

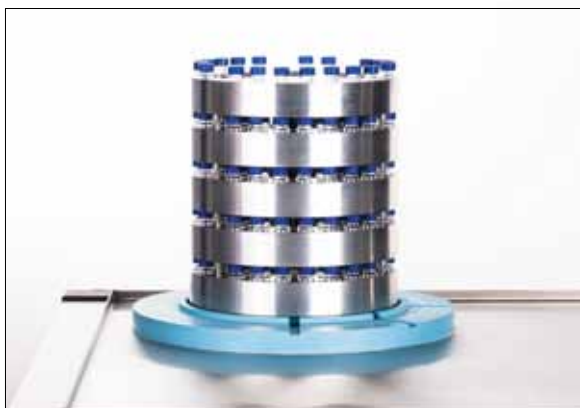


# Polar Bear Advanced Cooling Technology

Arctic temperatures at  
the touch of a button

Any temperature from ambient close to -90 C can now be achieved in a clean, simple system at the touch of a button !

Our Polar Bear Advanced Cooling Technology uses no heat transfer fluids, solvents or ice - just plug it in and set the desired temperature. The simplicity of the system ensures high flexibility to suit many applications



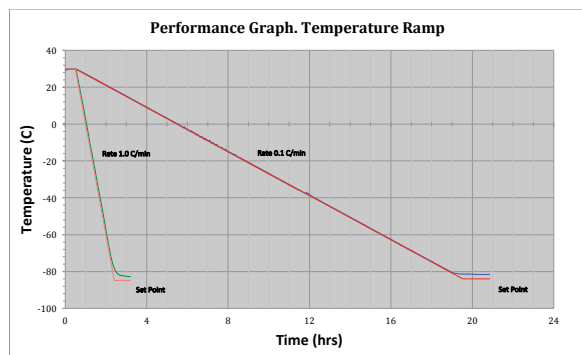
## Introduction

Many laboratory applications require sub ambient temperatures, whether in the field of biology, chemistry, medicine, food or even electronics.

The Polar Bear has been designed to accurately deliver a range of cold temperatures, in a clean and simple way, by using novel technology.

At the touch of a button, you can achieve a controlled cold environment for observation manipulation and testing.

There are endless possibilities for monitoring the data. Information and alarms can be viewed on your office network and even on your smart phone!





The Polar Bear is a flexible platform that can be adapted to many applications



### Active Control of the Freezing and Thawing Process.

In a chilled plate format, the Polar Bear can be used to hold a variety of samples such as microtitre plates or circuit boards.



Also, aluminium formers can be manufactured to specific requirements. The clear enclosure maintains the controlled environment while being easily accessible.



### Successful Cryopreservation?

Our Polar Bear can accommodate a range of vial sizes and bags of up to 2L. Users can select cooling profiles from 1 C/min down to 0.001 C/min. Moreover, different temperature profiles can be set at different stages of cooling so for example the nucleation range can be controlled to manage any heat generated during the course of a phase change.



Network ready

## Polar Bear Advanced Cooling Technology

Features of the Polar Bear include:

- Hundreds of sample holder options
- Accurate and precise temperature control
- Simple operation and scalable
- Attach to an electricity supply and set the temperature or start a ramp
- No solvents, heat transfer fluid or ice
- Adaptable to many applications
- Novel control mechanism



**Whether your application requires a cryo reactor, a cold plate, or a refrigerated vessel, the Polar Bear will provide you with a clean, simple and efficient cooling at the touch of a button.**



**If you would like to speak to a technical representative please call us on +44 (0)1954 252522, e-mail [sales@crduk.com](mailto:sales@crduk.com), or alternatively you can visit [www.cambridgereactordesign.com](http://www.cambridgereactordesign.com) for further information.**

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\* -90C is a nominal value. The absolute lower limit will depend on the refrigerant concentration.

