





#### CASE STUDY

**Securing ULT Freezers:** How ATEK's Monitoring System **Ensures Cold Chain Safety** in a University Laboratory



# CLIENT PROFILE

university-based research laboratory specializing in molecular biology and biochemistry, with a focus purification on protein and crystallization. These activities involve the use of highly sensitive biological materials that must be stored in ultrastable, tightly controlled environments to maintain research integrity.



## ROLE INTERVIEWED

Lab Manager responsible for equipment oversight and environmental monitoring. Their duties include managing freezer performance, ensuring sample safety, implementing preventive measures to mitigate temperaturerelated risks.

# **CONTEXT & CHALLENGES**

Prior to adopting the ATEK system, the laboratory was experiencing critical reliability problems with its freezers and internal monitoring tools.

On one long weekend, a major incident occurred: the failure of a freezer resulted in the loss of almost \$50,000 worth of research equipment, representing several years of scientific effort.

Although a Building Automation System (BAS) was in place, it was unable to provide timely alerts. The laboratory therefore urgently needed a reliable, autonomous and proactive environmental monitoring solution to prevent such losses recurring.





To meet these requirements, the university laboratory turned to ATEK for a detailed assessment and expert advice on the best solution, including the installation of precision sensors. Recognizing the major impact of product loss on researchers' work, ATEK activated its emergency protocol, enabling the installation of a complete monitoring solution in less than two weeks, to protect valuable scientific assets in a time-critical manner.

### ATEK'S SOLUTION

- Installation of temperature sensors for all -30°C and -80°C freezers
- A cloud-based platform enabling real-time temperature monitoring and custom alerts in case of deviation
- Tailored threshold configuration and secure remote access for researchers
- O4
  Automated compliance
  reporting, eliminating manual
  data handling
- Full service deployment, including installation, staff training and 24/7 bilingual technical support



ATEK has provided an essential layer of protection for our research materials. Real-time monitoring and proactive alerts allow us to manage our equipment effectively and avoid costly losses. The peace of mind this system provides is invaluable.

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### **RESULTS**

- No further loss of research materials since implementation
- Teams are now able to act proactively at the first signs of system failure
- The ATEK solution has become a daily source of peace of mind for research teams.
- O4 Clarity of operations with better access to alarms and recordings

