

Panasonic CONNECT

VIXELL

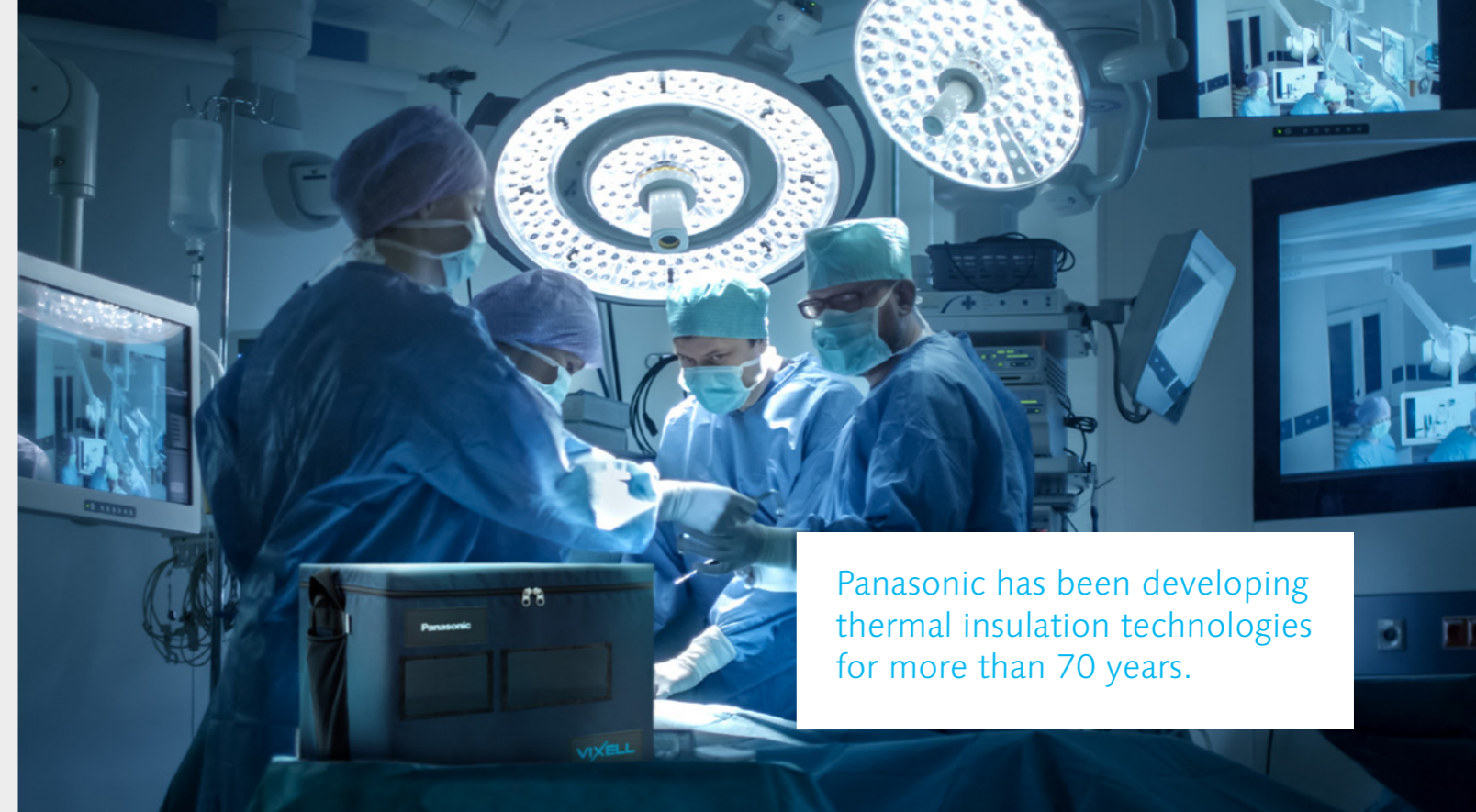
Vacuum-insulated cooling boxes and accessories
with built-in wireless vacuum sensors



For consistent temperature transportation of pharmaceuticals and vaccines

Designed to meet the challenges of cold chain transportation for biopharmaceuticals, investigational drugs and vaccines that require strict temperature controls.

VIXELL features patented vacuum insulation and in-box health-monitoring technology for guaranteed insulation performance, goods protection and long-lasting cooling power.

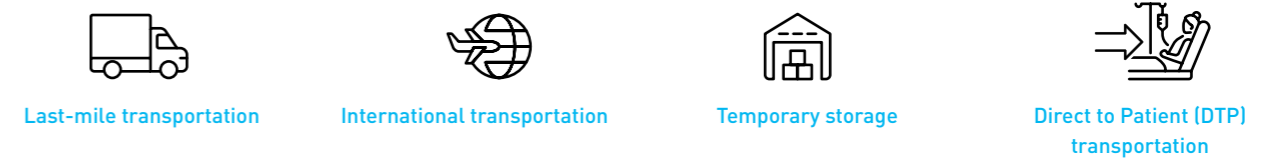


Panasonic has been developing thermal insulation technologies for more than 70 years.

Keeping the cool in your cold chain

- Patented Vacuum Insulated Case (VIC) design reduces cold leakage
- Added protection from drops and vibrations
- Adaptability to different temperature zones (saves resources and budget)
- Wireless in-box health monitoring
- IoT connectivity
- Easy use and maintenance

The perfect fit for multiple scenarios



Benefits for you and your customers

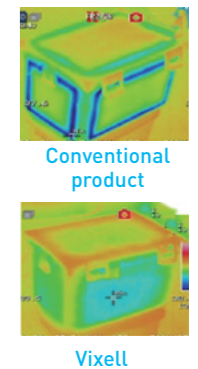
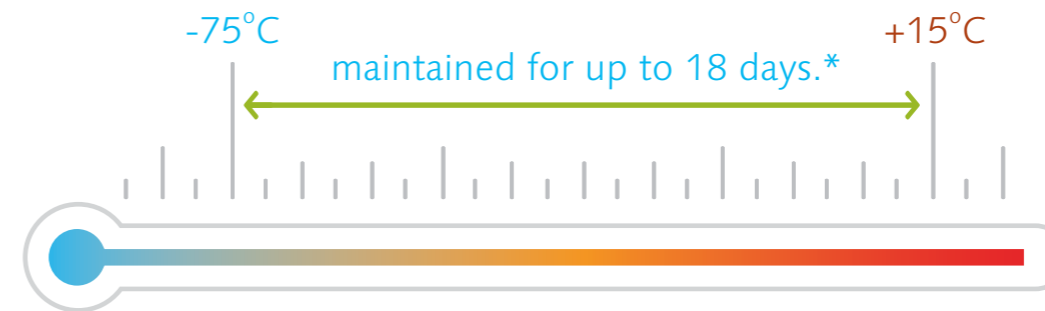
A smarter structure and long-time cooling

No joints. No cold leakage.

Conventional insulated boxes are manufactured by joining Vacuum Insulated panels (VIPs) together, but cool air commonly leaks through the gaps where the panels join. VIXELL virtually eliminates cold air leakage from joints. How? By doing away with joints altogether.

VIXELL's thermal insulation layer (the most important part of a cooling box) utilises Panasonic's patented Vacuum Insulated Case (VIC) design, a seamless, integrally-moulded body, with no joints. As a result, $-75\text{ }^{\circ}\text{C} \pm 15\text{ }^{\circ}\text{C}$ can be maintained for up to 18 days.*

VIXELL cooling boxes are helping specialist logistics and delivery companies around the world to transport temperature-controlled goods further, for longer.



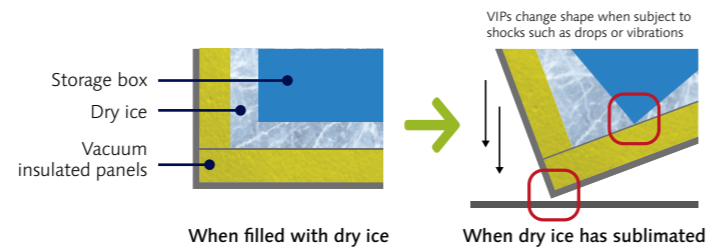
* The vacuum insulated cooling box Type-L (AE-V 12 UXR) houses a dry ice thermal storage unit (AE-V 12 DXR) and 34 kg of dry ice is filled in the cooling box and storage box. Including only a simulated product of size 231 x 231 x 40 mm, measure the number of days the temperature is maintained at $30\text{ }^{\circ}\text{C}$ and $-75\text{ }^{\circ}\text{C} \pm 15\text{ }^{\circ}\text{C}$.

Strength, stamina and shock absorption

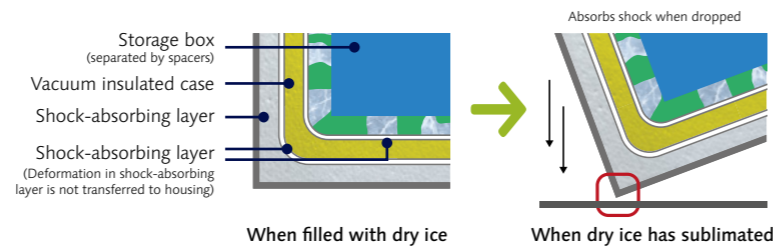
Protection from drops and vibrations

Unlike VIPs, which are covered in a thin layer of aluminium and plastic film, the VIXELL cooling box is covered in a plastic sheet layer. This gives it outstanding durability and resistance to cracks. Both inside and out are protected by a 'buffer' layer, helping reduce the risk of damage should the box be subjected to drops or vibrations during transportation.

Even if the dry ice sublimates and reduces in volume, VIXELL's buffer layer prevents the storage area carrying the contents from bumping into the outer case.



Previous Panasonic prototype: Cooling box using VIPs



New Panasonic prototype: VIXELL™

Wireless in-box health monitoring

For pre-journey peace of mind

Transportation or long-term use very often damages or deteriorates traditional vacuum insulation products, diminishing their insulation performance.

VIXELL's VIC is equipped with a built-in NFC wireless vacuum sensor that uses contactless power supply technology, so thermal insulation performance can be easily checked before a journey by simply placing the box on a dedicated inspection board.



Adaptable to different temperature zones

Thinking inside the box

Appropriate transportation temperatures are determined by the type of drugs and vaccines in question. With traditional coolers, it can often be necessary to change the outer box for each and every set temperature range.

But with VIXELL, the same outer box can cater to 4 different temperature zones (5°C to 20°C; 3°C to 5°C; -20°C to 5°C, and -75°C to 15°C) by simply changing the inner thermal storage unit. Conserving resources, saving budget, and enhancing work efficiency.

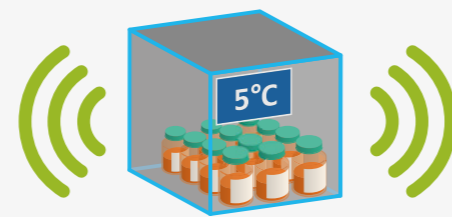


*-20°C or less will be out of standard line up. It depends on individual order.

IoT connectivity

Monitor internal conditions, externally

Unlike conventional VIPs – which are covered in aluminium film – VICs are made from aluminium-free resin, allowing the transmission of radio waves for communication. So, VIXELL cool boxes with temperature ranges of 15°C-25°C and 2°C-8°C, can easily connect to IoT devices. By installing temperature or GPS sensors inside, users can monitor the internal condition of the box without having to open it.



VIXELL in action

Last mile transportation

Ultimate cooling performance and built-in wireless vacuum sensor for pre-journey insulation inspection, means products can be transported to multiple destinations safely.



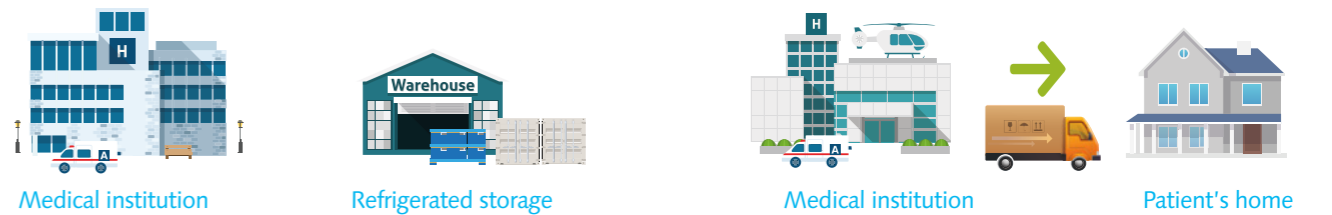
International transportation

Long cooling times allow for transport from the country of origin to destination without the need for refrigerant transshipment.



Temporary storage

Use for temporary storage of medical supplies in cases of power outages due to unforeseen events, including natural disasters.



Direct-to-Patient (DtP) transport

Transport refrigerated and investigational products when patients and/or experiment subjects cannot visit the hospital or medical centre.



Every VIXELL outer box can cater to 4 different temperature zones, ranging from -90°C to 25°C

The Panasonic VIXELL lineup

Two box sizes. Four temperature zones.

Cooling box Type-L

Large capacity. Ideal for transportation.



Name	Type-L
Model number	AE-V12UXR
Box external dimensions	545x495x450 mm
Unit weight	7kg

Type-L thermal storage unit options

20°C±5°C	5°C±3°C	-20°C±5°C	-75°C±15°C
AE-V12R5R	AE-V12C5R	AE-V12S4R	AE-V12DXR*
With dedicated phase change materials		With dedicated phase change materials	
Internal dimension 320x270x220 mm	Internal dimension 336x292x255 mm	Internal dimension 316x269x213 mm	Internal dimension 320x270x296 mm
11kg	11kg	16kg	4kg

Cooling box Type-S

Lightweight and compact. Ideal for deliveries.



Name	Type-S
Model number	AE-V06GXR
Box external dimensions	480x350x355 mm
Unit weight	5kg

Type-S thermal storage unit options

20°C±5°C	5°C±3°C	-20°C±5°C	-75°C±15°C
AE-V06R5R	AE-V06C5R	AE-V06S4R	AE-V06DXR*
With dedicated phase change materials	With dedicated phase change materials	With dedicated phase change materials	
Internal dimension 243x154x129 mm	Internal dimension 300x163x164 mm	Internal dimension 265x130x135 mm	Internal dimension 299x157x211 mm
7kg	8kg	11kg	2kg

*Dry ice not included

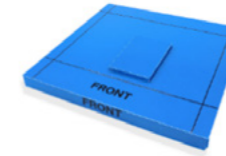
Accessories

Accessory

Inspection Board

AE-VXXCXR (Board)
AMI2450X/08C/U-PAP (R/W)

To check thermal insulation performance



Vital Tray

For use with COVID-19 Pfizer vaccine only.
Not for use with other vaccines.

AE-V06A02 - Can store 65 vials(φ16.5)/1pc
AE-V12A02 - Can store 195 vials(φ16.5)/1pc.

Freezer Spacer

AE-V06A01

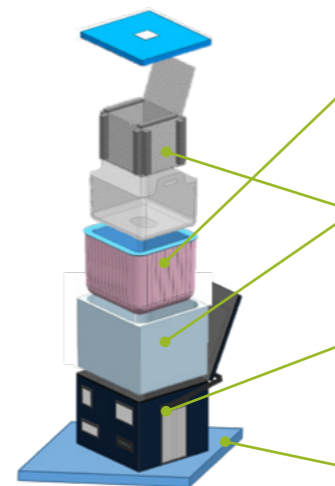
Use when freezing PCM in layers



Service material

Phase change material (PCM)		
For Type-S		
20°C±5°C	5°C±3°C	-20°C±5°C
AE-V06RER	AE-V06CER	AE-V06SDR
For Type-L		
20°C±5°C	5°C±3°C	-20°C±5°C
AE-V12RER	AE-V12CER	AE-V12SDR

Product composition



Vacuum insulated case (VIC)

The integrally-molded, seamless housing prevents cold air leaking through gaps, enhancing cooling performance. Keep -75°C±15°C for 18 days.

Shock resistant

Shock resistant parts protect the VIC against damage from drops.

Sustainability

If you want to use for other temperature zones, simply change the thermal storage unit.

Quality record

A wireless sensor enables instant quantitative measurement of heat insulation performance. Simply place on the Inspection Board.



Storage box



Basket



Cold insulator



VIXELL's VIC is equipped with a built-in NFC wireless vacuum sensor that uses contactless power supply technology. Conduct a health check by simply placing the box on a dedicated inspection board.



En route to success

We've already helped small, medium, large, local and global businesses to achieve significant success with Panasonic VIXELL cold transportation boxes – including household names.

Connecting for tomorrow

Vixell is part of Panasonic's supply chain portfolio, which are solutions combining components, hardware and software to solve customers' logistics challenges with respect to efficiency and sustainability. Delivered as turnkey solutions - from planning to service - integrated in the customers' digital and hardware infrastructure.

Panasonic's approach is unique as it starts the development of its solutions "Gemba", Japanese for "on site" - on the factory floor, in the warehouse or at the shopfront.

Contact us

business.panasonic.co.uk/solutions/contact-us

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