

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



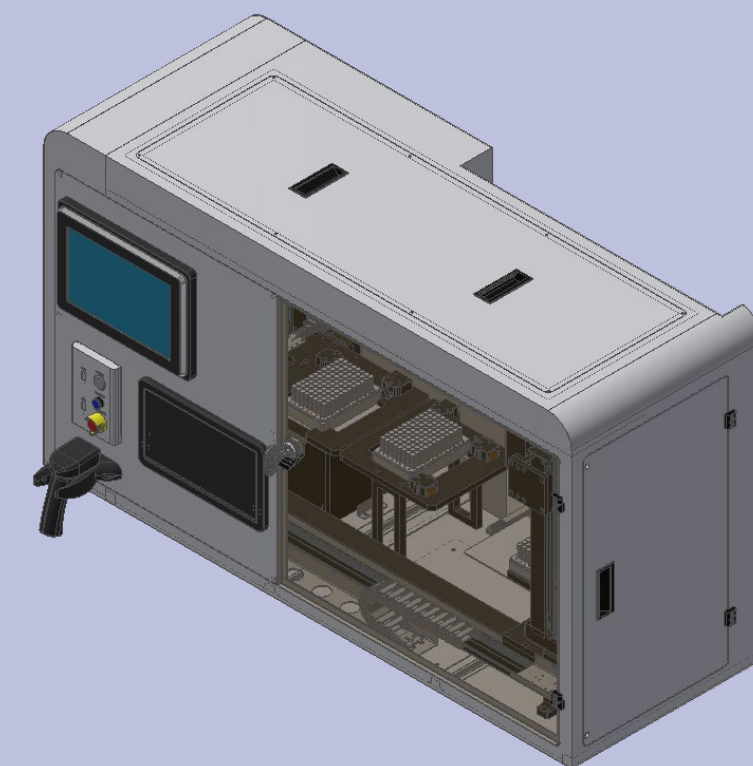
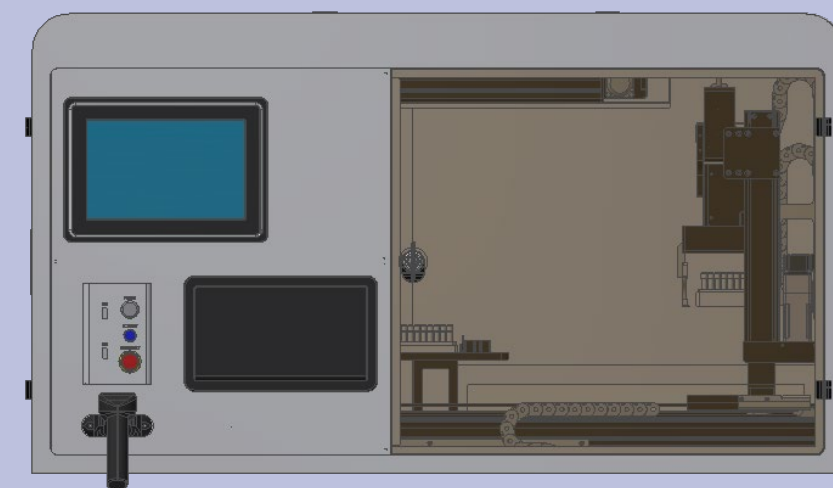
Efficient

- 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

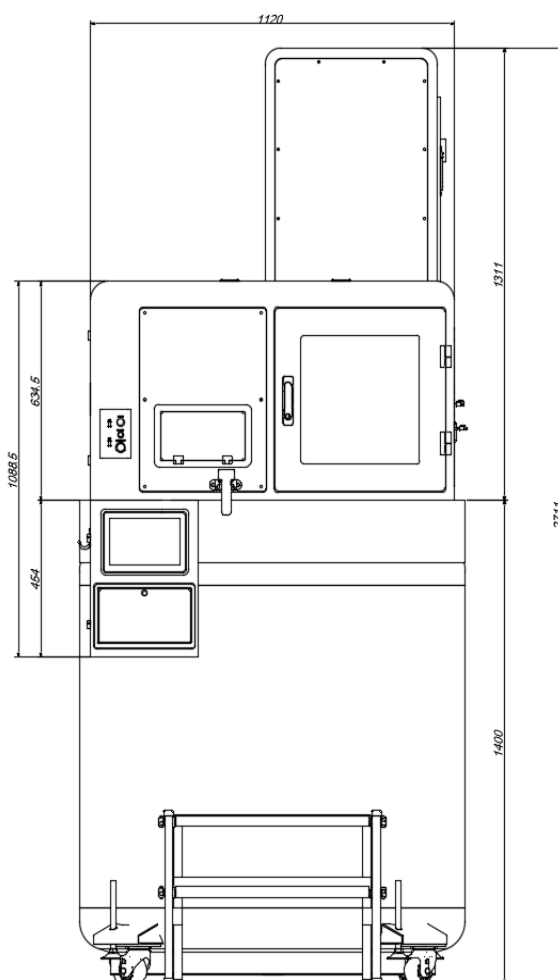
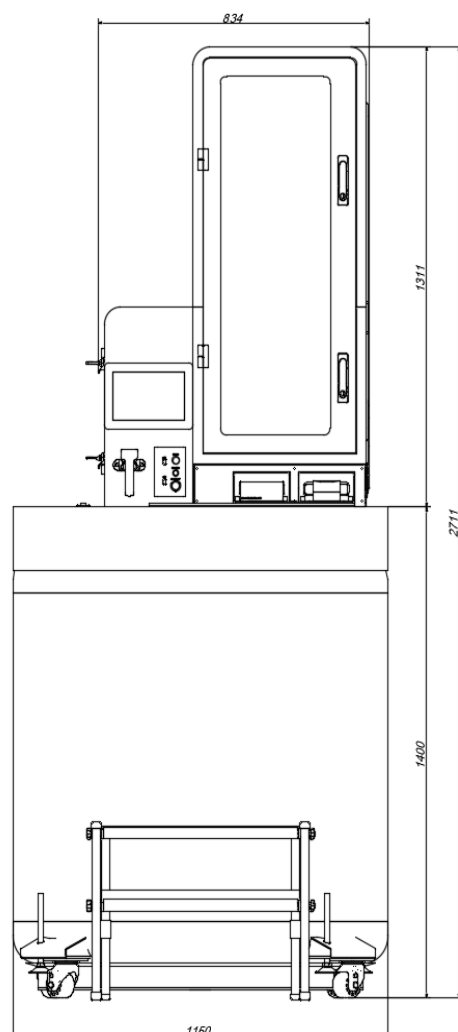
RoboVial

Specifications

RoboStor™ Specifications				
RoboStor™ Total Dimensions	1500 mm x 1263 mm x 2711 mm (3.77 ft x 3.77 ft x 8.89 ft)			
RoboStor™ and Cryogenic Storage Tank Dimensions	Height without Robot	1311 mm (4.30 ft)		
	Cryogenic Storage Tank Dimensions	(Diameter)Φ1,150 mm (3.77 ft) x (H)1,400 mm (4.59 ft)		
System Weight	810 kg (not loaded)			
Storage Capacity	Labware	Racks	Slots per Rack	Samples
	SBS Cryo Rack	18	12	Variable
	9 x 9x Box (1.2 mL or 2.0 mL internal threaded)	18	13	18,954
LN2 Capacity	Total LN2 Capacity	900 liters		
	LN2 Under Turntable Capacity	167 liters		
Celltrio SkyView Controller	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		
Other	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)		



RoboVial™ Specifications	
RoboStor™ w/ RoboVial™ Dimensions	1500 mm x 1352 mm x 2711 mm (4.92 ft x 4.44 ft x 8.89 ft)
Container Requirements	Format: SBS CryoRack, 9x9
Vial Requirements	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
Unit Weight	220 lbs
Cycle Times	Individual CryoVial Transfer Time: Average: 4 seconds / cryovial
	Container Store / Retrieve Time: 90 ~ 120 seconds
	Container + All CryoVials' Barcode Scan Time: Maximum: 12 seconds



RoboStor with RoboVial

