UPGRADED CRYOPORT EXPRESS® HIGH VOLUME CRYOGENIC ADVANCED THERAPY SHIPPER™

The Cryoport Express® High Volume Cryogenic **Advanced Therapy Shipper™** (ATS) is an IATA certified, non-hazardous, pre-packaged, dry vapor shipping container. The shipper and our processes are designed to be used exclusively for cell and gene therapies containing human clinical and/or commercial product. We guarantee your **Advanced Therapy Shipper™** has never contained non-human-based materials, virtually eliminating the possibility for cross-contamination.

The upgraded ATS High Volume Shipper is the latest enhancement to our Cryoport Express® product line and provides even more security for your irreplaceable commodities, integrating the most advanced packaging, informatics and logistics capabilities available on the market today. The enhanced model also improves usability and adheres to the strictest industry standards while maintaining hold time, shipping performance, and near real-time monitoring. For materials that need to be kept at frozen temperatures, trust the most advanced solution available – the signature Cryoport Express® High Volume Advanced Therapy Shipper™.



| Specifications | ATS High Volume Shipper |
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| Dynamic Holding Time | Up to 10 days |
| Holding Temperature | -150°C or colder |
| Specimen Chamber | 8.5" (215.9 mm) diameter, 12" (304.8 mm) depth |
| Storage Capacity – Boxes 405 vials: Five 5" x 5" x 2" cryovial boxes 81 2.0 ml vials per box 500 vials: Five 5.25" x 5.25" x 2" cryovial boxes 100 2.0ml vials per box | Accessories Metal cryovial box rack OR Safepak®XL Tyvek Bag with optional Cryostrap® |
| Storage Capacity – Canes 500 vials 100 canes Five 2.0 ml vials per cane | Accessories Up to 4 metal canisters with 25 canes per canister OR Up to 6 Safepak® Tyvek bags with 15 canes per bag |
| Storage Capacity – Cassettes • 9 cassettes (up to 11.13" x 6.5" x 0.5") • Additional quantities depending on cassette size | Accessories Metal cassette rack OR Safepak®XL Tyvek Bag with optional Cryostrap® |
| Weight | Dry - 57 lb / 26 kg; Charged - 77 lb / 35 kg |
| Outer Container | 22" (558.8 mm) diameter x 28" (711.2 mm) tall |

KEY NEW FEATURES & BENEFITS:

- New, purpose-built hinged lid securely houses our Smartpak II® condition monitoring system. The hinged lid provides robust protection for the Smartpak II® which improves data reliability during transit.
- ➤ For extra security, the hinged lid can be secured with a zip tie to prevent unauthorized access into the shipper. The new zip tie loop on the hinged lid provides enhanced functionality with simple, one-handed threading.
- Innovative 360-degree handle on vapor plug allows for an easy, one-handed grip with a gloved hand.
- ➤ Vapor plugs are fleece-lined to maintain temperatures inside the specimen chamber. The fleece material improves Nitrogen Evaporation Rate (NER) and hold time while in the upright and side orientations.
- ➤ Modified foam inside the enclosure reduces dewar movement, increases impact resistance and provides more space for shipping documentation and accessories.







ADVANCED THERAPY SHIPPERS™

The Advanced Therapy Shipper™ fleet is the latest in Cryoport's Chain of Compliance® solution portfolio, providing complete traceability and certification that all equipment has exclusively been utilized for human clinical and commercial drug product distribution. The Advanced Therapy Shipper™ fleet was specifically designed to meet ISO 21973 - General Requirements for Transportation of Cells for Therapeutics Use.

Segregated Fleet & Handling Processes:

A specialized set of logistic operations and instructions ensure Advanced Therapy Shippers[™] and components are free of cross-contamination by handling them separately from other fleets.

Cryoportal® Logic:

Logic is implemented via the Cryoportal® Logistics Management Platform to prevent violation of procedures from order entry through processing.

Veri-Clean™ Validated Cleaning & Disinfection Processes:

Our proprietary sanitation procedure, Veri-Clean™, virtually eliminates the potential risk of cross-contamination of materials by reducing external contaminants by 99.9999%.

Dewar Requalification:

Shippers are requalified after each journey for physical suitability, cleanliness, liquid nitrogen capacity and minimum required hold times. Cryoport is the only company in the life sciences industry that provides 100% requalification of our entire fleet after every use. Shippers are removed from our fleet if the specifications do not meet our criteria.

Certificate of Conformance:

Formal certification with signature from Cryoport Quality Assurance personnel guarantees the shipper processed has only been used for cell and gene therapy products of human origin.



