Cryoport Systems

Cryoport Elite® 56L Ultra Cold Shipping System -
Technical Specifications

The Cryoport Elite® Cryogenic Shipping Systems are available for both general purpose and advanced therapy shipments, offering advanced protection for high-value commodities and supporting international shipping lanes.

Ordering Information

ELUC156SPGP	Cryoport Elite® 56L Ultra Cold Shipping System (GP)
ELUC156SPHU	Cryoport Elite® 56L Ultra Cold Shipping System (ATS™)

Product Specifications

Temperature Range	Internal: -60 to -80°C Operational: -20 to +60°C Storage: -20 to +25°C
Static Hold Time	7+ days | 185+ hours
Exterior Dimensions	24.55 L x 23.85 W x 23.93 H in 62.36 x 60.58 x 60.79 cm
Interior	15 L x 15 W x 15 H in / 38.1 x 38.1 x 38.1 cm
Pallet	30 x 30 x 5.75 in / 76.2 x 76.2 x 14.6 cm
Weight	75 - 85 lb / 34 - 39 kg (empty with payload holding system) 97 - 107 lb / 44 - 49 kg (empty with pallet) 145 - 155 lb / 66 - 70 kg (fully loaded) 167 - 177 lb / 76 - 80 kg (fully loaded with pallet)

GP

Payload Capacity

Capacity - Boxes

- 8 standard cryovial boxes (5 W x 5 L x 2 H in / 127 x 127 x 51 mm)
- 24 Cryoport cryovial boxes (5.75 W x 2 L x 2 H in / 146 x 51 x 51 mm) - 30 vials per box (720 total cryovials) - Safepak XL®
- 36 Cryoport cryovial boxes (5.75 W x 2 L x 2 H in / 146 x 51 x 51 mm) - 30 vials per box (1,080 total cryovials)

Capacity - Cassettes

- 40 blood bag cassettes (flat orientation) - 250 ml
- 45 blood bag cassettes (flat orientation) - 50 ml

ATS™

Condition Monitoring Solutions

Smartpak™ Condition Monitoring System	o Records near real-time information o Track shipment's location o Records temperature, pressure, anti-tamper, orientation, humidity, and shock o Unsurpassed analytics contributes to the preservation of the shipped materials o Assists with planning, enroute mitigation, and reporting
Cryoportal® Logistics Management System	o Maintains data recorded by the Smartpak™ and provides 24/7 access to a shipment's location and condition o Integrates ordering, tracking, paperwork, and communications o Enhanced Security/GAMP Compliance (CRF 21 Part 11) o Audit logging system captures all changes made in the database o Built to uphold latest industry standards in web security and cross-site scripting prevention o 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 3B	This test assesses packaged products intended for distribution through a retailer fulfillment system. It simulates the combined hazards of transportation and handling, including vibration, drop, compression, and environmental factors, to ensure packages can withstand real-world shipping conditions.
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.
ASTM D4169	This packaging test assesses the performance of a packaging system when exposed to the typical hazards encountered in a distribution environment. It incorporates sequences of hazards such as handling, stacking, vibration, and low-pressure conditions, ensuring packaging systems can endure typical transportation stresses.
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.
IP53 Rated	This certification demonstrates protection against dust ingress and spraying water. An IP53 rating indicates the product is safeguarded from limited dust exposure and water sprayed at up to a 60° angle, ensuring reliable performance in challenging environments.

Cryoport Systems

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.

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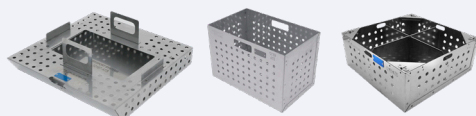
- Holds up to 15 Cryoport cryovial boxes (5.75 W x 2 L x 2 H in / 146 x 51 x 51 mm); up to 400 ml
- Holds up to 9 blood bag cassettes - for additional security, we recommend using a Cryostrap®
- Holds up to 5 standard cryovial boxes (5 W x 5 L x 2 H in / 127 x 127 x 51 mm)

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-10577 (GP) / ACC-10574-ATS (ATS™) | 56L Payload Holding System

The Cryoport Elite® Ultra Cold Shipping Systems are equipped with our innoative, reusable, proprietary, and patented dry ice Payload Holding Systems, which consist of 3 components.

- 12205 (GP) / 12187 (ATS™) - Bottom Dry Ice Compartment
- 12206 (GP) / 12189 (ATS™) - Payload Carrier
- 12207 (GP) / 12191 (ATS™) - Top Dry Ice Compartment

Compatible Accessories

ACC-9043 | Cryovial Box
Cryovial box with insert.

o Holds up to 30 cryovials
o Up to 2.0 ml

ACC-9160 | Serialized Seal
Serialized blue tamper-evident seal that helps identify if shipment may have been compromised.

ACC-10631 | Cable Zip Tie
Serialized blue tamper-evident cable zip ties that helps if shipment has been compromised.