

Temperature monitoring in a hospital dispensary with **testo Saveris**.



Measurement data monitoring for the highest demands:

The dispensary of Freiburg's University Medical Center places the highest demands on the monitoring and documentation of temperature and humidity data. For the purposes of monitoring temperature during the preparation of medicaments, or their storage in refrigerators, sensors are used which not only record and save measurement data, but can also trigger alarms if a limit value is exceeded. With testo Saveris, a measurement data monitoring system is offered by Testo AG which precisely and reliably records and centrally archives measurement data. By ensuring the storage conditions, the surplus quantities needing to be disposed of in the preparation of administerable medicaments is considerably reduced.

The University Medical Center Freiburg:

The University Medical Center in Freiburg is a maximum care hospital. All special medical faculties are represented here, with their own specialist clinics and institutes. It is one of the largest medical facilities in Europe. In addition to the over 66000 in-patients annually, approximately 1000 out-patients are treated every day. The University Medical Center combines patient care, research and teaching under one roof. Roughly 10000 staff members make it the largest employer in the Freiburg region. Research at the Medical Center is focused or planned according to the changing requirements of modern medicine.





The challenge:

The central chemotherapeutic agent and antiviral drug preparation in the dispensary of the University Medical Center Freiburg supplies all wards with patients' individual medicaments. Not only in the production of injections, infusion solutions, pump reservoirs or eyedrops, but also in preparations for clinical studies, which are subject to particularly stringent guidelines, is measurement data monitoring indispensable for the uninterrupted documentation of ambient conditions.

"Parallel to temperature monitoring via the sensors in the refrigerators, a continuous recording of measurement data used to take place with additional data loggers, which involved needing to regularly and consecutively analyse and reprogram them, then place them back in the cleanrooms or refrigerators."
 Dr. rer. med. Alexandra Schwehr
 Specialist Pharmacist for Medicinal Product Information
 University Medical Center Freiburg

The solution:

The measurement data monitoring system testo Saveris consists of individually positionable probes and the so called base station, which can be run selfsufficiently or connected to a PC. The probes measure not only the ambient temperature and humidity, at the same time they also continuously save the data in definable cycles, and transmit them at regular intervals by wireless or Ethernet to the base station. Both probe variants can be combined into one system. Due to spatial considerations, and because the probes are placed in large numbers in various refrigerators, only wireless probes are used in Freiburg's University Medical Center dispensary.

A router takes over the job of extending the transmission distance in the specially shielded clean rooms. If limit values are exceeded, various alarm options, such as SMS/e-mail alarm or alarm relay are available. Remote alarms can even be given when the system is not connected to a running PC. Even in cases of power cuts, the recording of data continues without interruption with testo Saveris. All measurement data are stored automatically in a central data base, and can be retrieved as required in the form of a table or graph. The database also lists all occurring alarms. The Saveris software is available in three different versions. The CFR version fulfils the requirements of the FDA 21 CFR Part 11 and is thus validatable.

"An additional simplification of the documentation work is provided by the automatic creation of reports in PDF format."
 Dr. rer. med. Alexandra Schwehr
 Specialist Pharmacist for Medicinal Product Information
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More information.
 More information and answers to all your questions concerning measurement data monitoring with testo Saveris at www.testolimited.com