

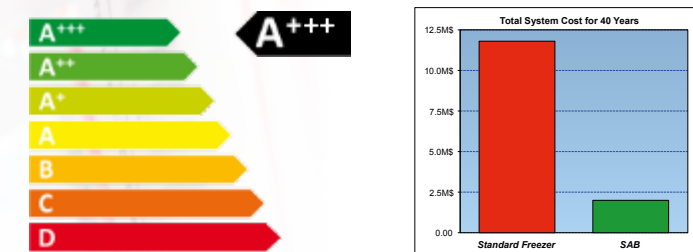
FAB-SERIES - FULL AUTOMATED BIO-LIBRARIES

The FAB-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 FAB also provides an extremely easy pathway to transition manual freezer repositories into automation operations.

Biobanking is becoming more and 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 labware present a challenge to operational and cost efficiency. LiCONiC Instruments is a leader in dedicated, application driven sample storage automation. The FAB series of the BiOLiX! Bio-Library Sample Storage product family specifically addresses the need of this rapidly growing sample management sector.

Energy Efficiency

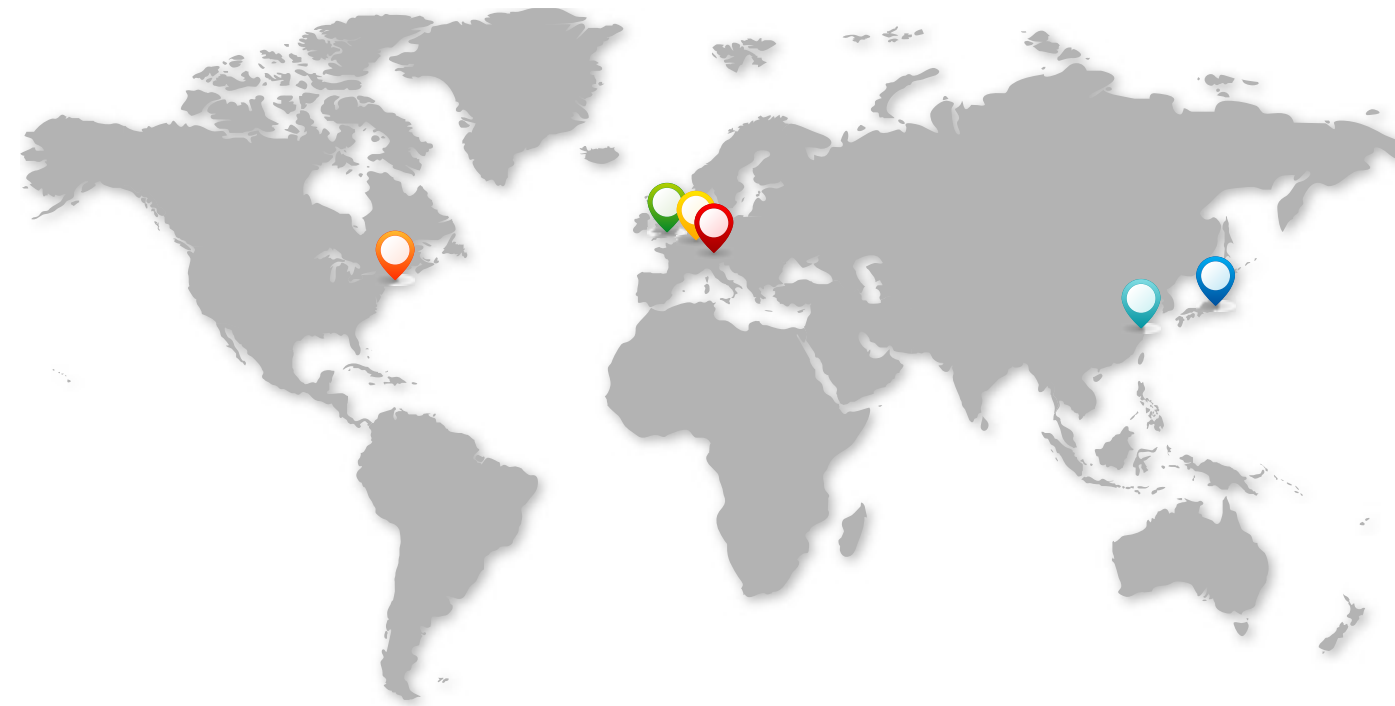
The FAB-Series delivers an industry leading return on investment by all standards. The combination of a highly space optimized storage layout, unique chest freezer design and our proprietary refrigeration design, reduces power consumption to a fraction of what is known in the market today.



MAIN FEATURES

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

WORLDWIDE PRESENCE



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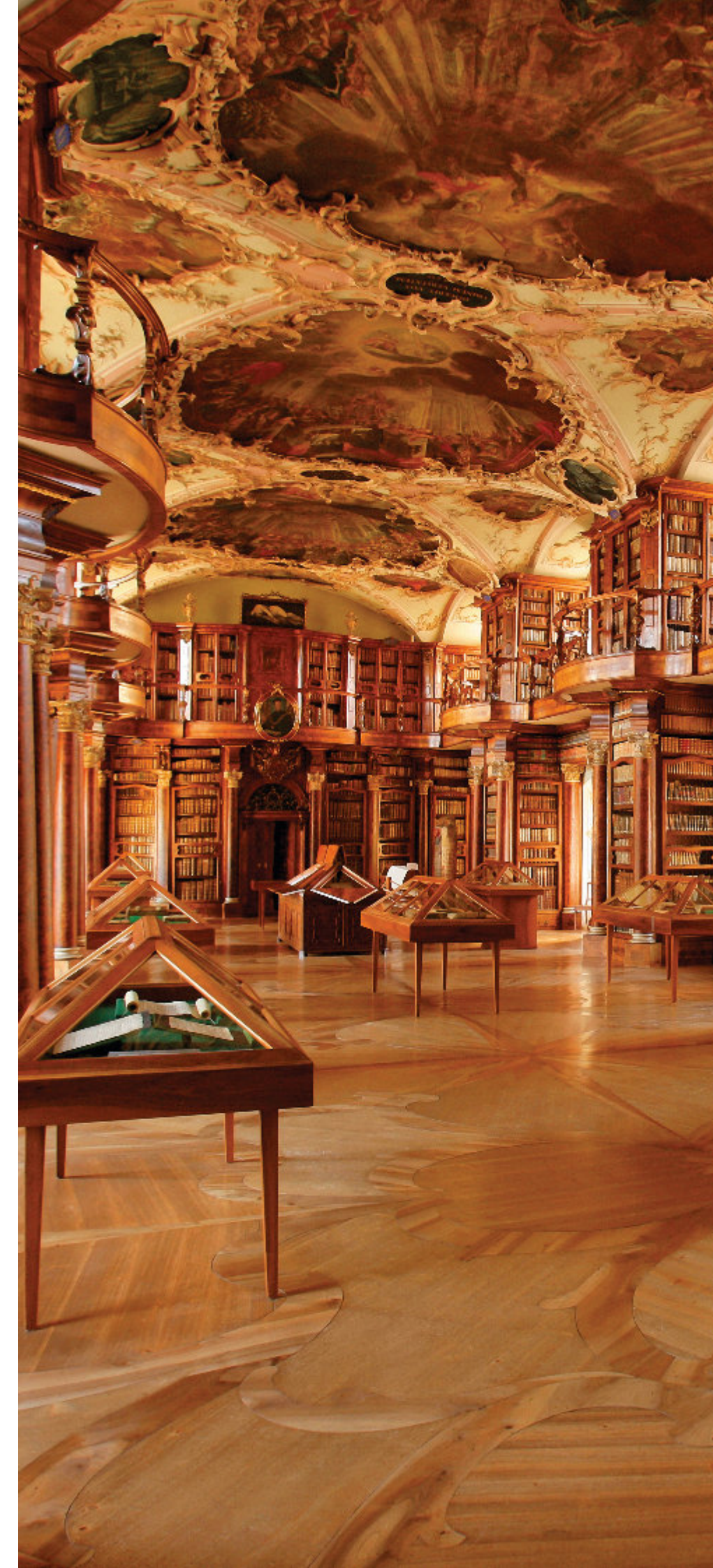
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-80°C
-40°C
-20°C
RT

FAB
Series

BiOLiX!

FAB-SERIES PRODUCT OVERVIEW

The FAB-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 FAB-ULT-Series simplifies the sample storage/retrieval process and ensures that sample integrity is maintained in perpetuity.

The FAB 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 FAB is easy with fully configurable storage cassette sizes.

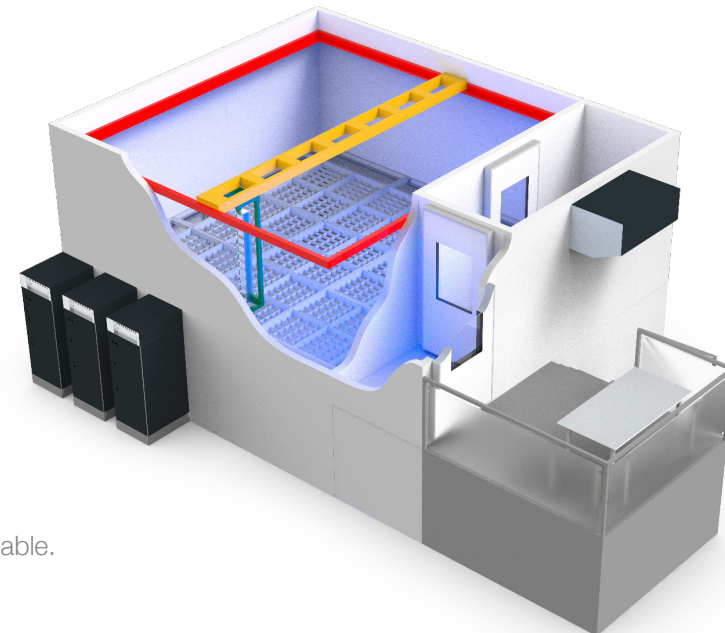


The FAB-ULT-Series is designed for the unique challenges of large biobank sample collections.

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.



Multi - Tube / Vial Picker

FAB CAPACITIES

| BiOLiX! FAB-Series examples | | | FAB31k0-ULT | | FAB46k5-ULT | | FAB98k0-ULT | | FAB220k5-ULT | |
|-------------------------------|--------------|-------|-------------|-----------|-------------|-----------|-------------|-----------|--------------|------------|
| Labware | Plate height | Pitch | Levels | Samples | Levels | Samples | Levels | Samples | Levels | Samples |
| FluidX 0.3 ml Screw Cap | 19.1 mm | 25 mm | 50 | 2'764'800 | 50 | 4'147'200 | 78 | 8'626'176 | 78 | 19'408'896 |
| Micronic 0.5 ml Screw Cap | 28.5 mm | 35 mm | 35 | 1'935'360 | 36 | 2'985'984 | 56 | 6'193'152 | 56 | 13'934'592 |
| LVL LX1000 | 45.6 mm | 52 mm | 24 | 1'327'104 | 24 | 1'990'656 | 37 | 4'091'904 | 37 | 9'206'784 |
| Thermo Matrix 1.0ml Screw Cap | 54.6 mm | 61 mm | 20 | 1'105'920 | 20 | 1'658'880 | 32 | 3'538'944 | 32 | 7'962'624 |
| Greiner Bio One 2 ml | 48.0 mm | 54 mm | 23 | 635'904 | 23 | 953'856 | 36 | 1'990'656 | 36 | 4'478'976 |

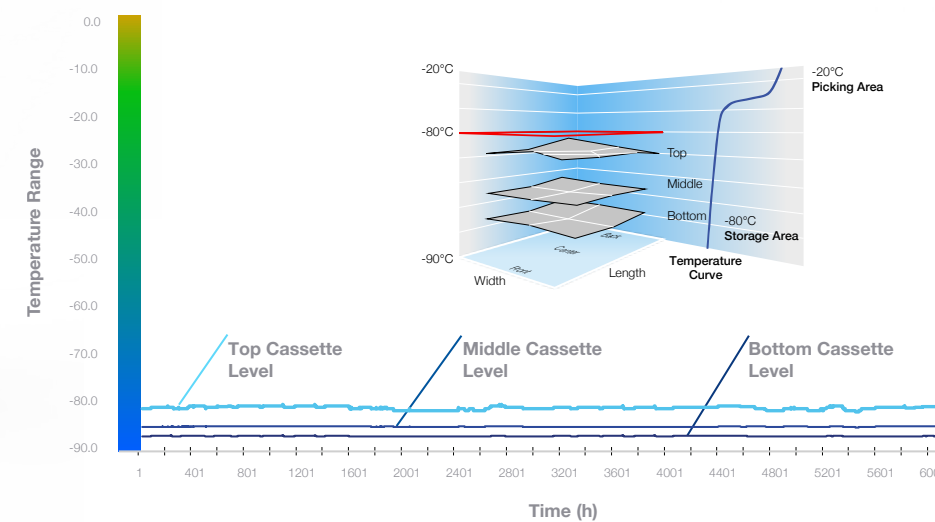


FAB STORAGE CONDITIONS

The FAB-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 FAB-Series, single, chest style storage combines with LiCONiC's proprietary dual temperature zone

designtoprovidetemperaturestability,excellent humidity control and easy service access to robotic components.

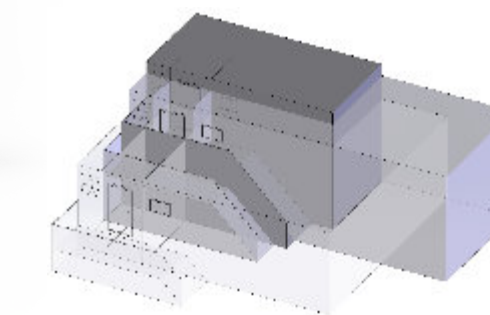
LiCONiC's unique chest freezer design naturally creates numerous benefits. Two of the most important are:



Two climate zones, one for active components at -20°C and another for passive elements at -80°C. Proven, stable horizontal temperature layers within the ULT storage area.

INTUITIVE SOFTWARE

- Graphical 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



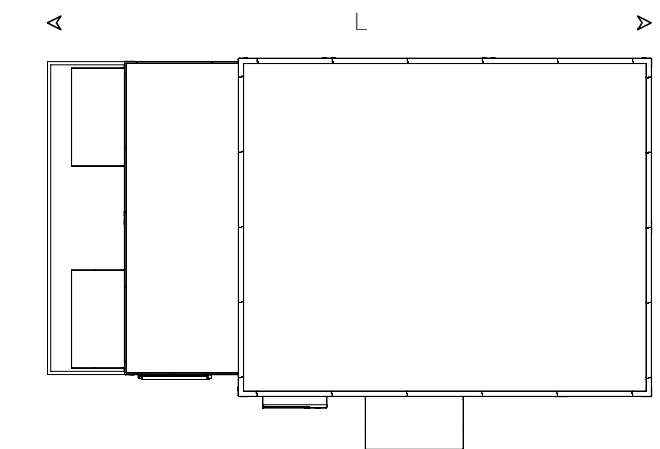
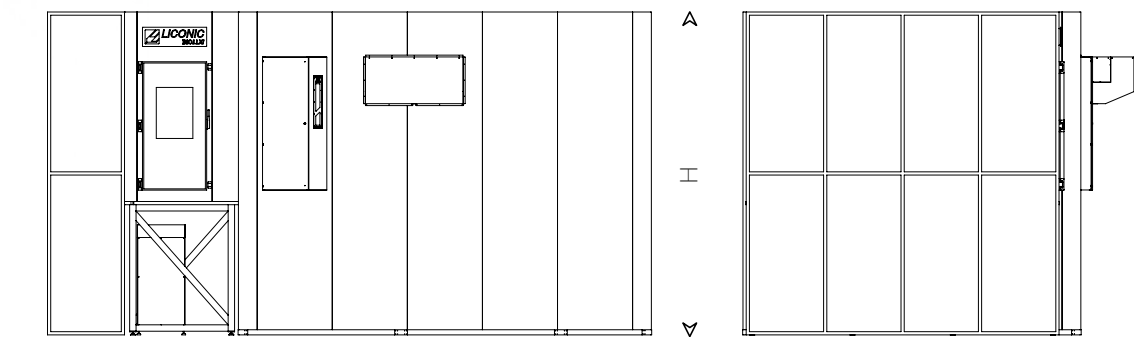
SPACE EFFICIENCY

The FAB-Series Automated BioLibraries makes best use of given room constraints by its "built to space" modular design. System dimensions are optimised to the individual application's needs and workflow requirements.

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
- Dynamically Configurable Storage Cassettes

FAB DIMENSIONS



BiOLiX! FAB Dimensions examples

| Type | L= Length | W= Width | H= Height |
|--------------|-----------|----------|-----------|
| FAB31k0-ULT | 6085 mm | 5650 mm | 3530 mm |
| FAB46k5-ULT | 8045 mm | 6092 mm | 3530 mm |
| FAB98k0-ULT | 9410 mm | 6092 mm | 5030 mm |
| FAB220k5-ULT | 15845 mm | 6092 mm | 5030 mm |