

FedEx Healthcare Shipping Solutions



Temp-Assure
Medium Cold Box
EXTENDED DURABILITY





Index

Delivering for the healthcare industry.....	3
FedEx Priority Alert®.....	4
FedEx SenseAware SM	5-6
Medical devices.....	7
Temperature controlled solutions.....	8
Facilities.....	8
Packaging and Containers: Parcel.....	9-10
Packaging and Containers: Freight.....	11-12
Quality management.....	13
Glossary of terms.....	14
Contact information.....	14



Delivering for the healthcare industry

From pharmaceuticals to medical devices, from small packaging to freight consignments, you can trust your valuable, temperature-sensitive shipments to FedEx. With multiple services available for your door-to-door deliveries, you choose the level of speed, monitoring and validation that your product requires.

We have specially designed packaging for exempt clinical-sample¹ shipments²:

- FedEx Small Clinical Pak
- FedEx Large Clinical Pak
- FedEx® Medium Clinical Box
- FedEx® Large Clinical Box



Try our **FedEx® Clinical Pak** when the sturdy outer packaging of your properly packaged shipment is smaller than the minimum acceptable package size 7" x 4" x 2" (17.78 cm x 10.16 cm x 5.08 cm). To help ensure the timely delivery of your shipment and the safety of shipments exposed to yours, our clinical paks and boxes help your clinical shipments stand apart from other shipments. For samples that require refrigeration, please refer to **FedEx Temp-Assure®** portfolio on this document.

¹ Clinical samples are generally defined as non-infectious human or animal materials including, but not limited to, excreta, secreta, tissue and tissue fluids, blood, and FDA-approved pharmaceuticals that are blood product.

² Only available in selected countries. Please consult with your FedEx Account Executive before making your shipment and confirm country availability.



Enhanced tracking for your valuable shipment

We understand the importance of knowing where your shipment is, you can count on our special solutions to enhance your shipment tracking.

With **FedEx Priority Alert^{®3}**, we monitor your shipments 24/7 so you can take care of the rest of your business. Be assured of the safe and timely transit of your high-value, mission-critical or temperature-sensitive shipments.

FedEx Priority Alert[®] is available for the following services:

- FedEx International First^{®4}
- FedEx International Priority[®]
- FedEx International Priority[®] Freight

³ Additional terms and conditions governing the use of FedEx Priority Alert apply and can be found in the FedEx Priority Alert Agreement. Service available by contract only.

⁴ Only available in selected countries. Please consult with your FedEx Account Executive before making your shipment and confirm country availability.

FedEx SenseAwareSM

Know the location and condition of your critical shipments in real-time.

Whether you're shipping a single specimen or a pallet of expensive diagnostic equipment, **SenseAware®* a FedEx innovation**, gives you the inside story on your critical shipment's location and environmental conditions.

This cost-effective, sensor-based logistics (SBL) technology lets you make informed decisions regarding rerouting, replacing, and intervention. Use it to gain visibility into a single shipment — or your entire supply chain.

**SenseAware® is available by contract only.*





■ **Verify location and condition for regulatory compliance**

Use SenseAware to monitor and store data required for regulatory compliance. Verify temperature in transit and chain of custody for controlled substances, document distribution, dosing for a clinical trial, and much more.

■ **Be alerted to security issues**

Be the first to know if security has been compromised. Designate a geofence or a route based geofence, and SenseAware can notify you if your high-value items leave or enter the area, or if they deviate from the designated route. SenseAware can also inform you if the shipment's contents are exposed to light — a possible indicator of theft or tampering.

■ **Track your shipment's progress**

In healthcare and life sciences, timing is everything. SenseAware supports just-in-time precision. It can notify key parties when a shipment crosses a geofence or is exposed to light — so everyone can receive alerts confirming the shipment arrival.

■ **Monitor or verify environmental conditions**

When your shipments are environmentally sensitive, use SenseAware to monitor temperature, humidity, barometric pressure, g-shock, and light exposure. Establish desired ranges for data, and SenseAware will notify you when a shipment goes out of that range.



How do I sign up?

SenseAware Subscription is available for unlimited use with a monthly subscription. With **SenseAware Single Journey**, you pay for each use, and we handle everything — from programming the device, to monitoring your shipment, and even coordinating intervention with local law enforcement, if necessary.

You can learn more at senseaware.com or by contacting your FedEx Account Executive to enquire about this solution.

**SenseAware® is available by contract only.*

Medical devices



It has never been easier to transport medical devices.

Whether you are shipping Class I, Class II or Class III* medical devices, FedEx has the solution for your need. During COVID-19 pandemic, FedEx has transported countless masks, mechanical respirators, test kits, etc. around the world. For those shipments that do not require any refrigeration or special handling, please consider any of the following services to transport your medical devices shipment.

Your need	Our solution
When it needs to be there within 48 hours	FedEx International First®
Fast, worldwide delivery	FedEx International Priority®
Economic, worldwide delivery	FedEx International Economy®
Fast, worldwide delivery	FedEx International Priority® Freight
Economic, worldwide delivery	FedEx International Economy® Freight
Direct-distribution delivery	FedEx International Priority DirectDistribution®
Economic, direct-distribution delivery	FedEx International Economy DirectDistribution®

*Contact your FedEx Account Executive for additional information about shipping and special handling for some Class II medical devices. Always contact your FedEx Account Executive for information about shipping Class III medical devices.

Temperature controlled solutions available on-demand

FedEx Temp-Assure[®], our temperature-control solutions portfolio, is available on-demand in selected Latin America and the Caribbean markets to selected markets around the world.

We know even a slight change in temperature can compromise your shipment's integrity. Rather than risk, regulatory compliance – and your profits – trust your healthcare shipments to FedEx.



Facilities

Cool room storage for small parcel packages and freight, temperature range 2°C to 8°C.

Whether your shipment needs refrigeration while on transit, on arrival or on departure, we have cool room storage**. Available in selected markets in Latin America and the Caribbean. You can request this service by contacting your FedEx Account Executive.



**Only available in selected countries. Cool room storage space is limited; please consult with your FedEx Account Executive before making your shipment and confirm country and space availability. Refrigerated space for large freight is only available in Puerto Rico (San Juan and Aguadilla).

Packaging & Containers: Parcel

Cold Shipping Package provided by FedEx

Our five convenient cold shipping packages (developed by NanoCool) stay at a consistently cold temperature. Each of the packages includes a chilling unit activated by the shipper and placed in the box with the shipment. The unit continuously evaporates small amounts of water at a low pressure, keeping your shipment at 2°C to 8°C for up to 48 or 96 hours⁴, depending on the packaging option you choose.

One of the features of the NanoCool controlled-temperature packaging system is an on-demand capability. By simply pushing the actuator button, the system starts to cool — no need for ice packs, freezers or pre-freezing. Packouts have never been easier!

Available sizes of cold shipping packages



Small Standard Duration

- Duration: 48 hours
- Payload: 8.5" x 4.7" x 1.6"
- Outer dimension: 12.1" x 7.9" x 5.1"
- Weight: 3.8 pounds



Medium Standard Duration

- Duration: 48 hours
- Payload: 8.5" x 4.7" x 3.0"
- Outer dimension: 12.1" x 7.9" x 8.5"
- Weight: 7.5 pounds



Large Standard Duration

- Duration: 48 hours
- Payload: 9.5" x 8.7" x 4.5"
- Outer dimension: 13.9" x 12.0" x 10.3"
- Weight: 12.1 pounds



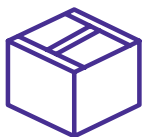
Medium Extended Duration

- Duration: 96 hours
- Payload: 8.5" x 4.7" x 2.7"
- Outer dimension: 12.1" x 7.9" x 9.9"
- Weight: 9.4 pounds



Large Extended Duration

- Duration: 96 hours
- Payload: 9.5" x 8.7" x 4.8"
- Outer dimension: 14.2" x 12.0" x 12.0"
- Weight: 16.8 pounds



You can order FedEx Cold Shipping packages online⁵ at fedex.com/coldshipping

⁴ Actual cooling duration varies depending on external temperatures.

⁵ This link will take you to a third-party site, a secure Veritiv web portal <http://www.orderboxesnow.com/>. FedEx makes no representations concerning the information provided or made available on such sites nor the quality or acceptability of the products or services offered by any persons or entities referenced in any such sites.

Packaging & Containers: Parcel (Continued)

Medpak VI°C by va-Q-tec



The **Medpak VI°C*** is designed for ease of use, with materials designed to maximize temperature performance. This solution uses Phase Change Material (PCM) to maintain temperatures of 2°C-8°C, 15°C-25°C and -20°C for 48, 96 or 120 hours.

- PCM recharges while in temperature-controlled storage.
- Comes ready to “load-and-go” from va-Q-tec fulfillment center.
- Multiple Sizes (Small Package - 3 sizes)
- Arrives pre-conditioned
- Return logistics provided

Credo Cube by Pelican Bio-Thermal



The **Credo Cube by Pelican Bio-Thermal*** is a passive, reusable packaging solution that utilizes Phase Change Material (PCM) to maintain temperature ranges of -15°C, 2°-8°C, 15°-25°C. This package can maintain temperature for up to 96 hours.

- Packaging can be reused by the customer if needed
- Many sizes available
- Light weight
- Pre-conditioning available

PharmaTherm by Intelsius



The **PharmaTherm by Intelsius*** is a passive package that uses gel packs, comes in various sizes and temperature ranges (2°C-8°C and 15°C-25°C) for up to 96 hours. Dry ice options available for frozen shipments.

- Customer quick and easy assembly
- Light Weight
- Packaging is single use and does not require return logistics
- Many sizes available for package needs

*Not available in all markets, please consult your FedEx Account Executive for availability. Solution available on demand and by contract only. Exclusively serviced by FedEx Air Expedite within the FedEx Express network.

Packaging & Containers: Freight

Softbox Pallet Shipper



Softbox Pallet Shipper* provides customers with a single pallet passive packaging solution with the ability to maintain temperature ranges of 2°C-8°C and 15°C-25°C for up to 120 hours. The Softbox Pallet Shipper utilizes gel pack technology to support cold chain requirements of the product. Dry ice solutions available for frozen temperature ranges.

- Cost effective solution for freight sized solutions
- Customer quick and easy assembly
- Light Weight

C-Safe RKN and RAP – Compressor



The **C-Safe Compressor*** solution uses compressor technology with the ability to maintain temperature ranges from 0°C to +25°C. Shipping container delivered to customers at requested temperature range.

- Refrigerated container maintains internal temperature up to 130 hours; remains charged up to 4 days when not connected to an external power supply
- Touch point updates with critical shipment details
- Post-shipment temperature data and quality support provided
- Used with Temp-Assure® Air and FedEx Customized Freight services

Envirotainer RKN and RAP t Series – Dry ice



The **Envirotainer t Series*** is an active container solution that uses dry ice and batteries to maintain temperatures ranges of 2°, -8°C and -20°C. These solutions allow for both frozen and refrigerated products for single and up to four pallet shipments.

- Enables air transportation for both frozen and chilled products
- Offers single and multi-pallet solutions.
- Can be booked as a bundled solution with transportation.

*Not available in all markets, please consult your FedEx Account Executive for availability. Solution available on demand and by contract only. Exclusively serviced by FedEx Air Expedite within the FedEx Express network.

Packaging & Containers: Freight (Continued)



Envirotainer RKN and RAP e Series – Compressor

The Envirotainer e Series* are active container solutions utilizing compressor technology with the ability to maintain temperature ranges from 0°C to +20°C. These containers have an easy to use temperature control unit.

- Has the ability to heat and cool temperature-controlled products
- Rechargeable batteries that can be plugged in while in transit
- Offers single and multi-pallet solutions
- Can be booked as a bundled solution with transportation.



va-Q-tainer – USx

The **va-Q-tainer Usx*** is a single pallet solution that provides customers with a passive, more cost effective option to move their critical and temperature-sensitive freight in comparison to active containers. The container will maintain temperatures from -60°C to +25°C for 120 hours utilizing Phase Change Material (PCM).

- Comes ready to “load-and-go” from manufacturer.
- More cost-effective option than active containers.
- Only passive container with a data logger on the outside of the container.
- Unique temperature ranges from -60°C to +25°C enabling frozen capabilities without dry ice.
- Available in a variety of freight sizes.



FedEx thermal blanket solution

The **FedEx Thermal Blanket**** is used to protect palletized freight from various weather conditions in transit. The blankets provide protection from direct sunlight, rain, humidity and tarmac heat. This solution is branded FedEx and customers must have a contract to use within the FedEx Express network.

- Customer does not have to purchase blankets or manage the returns
- Complete end-to-end solution that limits the impacts of extreme temperatures
- Provides multi-pallet solutions (4-6 pallets)
- Helps to maintain a constant temperature range of 15°C to 25°C (+/- 5°C)

FedEx Thermal Blanket is available in 41 countries around the world. In Latin America and the Caribbean, it is only available in Colombia, Brazil, Mexico, Panama and Puerto Rico.

*Not available in all markets, please consult your FedEx Account Executive for availability. Solution available on demand and by contract only. Exclusively serviced by FedEx Air Expedite within the FedEx Express network.

**FedEx thermal blanket solution is contract only. Some restrictions apply for specific countries. To learn more, please contact your FedEx Account Executive.



Quality management

Shipping COVID-19 vaccines is complex and critical work with many moving parts. FedEx is working closely with governments and our healthcare customers on vaccine distribution plans. We are confident in our strong relationships with our healthcare distribution customers as we work through the preparation and prioritization of these deliveries.

- The FedEx network is well positioned to handle these shipments with our temperature-control solutions, real-time monitoring capabilities and a dedicated healthcare team to support the storage, customs brokerage and express transportation of vaccines and bioscience shipments around the world.
- With the largest cargo fleet of airplanes, FedEx Express has the flexibility and customized solutions, including charter flights, refrigerator trucks and trailers, warehousing, thermal blankets, and temperature-controlled containers, to help safely move temperature sensitive shipments, such as vaccines and other bioscience shipments, around the world.
- At present, to complement our existing cold chain capabilities in support of the vaccine distribution, we are also exploring a combination of solutions including stationary freezers, temperature-controlled ocean containers, and refrigerated trailers.





Glossary of terms

Active: A container utilized to transport temperature-controlled products that regulates the cargo hold return air through compressor-driven systems.

Passive: A container or package utilized to transport temperature-controlled products that regulates the cargo hold via gel packs, PCM units or ice variants.

Phase Change Material (PCM): Substances that absorb and release thermal energy during the process of melting and freezing.

Pre-Conditioning: To bring a package or container to its desired temperature range before transit.

Unit Load Device (ULD): A pallet or container used to load parcel and freight on select narrow and wide-body aircraft.

RKN: A single pallet ULD designed on a 60.4"x61.5" platform with a refrigeration unit (LD3).

RAP: A four pallet ULD designed on an 88"x125" platform with a refrigeration unit (LD9).



Contact information

Visit us at [fedex.com](https://www.fedex.com) or please contact your FedEx Account Executive.