to new container types and proportions in storage.

Transitioning sample collections from legacy storage arrangements to the automated environment of the SAB is easy with fully size configurable storage cassette sizes.

Ideal with for legacy cryobox collections - No reformmating required.

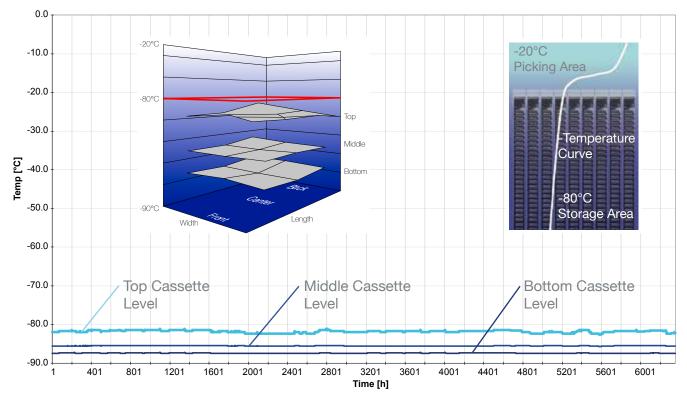


SAB Capacities

| BIO.Li X SAB Series examples | | | SAB46k0-ULT | | SAB98k0-ULT | | SAB220k5-ULT | |
|-------------------------------|--------------|-------|-------------|-----------|-------------|-----------|--------------|------------|
| Labware | Plate height | Pitch | Levels | Samples | Levels | Samples | Levels | Samples |
| FluidX 0.3 ml Screw Cap | 19.1 mm | 25 mm | 50 | 4'147'200 | 78 | 8'626'176 | 78 | 19'408'896 |
| Micronic 0.5 ml Screw Cap | 28.5 mm | 35 mm | 36 | 2'985'984 | 56 | 6'193'152 | 56 | 13'934'592 |
| LVL LX1000 | 45.6 mm | 52 mm | 24 | 1'990'656 | 37 | 4'091'904 | 37 | 9'206'784 |
| Thermo Matrix 1.0ml Screw Cap | 54.6 mm | 61 mm | 20 | 1'658'880 | 32 | 3'538'944 | 32 | 7'962'624 |
| Greiner Bio One 2 ml | 48.0 mm | 54 mm | 23 | 953'856 | 36 | 1'990'656 | 36 | 4'478'976 |

SAB Storage Conditions

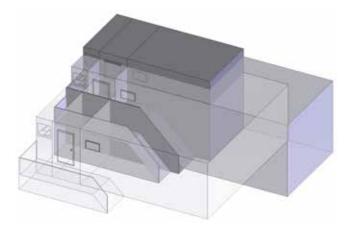
The SAB series features climate control design found across the BiOLiX! product family. These features result in high density, temperature stable, and power efficient sample storage. As with the SAB series, single, chest style storage combines with LiCONiC's proprietary dual temperature zone design to give temperature stability, excellent humidity control, and easy service access to robotic components. LiCONiC's unique chest freezer design naturally creates two important benefits:



Two climate zones, one for active components at -20°C another for passive elements at -80°C. Stable horizontal temperature layers in ULT storage area.

Space Efficiency

The SAB series Automated BioLibraries make best use of given room constraints by its "built to space" modular design. System dimensions, layout are optimised to the individual application's needs and workflow requirements.



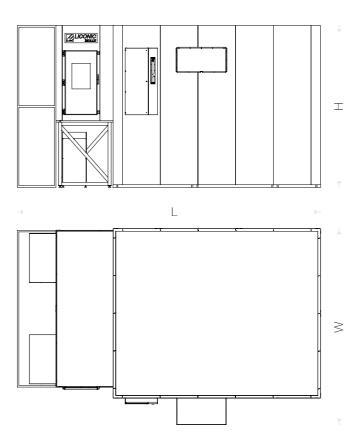
Intuitive Software

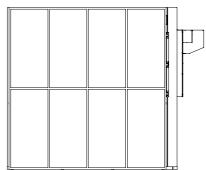
| Graphigal Job Creation for Import/Export of Samples | |
|---|--|
| Easy Search of Samples by Barcode, Name, Data etc. | |
| Complete Audit Trail | |
| Automatic Inventory Defragmentation | |
| Automatic Data Backup | |
| Integration to LIMS Database | |
| Remote Support | |
| Mobile Device Control | |
| User Access Security | |
| | |

Options & Accessories

| | Barcode Reader |
|-----|--|
| | Flexible Labware Support |
| | Configurable to Room Constraints |
| | Tablet Interface |
| | External Database Integration |
| | Remote Monitoring |
| | Internal Vision System |
| | Multi - Tube / Vial Picker |
| | LN2 - Backup Option |
| | 2D - BCR Rack Scanner |
| | Redundant Refrigeration |
| Dyr | namically Configurable Storage Cassettes |
| | |

SAB Dimensions





| BiO.Li.X/ | SAB Dimensions examples | | | | |
|--------------|-------------------------|----------|-----------|--|--|
| Туре | L= Length | W= Width | H= Height | | |
| SAB46k0-ULT | 8045 mm | 6092 mm | 3530 mm | | |
| SAB98k0-ULT | 9410 mm | 6092 mm | 5030 mm | | |
| SAB220k5-ULT | 15845 mm | 6092 mm | 5030 mm | | |



Worldwide Presence



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