

Stainless Steel Vapor Phase (IN-SSV-450)

The IN-SSV-450 by Innova Bio Life Technology is a high-performance stainless steel vapor phase cryogenic storage system designed for the safe and reliable preservation of biological samples, blood bags, vaccines, stem cells, and laboratory materials under ultra-low temperature conditions. Engineered with advanced vapor phase liquid nitrogen technology, the system ensures uniform temperature distribution while minimizing the risk of cross-contamination associated with liquid phase storage. The unit features a large 460-liter storage capacity with optimized rack configuration for maximum sample accommodation. Its robust stainless-steel construction provides excellent durability, corrosion resistance, and long operational life, making it ideal for hospitals, blood banks, IVF centers, research laboratories, biobanks, and pharmaceutical applications.

Equipped with intelligent remote cloud monitoring, automatic liquid nitrogen replenishment, dual-inlet solenoid valve assembly, and assisted lifting functionality, the IN-SSV-450 offers efficient, user-friendly operation with enhanced safety and reduced manpower requirements. The adjustable display interface and ergonomic design further improve accessibility and operational convenience.

Features

- ❖ Remote cloud monitoring system
- ❖ Assisted lifting mechanism for easy sample retrieval
- ❖ Adjustable display screen angle and direction
- ❖ Ergonomic manpower-saving design
- ❖ Dual-inlet solenoid valve assembly
- ❖ Hot gas bypass system for fluid reduction
- ❖ Automatic liquid nitrogen replenishment after lid closing
- ❖ Stable vapor phase cryogenic storage system



Standard Accessories



Frozen storage rack



cryopreservation box



blood bag box



Assisted lifting

Technical Specification

Model Number	IN-SSV-450
Storage Type	Stainless Steel Vapor Phase
Effective Volume of Tank	460 L
Liquid Nitrogen Level at Bottom Tray	55 L
Tank Opening Diameter	320 mm
Effective Internal Height	914 mm
Tank Outer Diameter	820 mm
Total Tank Height	1600 mm
Tank Operating Height	971 mm
Empty Tank Weight	264 kg
Static LN ₂ Storage Duration (Liquid Phase)	92 Days
Static LN ₂ Storage Duration (Gas Phase)	11 Days
2 ml Internal Spiral Cryopreservation Tube Capacity	21,000 Tubes
5 ml Cryopreservation Tube Capacity	6,804 Tubes
5 × 5 Cryogenic Rack Capacity	8 Racks
10 × 10 Cryogenic Rack Capacity	12 Racks
Number of Cryogenic Rack Layers	15 Layers
25 ml Blood Bag Capacity	1,764 Bags (9 Layers × 196)
50 ml Blood Bag Capacity	1,080 Bags (9 Layers × 120)
250 ml Blood Bag Capacity	480 Bags (5 Layers × 96)
500 ml Blood Bag Capacity	280 Bags (5 Layers × 96)