



BITO PharmaBox  
Digital high-performance packaging



A BIT OF  
PRODUCTS.



[www.bitto.com](http://www.bitto.com)



**BITO**  
STORAGE  
SYSTEMS

## High-performance packaging for temperature-controlled logistics



# The BITO PharmaBox is a high-performance box for temperature-controlled shipping

Safe storage and temperature-controlled shipping throughout the medical and pharmaceutical supply chain is vital to the success of treatments. This is why great care must be taken when it comes to replenishing the stocks of hospitals, GP practices and pharmacies with healthcare and pharmaceutical products.

We have developed a passive cold chain packaging solution based on our successful MB distribution container range: the **BITO PharmaBox**. This solution enables safe shipping of temperature-sensitive goods (including vaccines and medicines) over a shipping time from 37 to 80 hours during which a specified temperature is kept.



BITO PharmaBox in use at the pharmacy of the “Klinikum rechts der Isar der TU München”

## Smart multi-trip packaging for use in the pharmaceutical industry

- ✓ Real-time data monitoring and alarm function
- ✓ Tracking of parameters such as temperature, geo-coordinates and humidity
- ✓ Programmable cooling duration
- ✓ Cooling capacity of up to 80 hours
- ✓ Access control
- ✓ Goods are protected by a digital seal & lock.
- ✓ GDP-compliant shipment



# PCM cold pack

The clever interior design prevents that shipped goods are in direct contact with the cold packs.

This preserves the quality of the goods and prevents freeze damage. The insulating inserts keep in-box temperatures within the specified range. The insert box can be cleaned after use and reused multiple times.

- One-size cold packs
- Can be used in both MB container sizes
- Removable insert box allows for easy cleaning
- No direct contact of the product to be transported with the cold packs



Box size	Volume	PCM packs (pcs)	Temperature range	Keeps temp. for
400 x 300mm	4 litres	4 (1 PCM set)	2-8°C	43h (ISTA 7E)
600 x 400mm	15 litres	8 (2 PCM sets)	2-8°C	37h (ISTA 7E)
600 x 400mm	15 litres	12 (3 PCM sets)	2-8°C	48h (ISTA 7E)
600 x 400mm	15 litres	16 (4 PCM sets)	2-8°C	80h (ISTA 7E)

Prices and further temperature options on request.



# All technologies work independently of each other and are perfectly coordinated.



## Beacon

- Temperature and humidity records
- Transmission via Bluetooth Low Energy (BLE)
- External sensors for dry ice and LN2
- Reusable
- Calibrated according to DakkS and ISO 17025



## SmartHub

- Real-time tracking
- Temperature, humidity and geo-position recording
- 5G/Wifi real-time monitoring system as mobile gateway
- Digital seal & lock with international connectivity
- Reusable



## Cloud

- Logistics dashboard in the browser
- One system for shipment, vehicle fleet and warehouse monitoring
- Support for third-party devices
- White label functionality
- Alarms and data archiving



## App

- Beacon and label scanner
- Shipment tracking via label scan
- Fast read-out of the data loggers



## Passive systems

- Fully integrated passive reusable shipping systems

# Protected transport of medications in certified multi-use refrigerated transport boxes

## About the customer:

The hospital pharmacy of the Technical University Munich, Klinikum rechts der Isar, provides a wide range of pharmaceuticals to the university hospital with approximately 1,100 beds and two external hospitals with 30 and 400 beds respectively.

To ensure safe, refrigerated transport of the often high-priced pharmaceuticals, the hospital pharmacy uses **BITO multi-purpose containers MB** with thermal insulation set and the **BITO MB PharmaBox**.

## Customer requirements:

- For the customer, the focus was on ensuring an optimal and rapid supply of medications to hospital patients.
- Pharmaceutical logistics Krankenhausapotheke rechts der Isar covers all services and processes within the pharmacy Krankenhausapotheke rechts der Isar to ensure that the right medication is available for the right patient in good time and in optimum quality.
- What is essential is that all technical and legal requirements for pharmaceutical logistics are complied with during storage and transport.
- The Pharmaceutical Logistics department of the hospital pharmacy coordinates all drug orders, is responsible for proper storage and supplies the wards with the requested medicines in a timely manner.
- The hospital's list of medications currently includes 1,200 preparations that must be kept in stock at all times in a certain required quantity.



## The BITO solution:

- The **PharmaBox** ensures safe in-house transport processes for pharmaceutical products requiring refrigeration.
- For transports within a temperature range of 2-8°C, the pharmacy of the Klinikum rechts der Isar uses **MB multi-purpose containers** fitted with a thermal insulation set.
- For pharmaceutical products which have to be stored at low subzero temperatures, the hospital pharmacy uses the **BITO PharmaBox** designed for these temperature ranges. These boxes are used to distribute pharmaceutical contents safely and reliably to the various wards and hospitals at temperatures as low as -18°C. The PharmaBoxes are used once or twice a week.
- The chilled goods are picked by hand into PharmaBoxes and registered using a scanner system. The boxes are then loaded with the cold packs, securely sealed and labeled.



### What our customers say:



We are very happy with both systems. The inlays are easy to clean and therefore hygienic. Handling has also become well established since the introduction of the two boxes. Being a hospital pharmacy of a university hospital, which has to supply the most diverse, often highly sensitive and sometimes very expensive pharmaceuticals, it is our top priority to ensure the highest level of security during storage and transport.

Both in terms of the sensitivity and quality of the products and in terms of ensuring that no unauthorized person can access the goods. We are also subject to strict, regular inspections at all times. By using the two containers variants, we are able to meet the high safety requirements.

#### Martina Fischer

Specialist pharmacist for clinical pharmacy at the Klinikum rechts der Isar

WE TAKE THE TIME  
TO GIVE ADVICE.



+44 24 7638 8850

**BITO STORAGE SYSTEMS LTD**

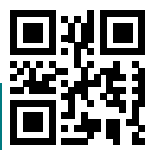
Finch Way  
Hemdale Business Park  
CV11 6WH Nuneaton

Tel. +44 24 7638 8850  
Fax +44 24 7638 8860

info.uk@bito.com  
www.bito.com



You can also join us online.



www.bito.com

A **BIT** OF YOUR LIFE.

**BITO**  
STORAGE  
SYSTEMS