



**Celltrio** is leading the world of lab automation through its **modular** integration of proven task modules, data management software, and robotics. We are redefining the standards for science and medicine.



## RoboStor®

Celltrio's RoboStor® is an automated liquid nitrogen (LN2) freezer that provides a robotic, cryogenic -195°C storage solution that is perfect for R&D, biobanking and cell culture applications.

RoboStor® can be equipped with an individual vial handler that can automatically transfer vials between storage racks, RoboVial™. This option is field upgradeable and fits comfortably within the existing RoboStor® footprint. Celltrio's RoboVial™ has an optional scanner to read the 2D barcodes of all the vials from a bottom view of the rack, in one scan.

RoboStor® expands to multi-freezer configurations with Celltrio's SkyView C3® line management software, for high volume testing and production. RoboStor® is designed as a modular component and can be directly integrated into a Celltrio RoboCell™ which is a fully automated cell maintenance, cell culture, and advanced plating system.



### Safe

- Automatic storage and retrieval ensures sample location and data integrity, minimizes cross-contamination, and limits sample exposure to room temperature
- Sensors on access doors prevent robot motions during operator access
- Complies with CE and ANSI / RIA robot safety standards



### Control

- Intuitive, modern touchscreen interface
- Restricted access to samples and interface through secure control features
- Advanced Inventory Management System (IMS) with barcode reader for tracking



### Data Management

- Powerful Skyview C3® software provides continuous monitoring and logging of freezer data, device status, and user actions
- Audible and visual alarms for safety, and LN2 level
- Easily connects with facility alarm, monitoring systems, and remote control

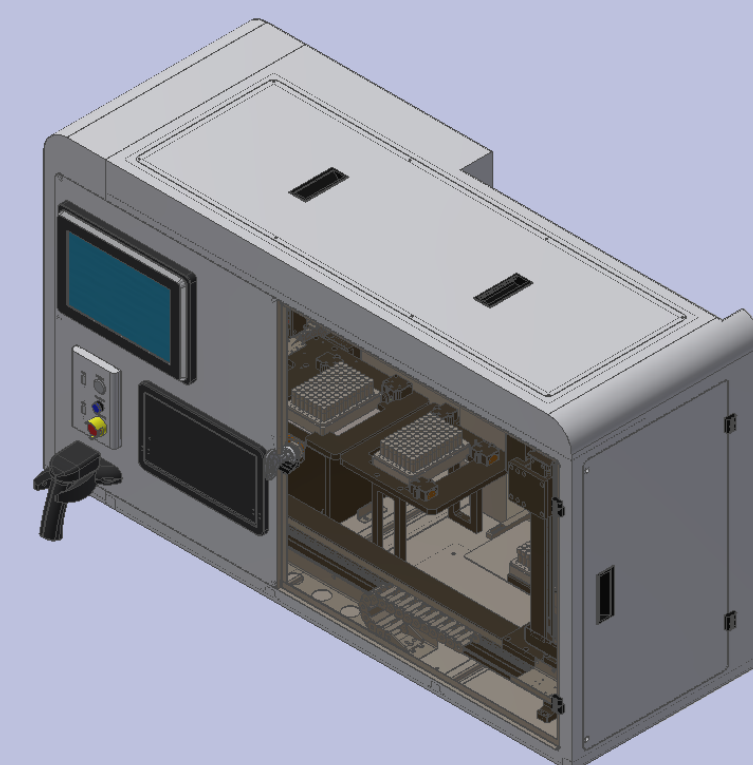
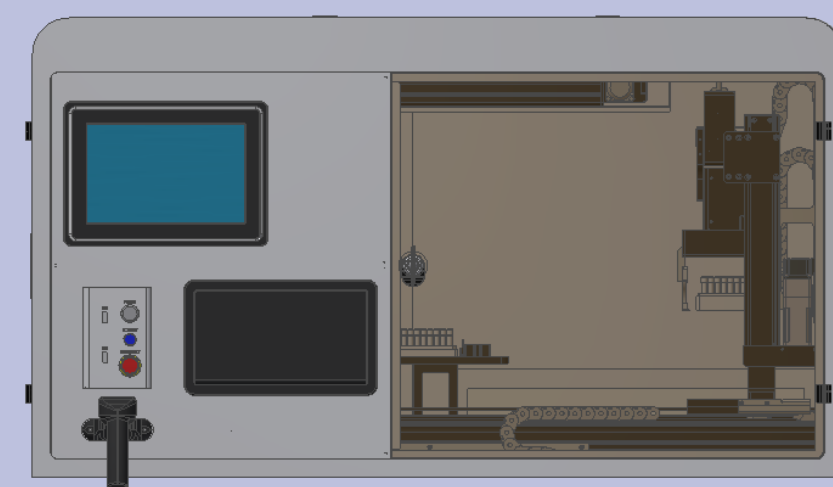


### Efficient

- Optimized robotic storage and retrieval
- Quick access to data and controls within 1-2 touches
- Fast, easy search to locate and review items stored in the freezer

## Specifications

RoboStor™ Specifications				
<b>RoboStor™ Dimensions</b>	1150 mm x 1150 mm x 2710 mm (3.77 ft x 3.77 ft x 8.90 ft)			
<b>Cryogenic Storage Tank Dimensions</b>	Height without Robot	1399 mm (4.59 ft)		
	Inner Diameter	1082 mm (3.55 ft)		
	Outer Diameter	1150 mm (3.77 ft)		
<b>System Weight</b>	1663 lbs (not loaded)			
<b>Storage Capacity</b>	<b>Labware</b>	<b>Racks</b>	<b>Slots per Rack</b>	<b>Samples</b>
	SBS Cryo Rack	18	13	Variable
	10 x 10 Box (1.2 mL or 2.0 mL internal threaded)	18	13	23,400
	9 x 9x Box (1.2 mL or 2.0 mL internal threaded)	18	13	18,954
	250 mL Cassette	12	36	432
500 mL Cassette	12	36	432	
<b>LN2 Capacity</b>	Total LN2 Capacity	818 liters		
	LN2 Under Turntable Capacity	155 liters		
<b>Celltrio SkyView Controller</b>	Touchscreen User Interface	10.1" Panel		
	Communication	Ethernet, RS-485 (Contact Celltrio for Options)		
	Battery Backup	12V, 7Ah, 36 hours		
	Power	AC 110/230V, 6A, 50/60Hz		
<b>Other</b>	Storage Temperature	-195°C		
	Environment Requirements	Room Temperature (20°C ~ 25°C) Max. 50% rH (non--condensing)		
	Vacuum Insulating Provides Significant Reduction in LN2 Supply	5 Year Warranty		
	Add-On Options	RoboVial™ (Individual CryoVial Handling)		



## RoboStor™ with RoboVial™

RoboVial™ Specifications		
<b>Container Requirements</b>	Format	SBS CryoRack, 10x10
<b>Vial Requirements</b>	Cap Size (Outer Diameter)	8~13 mm*
	Cap Type	Round (internal, external)*
	Height in Container / CryoRack without Lid	< 54 mm
	Supports One Vial Type Per RoboStor and RoboVial Unit	
<b>Unit Weight</b>	220 lbs	
<b>Cycle Times</b>	Individual CryoVial Transfer Time	Average: 4 seconds / cryovial
	Container Store / Retrieve Time	90 ~ 120 seconds
	Container + All CryoVials' Barcode Scan Time	Maximum: 12 seconds

