# Temperature Monitoring for Healthcare







CoolCheck by Kelsius is the market leading wireless temperature monitoring service that automates the process of temperature monitoring in controlled storage and testing environments within the healthcare sector and alarms staff members when the temperature deviates from set parameters. The broad scope of applications includes fridges, freezers, incubators, water baths, liquid nitrogen tanks, oxygen, C02 amongst others. A world class hosted solution, CoolCheck has harvested over 4 billion records to date.

The CoolCheck system complies with industry best practice for the safe storage of medicines & vaccines, blood, lab samples. It will reduce product wastage associated with fridge failure.

The CoolCheck system consists of small wireless sensors that are placed inside the cold storage environments they communicate to the CoolCheck Network Controller and onto the Internet via a local area network connection.

The CoolCheck sensors transmit the temperature data at regular intervals to the Kelsius data centre, and the data is processed and presented as user friendly reports in PDF format. Temperature data is presented in graphical and tabular format as shown in the screen shots. These reports can be easily and securely accessed anytime, anywhere, via the Internet. All data is encrypted for complete security whilst our web based service minimises the need for local IT support and maintenance as there is no software to be installed on site.

If a measured temperature goes outside of the set parameters an alert is triggered instantly via a local audio and visual alarm, text message (to any number of staff members), auto-dialer and email. All temperature data and corrective actions are archived providing a complete audit trail.

## Benefits of the Kelsius CoolCheck System

#### **Quality Control**

Protects the integrity of the products

#### Cost

Reduced product/sample wastage

## Reliability

Real-time, web-based temperature monitoring

### Traceability

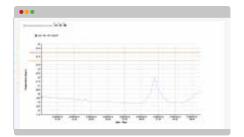
Live data history available on-line

#### **Productivity**

Time consuming paper trails removed

# Features of the Kelsius CoolCheck System

- DB9702 Electromagnetic compatibility with medical devices
- Complies with requirements for inclusion in 21CFR Part11 system
- · Annual recalibration against traceable standard
- ISO: 14001
- ISO: 19001
- MHRA & CPA compliant
- Full validation package available to include full IQ and OQ
- Sensors for all temperature ranges from -200°C to +200°C
- Other parameters include CO<sub>2</sub>, O<sub>2</sub>, door ajar sensors, water bath sensors, incubators amongst others
- Non disruptive and flexible deployment of sensors.



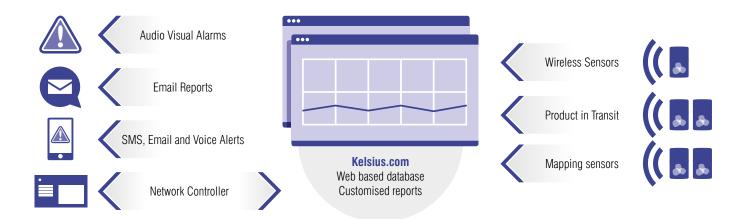
Sensor Graphs



Alert Events



Site Map



## CoolCheck for Temperature Mapping

In-line with regulatory requirements and good practice guidelines hospital pharmacies and laboratories carry out temperature mapping of cold storage units upon commission and on a periodic basis.

Traditionally, hospital pharmacies and laboratories have incurred significant costs by employing the services of third party consultants to perform the mapping exercise which typically comes at a large expense. With the Kelsius CoolCheck system, users are empowered to carry out their own mapping activities, as and when required, in a cost effective manner with little investment of their own time.

Pre-configured wireless mapping sensors are placed in cold storage areas for a defined period of time. During the mapping period the CoolCheck sensors will record the temperature data — this data is sent to the Kelsius web portable where the mapping reports are instantly available in graphical and tabular format. The mapping reports can be accessed from any web enabled device.

# Benefits of the Kelsius CoolCheck Mapping Sensors

- · Cuts costs associated with third party mapping
- · Minimal set up time
- Mapping reports available within 20 minutes of mapping exercise being completed
- Access to reports 24x7x365
- · Paperless archiving
- Automatic record of door opening events.

# Feauture of Kelsius CoolCheck Mapping Sensors

- Non-disruptive and flexible deployment of wireless sensors
- Annually recalibrated sensors against national standard
- Sensors pre-configured to user requirements e.g. logging rate
- Temperature Mapping range  $-200^{\circ}$ C to  $+200^{\circ}$ C.



# Temperature Monitoring for Healthcare

"We have increased our confidence in product quality and patient safety. Moreover the system has already paid for itself several times over by helping us avoid significant product loss. We recovered our costs within a year."

#### Tom Ferrie

Chief Pharmacist, Letterkenny General Hospital

# CoolCheck







# Ask for a demonstration of CoolCheck today!

**Email** sales@kelsius.com **Web** www.kelsius.com **Call Ireland** +353 (0) 74 91 62982 **Call UK** +44 (0) 28 90 737981

#### **Kelsius Ireland**

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#### **Kelsius UK**

Northern Ireland Science Park The Innovation Centre, Queen's Road Queen's Island, Belfast BT3 9DT Kelsius is the leading supplier of automation technology for product safety and compliance to the food services and healthcare industries. Using its world class wireless sensor technology and cloud based data hosting and processing, Kelsius systems improve product safety, ensure regulatory compliance and optimise costs associated with these activities.

Founded in 2003, Kelsius has offices in the United Kingdom and Ireland with a network of partners in Europe, Middle East, Australia and the USA that serve its global customer base.



