



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 is versatile and is available with multiple options:

- RoboStor for storing/retrieving cryobox containers filled with cryovials
- RoboStor with RoboVial adds individual cryovial handling with integrated barcode reading
- RoboStor CVR introduces Celltrio's LN2 Controlled Rate Freezer, RoboVial, and RoboStor in one integrated solution



Safe

- Automatic storage and retrieval ensures sample location and data integrity and minimizes cross-contamination
- Sensors on access doors prevent robot motions during operator access
- Patent pending humidity control reduces icing during robotic handling



Data Management

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



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



Efficient

- Optimized robotic storage and retrieval
- Import and export inventory with CSV files for bulk storing or retrieving cryovials
- Fast, easy search to locate and review items stored in the freezer

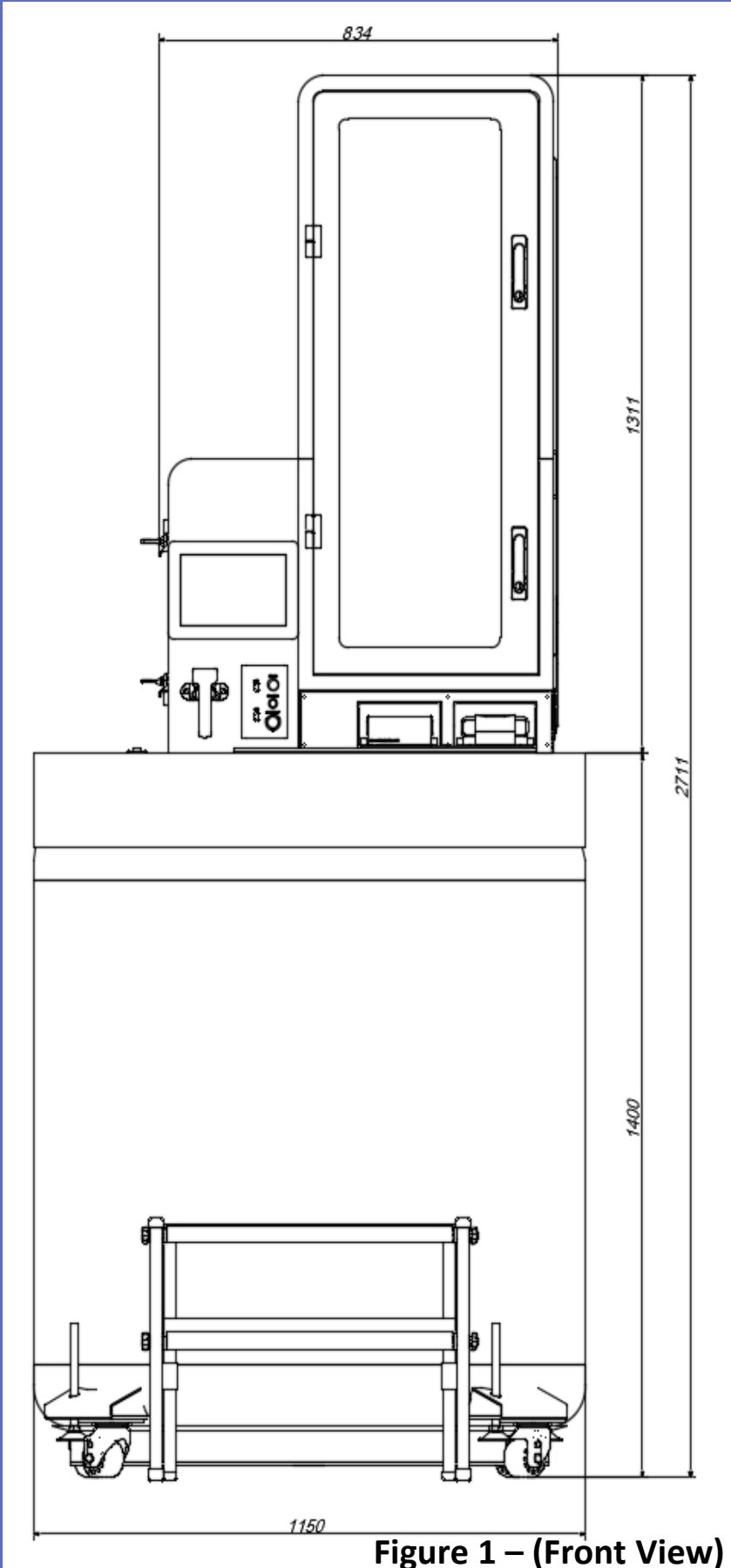
Specifications

RoboStor™ Specifications				
RoboStor™ Total Dimensions	1150 mm(W) x 1685 mm(D) x 2711 mm(H) (Figure 1) (3.77 ft x 5.52 ft x 8.89 ft)			
RoboStor™ and Cryogenic Storage Tank Dimensions	Height without Robot	1400 mm (4.60 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	Sample Vials
	SBS Cryo Rack (Matrix, 1.2 mL INT)	21	12	Variable
	9 x 9 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		

RoboStor™ with RoboVial™ Specifications		
RoboStor™ w/ RoboVial™ Dimensions	1150 mm x 1685 mm x 2711 mm (Figure 3) (4.92 ft x 5.53 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	166 kg (total weight 950 kg)	
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™ CVR (CRF Vial) Specifications		
RoboStor™ w/ CVR Dimensions	1998 mm(W) x1239 mm(D) x 2711 mm(H) (Figure 6) (6.56 ft x 4.06 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	
System Weight	1300 kg	
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



The Fastest Path To Cell Line Automation

Diagrams/Images:

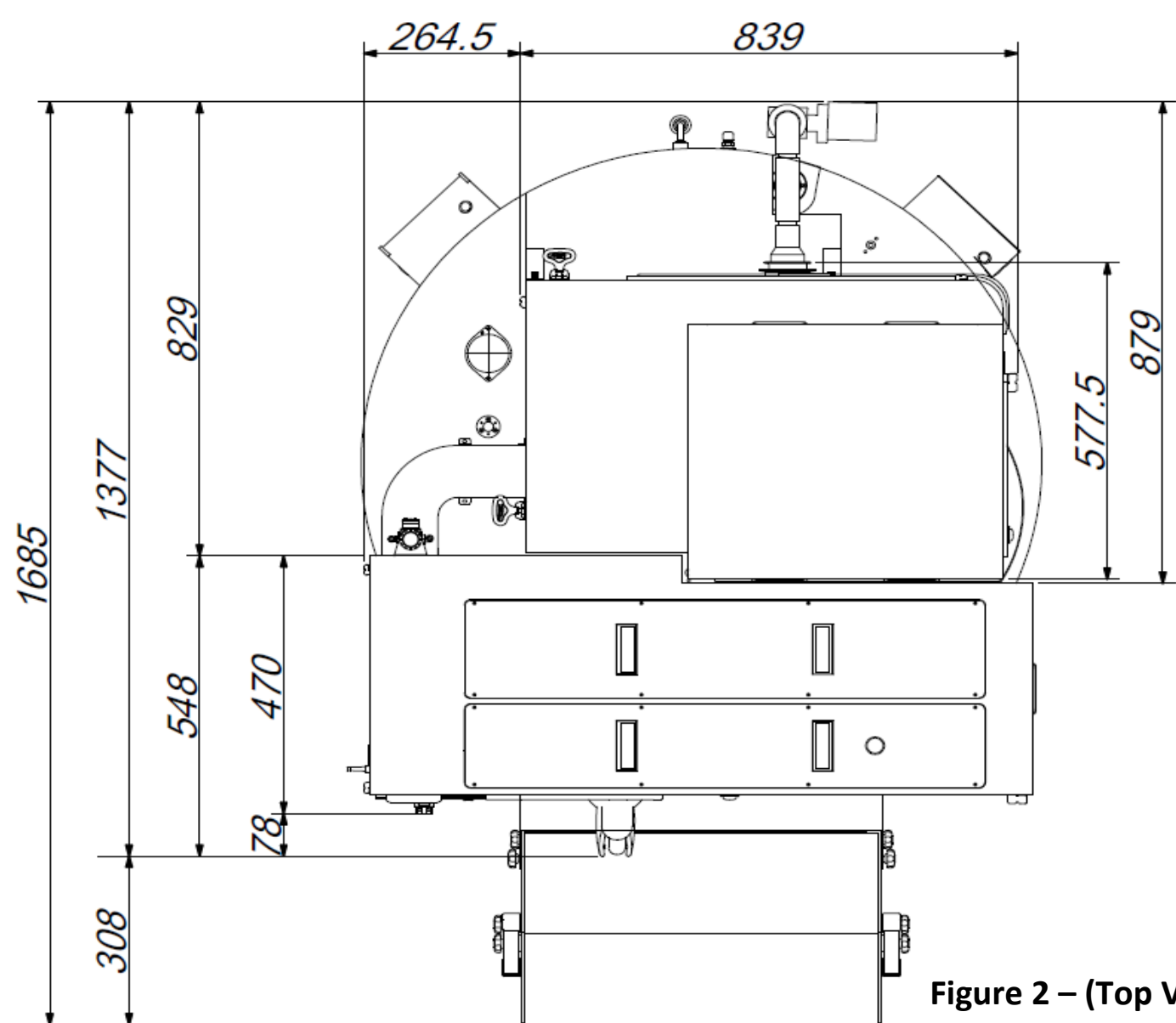


Figure 2 – (Top View)

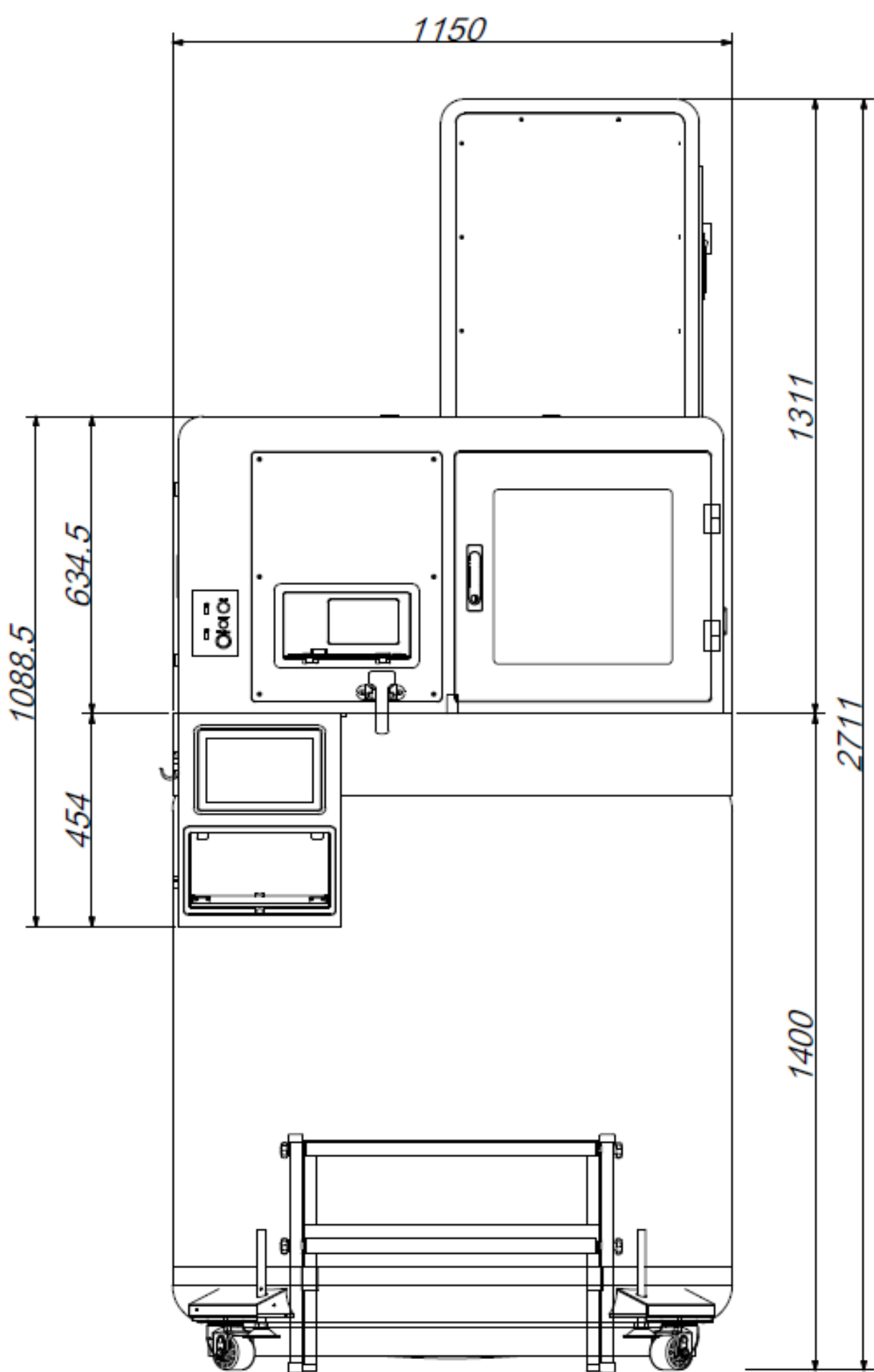


Figure 3 – (Front View)

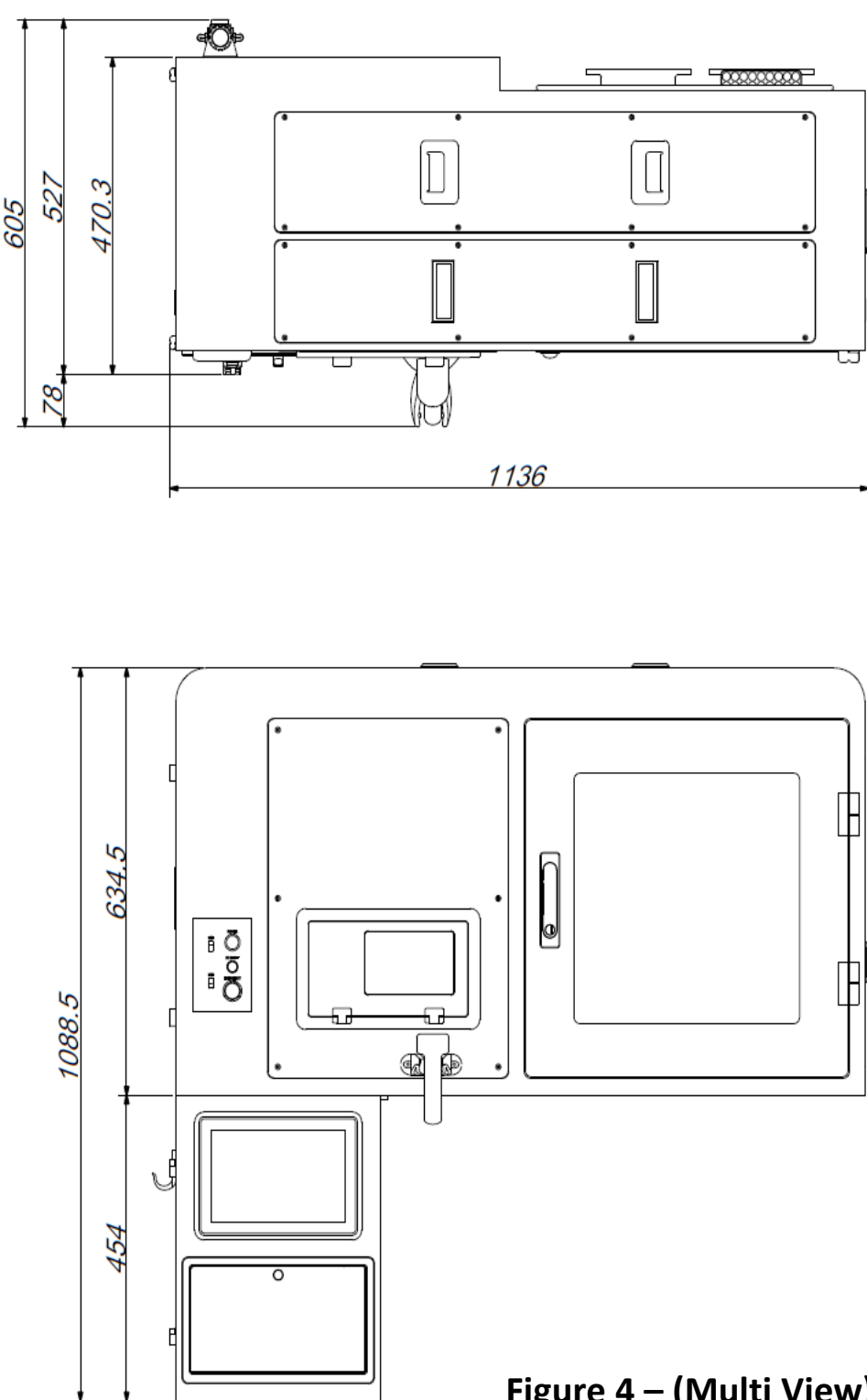
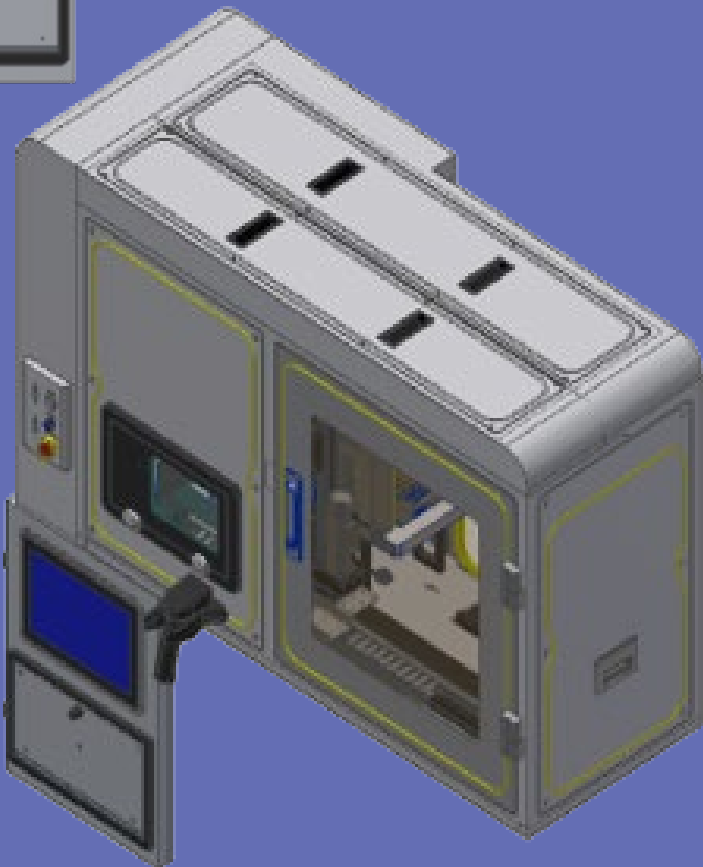
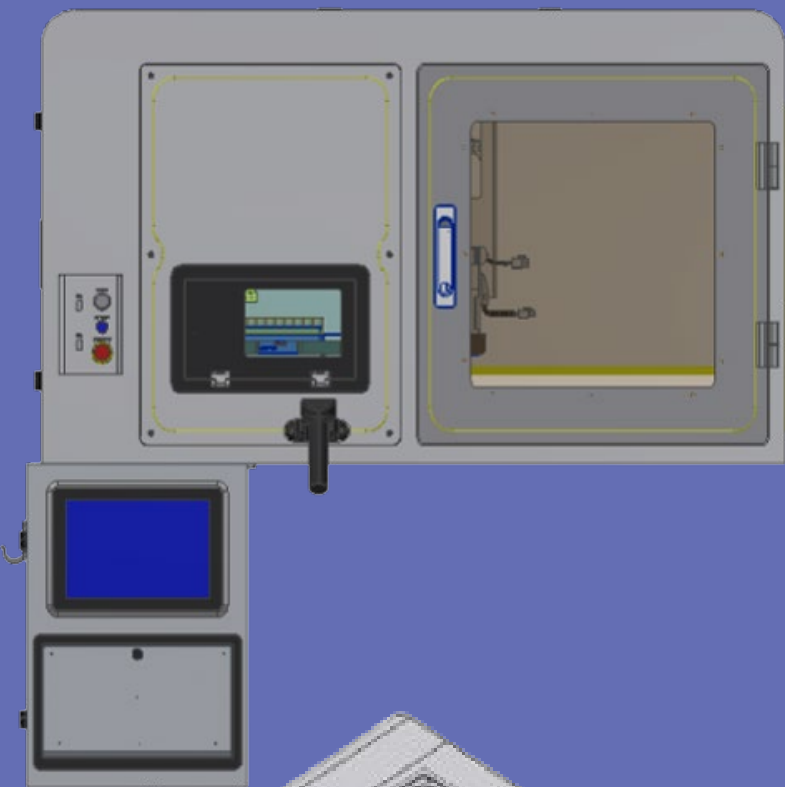


Figure 4 – (Multi View)

RoboVial



RoboStor with RoboVial



Diagrams/Images:

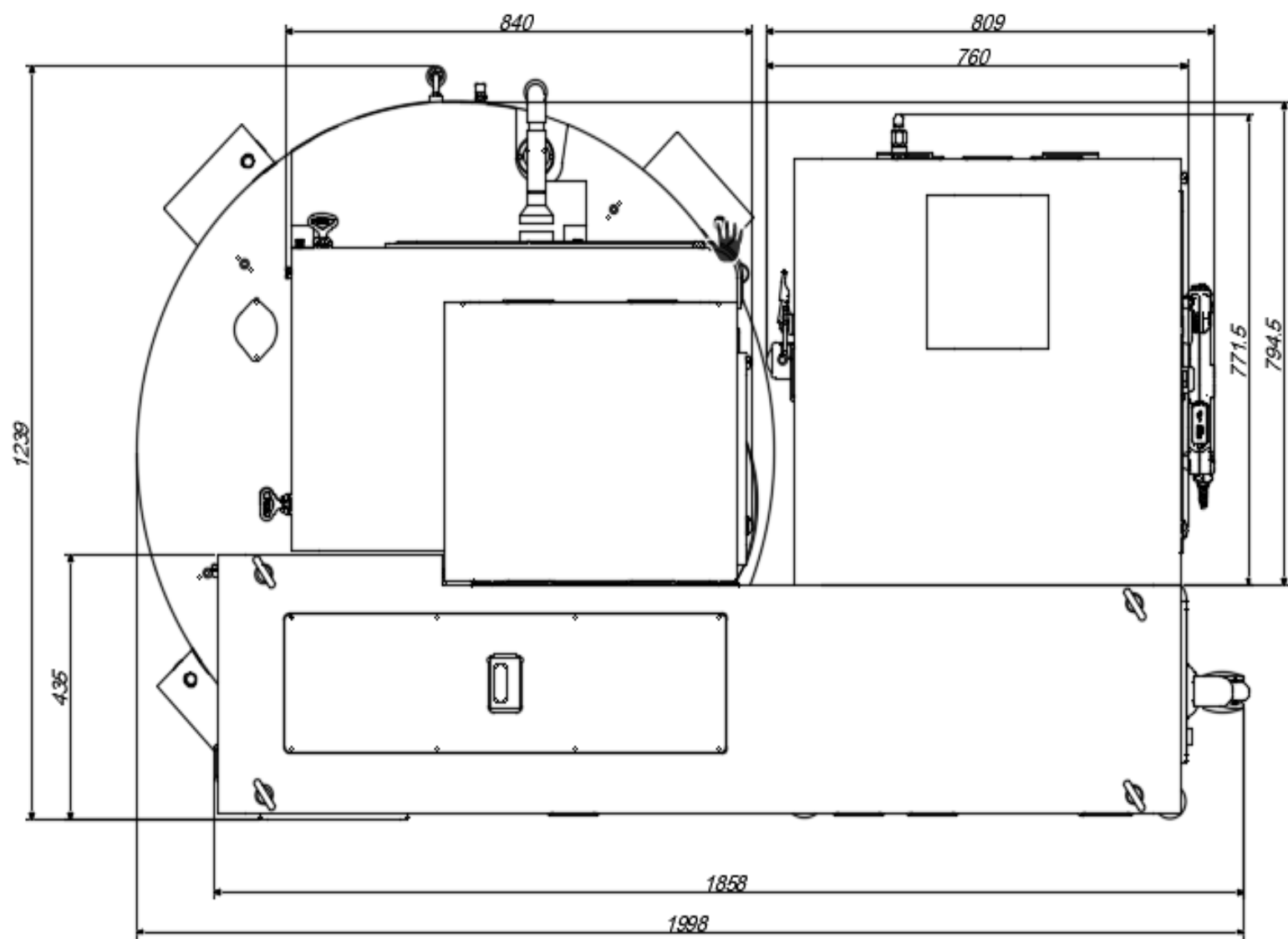


Figure 5 – (Top View)

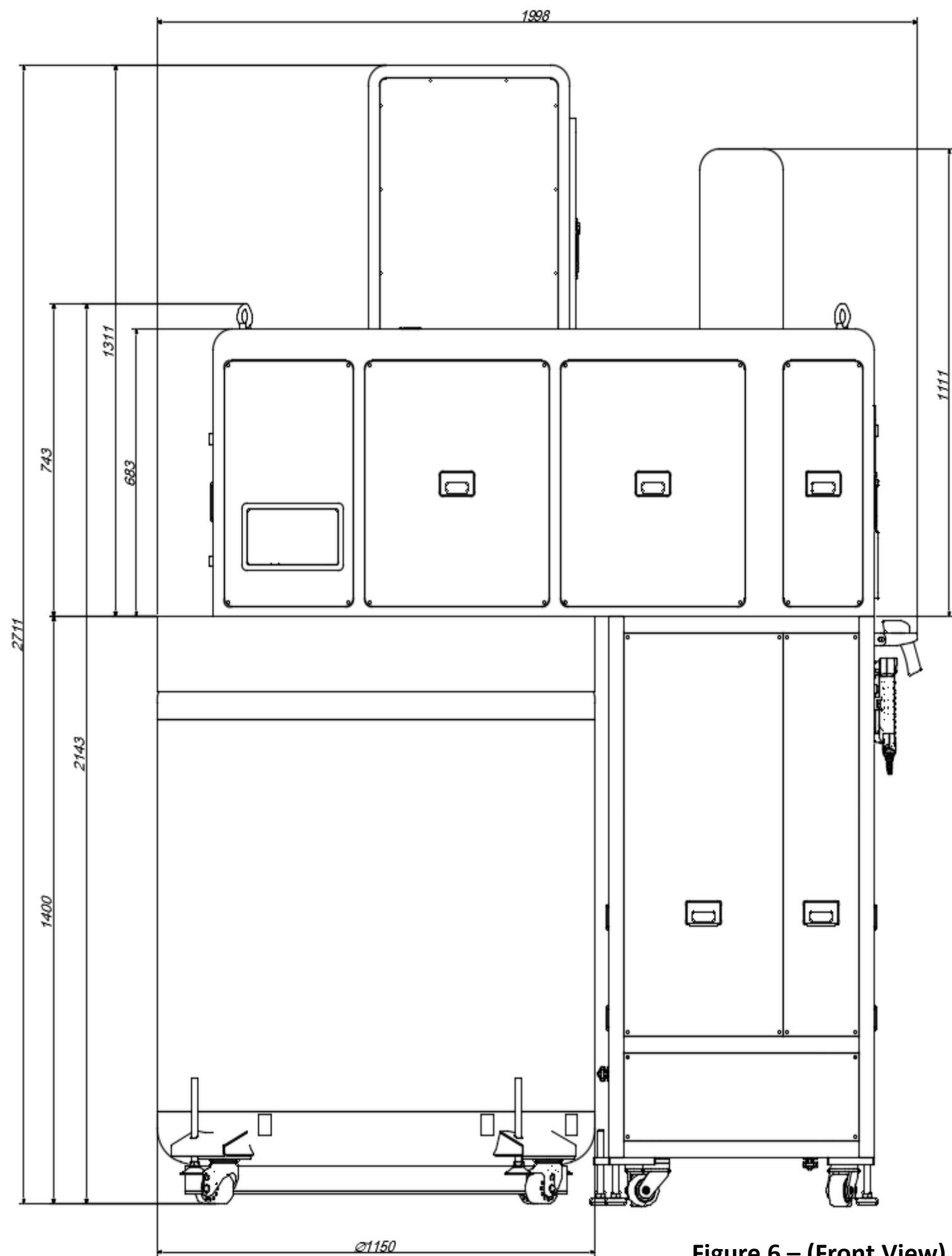


Figure 6 – (Front View)

RoboStor CVR

