

Temperature monitoring in medical refrigerators with **testo Saveris.**



Worldwide, more and more medicinal products need chilled storage, or indeed are even subject to a mandatory cold chain. Among these are anti-bodies, live vaccines such as insulin, or infusions. In order to ensure their effectivity, they must be stored in a constant temperature range of +2 °C to +8 °C. If these upper and lower values are exceeded, the products can be damaged. The consequence would be an increased risk to patients, and economic losses.

With testo Saveris, it does not need to come to this. The automated data monitoring system reliably measures, monitors and stores the temperatures in medical refrigerators. If limit values are exceeded, it alarms the responsible people immediately, allowing quick intervention in case of emergency.



The challenge.

Pharmaceuticals are extremely sensitive to temperature in many ways. This is mainly due to the proteins contained in many medicaments. These proteins react extremely sensitively to changing ambient conditions – especially to temperature fluctuations. Freezing a medicament in which they are contained only once can already alter its composition so negatively, that its effectivity is reduced or even entirely lost. In the worst case, toxic decomposition products can even be produced, which, in contrast to food contaminants are not externally identifiable, but which can cause equally serious damage.

However, not only medicaments themselves or their component substances are endangered outside the permitted temperature range. Their containers or packaging are also affected: Because below-freezing or extremely fluctuating temperatures can cause hairline cracks in ampoules and glass containers, or dissolve so-called leachable components out of the glass. The consequence can be contamination or even a loss of sterility.

In order to avoid this, those responsible on site rely on a measurement solution which automatically measures and securely documents the temperature values, functions

reliably even in a power cut, and above all, immediately provides alarms when defined temperature limit values are exceeded, or when power – and thus the cold chain – is interrupted.

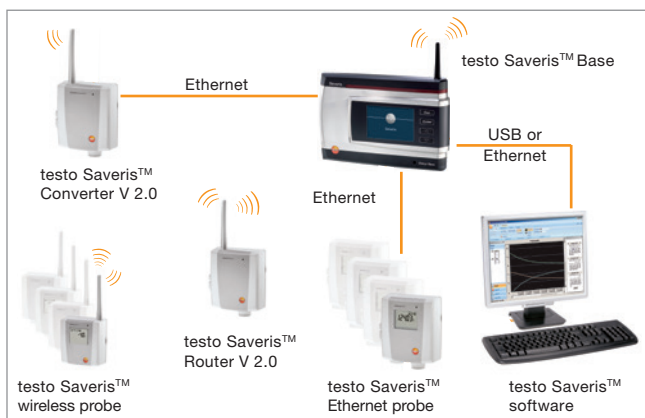
The solution.

The measurement data monitoring system testo Saveris was developed to meet the challenges of temperature monitoring in medical refrigerators. It offers:

- Redundant measurement data archiving and secure recording of measurement values, even in cases of power cuts – for reliable monitoring.
- Multiple alarm options (SMS, e-mail, LED) when limit values are exceeded or the power supply interrupted – for quick intervention.
- Automated monitoring of temperature and air humidity and central documentation of data – saves time and money.
- Comprehensive and automated report management – for a quick overview.
- Wide selection of probes – for measurements from -200 °C to over +1000 °C.
- Probes with internal and external sensors – for flexible attachment on and in the refrigerator.
- Validatable 21 CFR Part 11 software – for standard-compliant work.
- Qualification, validation and calibration service – for long-term security.

More information.

More information and answers to all your questions concerning measurement data monitoring with testo Saveris at www.testo.com.



The measurement data monitoring system testo Saveris with its components