

Cryoport Express® Cryogenic HV3 Shipping System - *Technical Specifications*

The Cryoport Express® Cryogenic HV3 Shipping System complies with all current airline regulations, has robust wheels and a handle to enhance mobility, and can stack and nest for efficient storage capacity.

Ordering Information

CXHV3SPGP	Cryoport Express® Cryogenic HV3 Shipping System
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Product Specifications

Temperature Range	-150°C or colder
Static Hold Time	Up to 13 days
Dynamic Hold Time	Up to 10 days
Exterior Dimensions	22 L x 22 W x 28 H in 55.88 x 55.88 x 71.12 cm
Interior Chamber	8.5 in / 21.59 cm diameter 12 in / 30.48 cm height Note: Max commodity height 11.5 in / 29 cm
Weight - Dry	69 to 73 lb / 31 to 33 kg
Weight - Charged	88 to 92 lb / 40 to 42 kg

Payload Capacity

Capacity - Canes Each cane holds 5 vials <ul style="list-style-type: none"> 6 Safepak® bags - 15 canes per bag (75 cryovials per bag, 450 cryovials total) 100 canes (2.0 ml per vial) 4 metal canisters (500 cryovials total) Max packout can hold up to 500 cryovials
Capacity - Boxes <ul style="list-style-type: none"> 5 standard cryovial boxes (5 x 5 x 2 in / 127 x 127 x 51 mm) 1 Safepak® 1800 with optional Cryostrap® 1 Safepak® XL with optional Cryostrap® 1 metal cryovial box rack (5 boxes per rack)
Capacity - Blood Bag Cassettes <ul style="list-style-type: none"> 9 blood bag cassettes (up to 750 ml); additional quantities depending on blood bag cassette size 1 Safepak® Soft System 1800 1 Safepak® XL with optional Cryostrap® 1 metal blood bag cassette rack



Condition Monitoring Solutions

Smartpak™ Condition Monitoring System	<ul style="list-style-type: none"> Records near real-time information Track shipment's location Records temperature, pressure, anti-tamper, orientation, humidity, and shock Unsurpassed analytics contributes to the preservation of the shipped materials Assists with planning, enroute mitigation, and reporting
Cryoportal® Logistics Management System	<ul style="list-style-type: none"> Maintains data recorded by the Smartpak™ and provides 24/7 access to a shipment's location and condition Integrates ordering, tracking, paperwork, and communications Enhanced Security/GAMP Compliance (CRF 21 Part 11) Audit logging system captures all changes made in the database Built to uphold latest industry standards in web security and cross-site scripting prevention Cryoportal® and Smartpak™ utilize the Live View® interface to display mobile-friendly data for "on-the-go" experience

Regulatory Testing

ISTA 3A	This test simulates typical shipping activity by subjecting the shipping systems to the worst-case scenarios associated with shipping and distribution.
ISTA 7E	This test evaluates the thermal performance of insulated shipping containers, with or without refrigerants, under controlled laboratory conditions. It uses pre-defined seasonal temperature profiles to replicate real-world distribution scenarios, ensuring the package maintains required temperature ranges. It is applicable to products up to 150 pounds.
ISTA 6-FedEx-A	General procedures simulating FedEx air and ground shipping environments for testing packaged products weighing up to 150 lbs. which includes drop, impact, compression, and vibration tests.
IP32	Ingress Protection (IP) testing is performed to establish the effectiveness of the shipping system to block solids such as dust and liquids from entering the shipper.
IATA CAT B	The testing evaluates the adequacy of the packaging to protect the payload (a Category B infectious substance) during a simulated distribution test, which includes drop, leakproofness, pressure differential, thermal shock, and vibration assessments, in accordance with the IATA Packing Instruction 650, Category B Infectious Substance Testing procedure.

Compatible Accessories



ACC-9123 | Smartpak II®

The Smartpak II® condition monitoring system provides near real-time cellular transmission tracking and reporting of location, temperature, pressure, humidity, orientation, and light.



SET-1000 | Safepak® Soft System 1800

This system includes a Tyvek bag with integrated absorbent material used for secondary containment of infectious substances. This is a one-time use product. Set includes Safepak® 1800 Bag, SoftRack™, and HV Sleeve (not pictured).

- 1 SoftRack™
 - Holds up to 8 blood bag cassettes (Any combination of 50 ml, 250 ml, and 500 ml blood bag cassettes)



SET-1001 | Safepak® System 1800

This system includes a Tyvek bag with integrated absorbent material used for secondary containment of infectious substances. This is a one-time use product. Set includes Safepak® 1800 Bag and HV Sleeve (not pictured).

- Holds 5 standard cryovial boxes (5 W x 5 L x 2 H in / 127 x 127 x 51 mm)



ACC-9139 | Safepak®

Tyvek bag with integrated absorbent material used for secondary containment of infectious substances. This is a one-time use product.

- Holds up to 15 cryovial canes
- Holds up to 2, 65 mm goblets
- Holds up to 2 Cryoport cryovial boxes (5.75 W x 2 L x 2 H in / 146 x 51 x 51 mm)



ACC-9140 | Safepak® XL

Tyvek bag with integrated absorbent material used for secondary containment of infectious substances. This is a one-time use product.

- Holds up to 15 Cryoport cryovial boxes (5.75 W x 2 L x 2 H in / 146 x 51 x 51 mm); up to 400 ml
- Holds up to 9 blood bag cassettes - for additional security, we recommend using a Cryostrap®
- Holds 1 ACC-8905 metal rack
- Holds up to 5 standard cryovial boxes (5 W x 5 L x 2 H in / 127 x 127 x 51 mm)

Compatible Accessories



ACC-9141 | Cryostrap®

Alternative to metal racks and compatible with Safepak® System.

- Hold up to 9 blood bag cassettes
- Hold up to 5 standard cryovial boxes (5 W x 5 L x 2 H in / 127 x 127 x 51 mm)
- Hold up to 12 Cryoport cryovial boxes (5.75 W x 2 L x 2 H in / 146 x 51 x 51 mm)



ACC-9122 | Blood Bag Cassette Rack

Reusable blood bag cassette rack for blood bags.

- Holds up to 9 blood bag cassettes
- Blood bag cassette sizes up to 11 W x 6 L x 0.5 D in / 279.4 x 152.4 x 12.7 mm
- Minimum blood bag cassette width is 5.5 in / 140 mm



ACC-8905 | Cryovial Box Rack

Reusable box rack for cryovials.

- Holds up to 5 standard cryovial boxes
- Standard cryovial box sizes up to 5 W x 5 L x 2 H in / 127 x 127 x 51 mm
- Minimum box width is 5.5 in / 140 mm



ACC-9043 | Cryovial Box

Cryovial box with insert.

- Holds up to 30 cryovials
- Up to 2.0 ml



ACC-9053 | Canister

Reusable stainless-steel canister for specialty canes.

- Holds up to 25 specialty canes
- Cryoport Express® High Volume Shipping Systems can accommodate up to 4 metal canisters for a total of 100 canes for an overall total of up to 500 cryovials per shipment

Compatible Accessories



ACC-9033 | Cryovial Cane

Snap cryovials into place to create a protective seal that will remain intact during liquid nitrogen cooling.

- Holds up to 5 cryovials
- Up to 2.0 ml



ACC-9052 | Cane Sleeve

Clear cryo-proof protective sleeve for ACC-9033 standard canes.

- Holds 1 cryovial cane



ACC-9160 | Serialized Seal

Serialized blue tamper-evident seal that helps identify if shipment may have been compromised.