

## Concrete Battery Enclosure | CBE-0001

# MAGICUBE

## CONCRETE BATTERY ENCLOSURE



- **Highly secure - vandal resistant**
- **Rapid deployment**
- **Low cost - Higher ROI**
- **Reduced overall site CAPEX / OPEX**
- **Passive temperature management**

### Product Overview

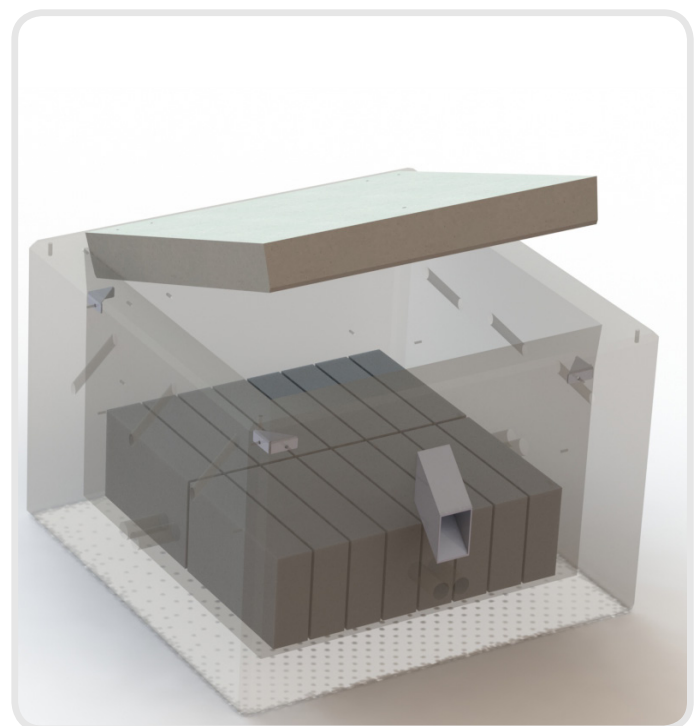
The low cost Poynting Magicube protects high risk critical infra-structure against theft and damage in remote, exposed and vulnerable locations. Features highly robust reinforced pre-cast concrete, quick and easy deployment, innovative patented access and access control system (sold separately) and a well-managed passive temperature control methodology. Ideal for infrastructure providers such as mobile operators, fibre and electricity providers who need to protect batteries, electrical sub-assemblies and IT equipment. The Magicube has been successfully deployed in the harsh extremes of sub-Saharan Africa. Protecting base station sites for mobile operators, the cube removes the need for expensive battery cooling (CAPEX) thereby reducing power consumption (OPEX). The current cost of repair, replacement and restoration of critically damaged infrastructure together with loss of associated revenue generating services justifies the highest Return On Investment (ROI) for the Magicube.

### Features

- Patented interlocking system
- Portable opening kit for ease of maintenance and added level of security
- Vandal resistant 150mm reinforced precast concrete
- Passive temperature control methodology for optimal battery life
- Removable access and opening mechanism

### Application

- Battery enclosures for mobile operators
- Equipment enclosures for service providers
- IT infrastructure providers
- Electrical sub-assemblies for utility providers
- Secure installations



### MagiCube

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Product Specifications may change without prior notice  
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## Battery Cube Capacity

Secure enclosure for 24 x 2V cells connected in series to form a 48V bank, or 28 x 12V cells with a bottom layer of 16 and top layer of 12 batteries.

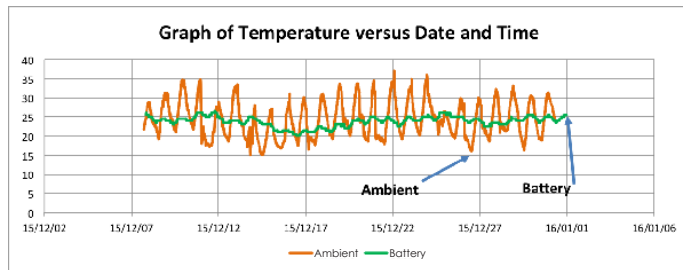
## Environmental Specifications

Environmental Conditions: Outdoor any climatic conditions  
Rain(drainholes and seals): Any equipment stored on shelving with 50mm height will remain dry under heavy (IP 25) rain conditions.

## Ordering Information

Commercial name: MagiCube  
Order Product Code: A-CBE-0001  
EAN number: N/A

## Battery Temperature in Hot Johannesburg Summer Month



### Month Summary

Max Ambient 37.5°C  
Ambient Avg 23.9°C  
Battery Avg 24.0°C

### Explanation:

Battery average temperature will be equal to AVERAGE Ambient temperature of the site. Average temperature for any location should take into account an annual cycle (winter and summer) and both day and night temperatures.

## Mechanical Specifications

Product Dimensions (L x W x D):	1500mm x 1500mm x 1000mm
Product Dimensions (inside cube):	1200mm x 1200mm x 750mm
Weight:	2.9 Ton(Without batteries)
Lid Weight:	750 kg
Opening:	Externally no apparent opening mechanism. Opening possible with HSO approved service kit
Wall Thickness:	100mm (base) -150mm (side wall)
Walls and lid:	75x 75 Y 16 rebar mesh with additional perforated plates at critical locations
Cube Base:	517 Y6 rebar mesh
Materials:	40-50MPa precast concrete Double 100 x 100 x 6mm Mesh reinforcing
HVAC :	Standard with Free flow ambient air cooling.
Exterior:	Coated with heat resistant white paint.
Locking options:	Optional access hole cover with actuator locking mechanism (actuator control device not provided)
Alarm Option:	Access, battery temperature, bus voltage, battery bank midpoint voltage monitoring
Specification:	Meets stringent health and safety requirements with certification
Cable interface (Hole dimensions):	2 x 50mm diameter ducts provided.
Venting:	6 x 12mm top mounted vents slanting outwards at 45 degrees
Ground preparation:	Compacted ground, slab or firm pebble surface.
Site installation:	Pure drop down of cube. On site provision of ducting/cabling and installation of batteries.

## Contact Poynting

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