

**Panasonic CONNECT**



**What we can learn from Japan in  
optimizing the Pharma Cold Chain  
Vaccine Distribution and clinical  
trials as circular economy model**

# Extend a business model to compliant cold chain logistics

## Case Study

### Suzuken, Japan Pharmaceutical Distribution



The Japanese wholesale company Suzuken developed a specialty drug traceability system called Cubixx. Applying RFID and IoT digital technology it offers total traceability from shipping and delivery through inventory management at medical institutions and at pharmacies.

With VIXELL it is now possible:

- Seamless data from transportation to inventory management in compliance with GDP guidelines for temperature sensitive goods in 1,400 boxes used in around 10,000 medical institutions
- Former boxes suffered from either cold air leakage (leading to temperature increase) or added unnecessary weight. By adopting the seamless, integrally molded vacuum insulation housing (VIC) for VIXELL, Panasonic could support Suzuken to solve the cold air leakage and weight reduction sustainably.



INE70



INE40



INE70-R

# Case Study Background: Specialty Drug Distribution Business

## Cubixx System

The Cubixx specialty drug traceability system is currently in use at over 300 regional core hospitals, hospitals specializing in certain diseases, and at other institutions as well.

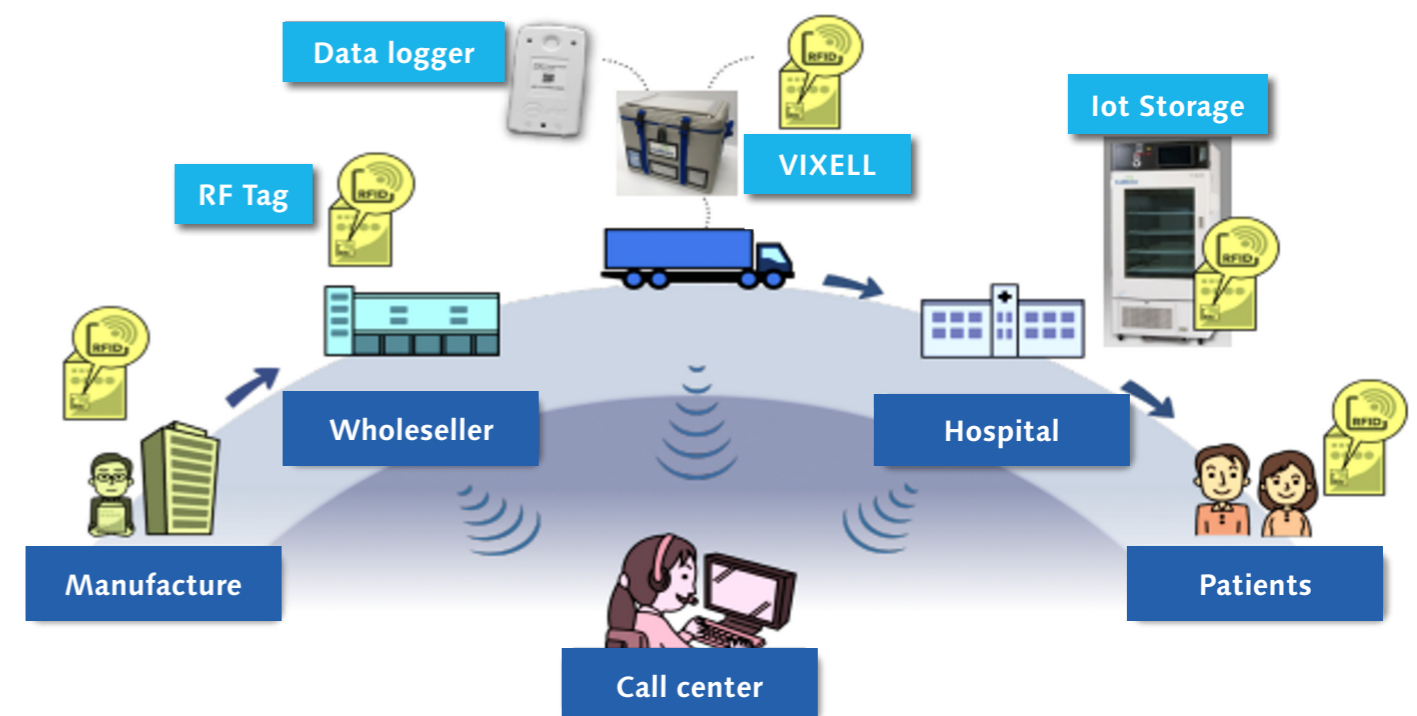
Applying RFID and IoT digital technology, this system offers total traceability from shipping and delivery through inventory management at medical institutions and at pharmacies.

Through 24/7 real time monitoring, the Cubixx System simplifies previously difficult judgments on resale possibility and enables inventory adjustment.

For investigational drugs, we have built a digital clinical trial platform by combining technologies provided by EP SOGO Co., Ltd. and SUSMED, Inc. with our Cubixx CT system.

To help reduce social costs, by lowering specialty drug disposal losses and lightning the administrative burden on medical institutions, we have undertaken activities such as starting a rental service for VIXELL pharmaceutical cool shipping boxes, which we developed together with Panasonic Corporation.

Utilizing the RF tag attached to the individual packaging box of pharmaceutical products and the IoT storage installed by the customer, it seamlessly connects from the pharmaceutical wholesaler to the customer's inside, then achieves the remote monitoring of the inventory and quality of each pharmaceutical product, and the time of warehousing/delivery history.

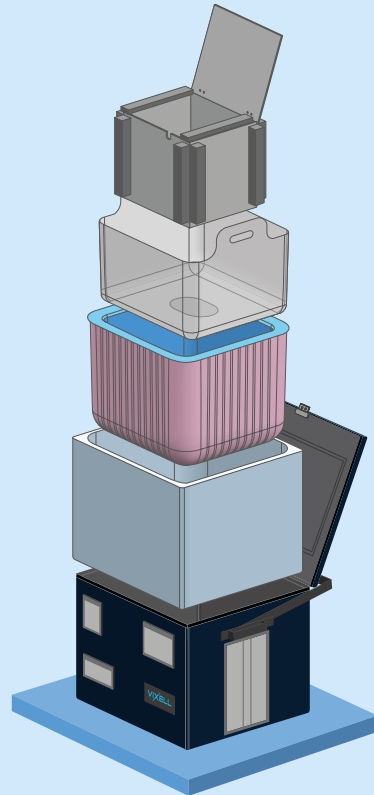


# High performant Passive Cooling Box System for Pharmaceutical Transportations

The Panasonic solution VIXELL is designed to meet the challenges of cold chain transportation for bio-pharmaceuticals, investigational drugs and vaccines that require strict temperature controls. With increased flexibility, safety buffer, and trackability. The perfect solution to support clinical trials. Panasonic has been developing thermal insulation technologies for 70 Years. With the technology to produce Vacuum Insulated Cases instead of Vacuum Insulated Panels, a unique Panasonic offer, the company has achieved the next level.

## Benefits

- Uses Vacuum insulated casing rather than Vacuum insulated panels
- Keeps cool for up to 30% longer
- Seamless insulation body keeps  $-90^{\circ}\text{C} \pm 15^{\circ}\text{C}$  for 216 hours
- The integral moulding of the box shape can eliminate leakage of cold air from the joint
- Various cooling temperatures can be achieved by simply replacing the thermal storage unit
- 4 years outstanding durability
- Broad product line-up:  
From 1l to 452l payload volume
- Up to three times thicker envelope provides protection from physical damage



Panasonic offers the option of renting the boxes or booking the transportation for global distributions e.g. for clinical trials. Partnering with pharmaceutical transport experts Nissin Corporation, we offer routes between the EU, US and Japan.

The circular system contributes to a more sustainable society and saves money as well as resources. After sensitive pharmaceuticals have been shipped

internationally with the temperature-controlled transfer service, the VIXELL system will be reused upon completion of its journey.

Book a demo of the passive cooling system today or request further information on the solution.  
<https://eu.connect.panasonic.com/de/en/vixell-new-temperature-sensitive-transportation-boxes>

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