

CASE STUDY



ASTORIOM STRENGTHENS BIOREPOSITORY OPERATIONS WITH REES MONITORING SYSTEM



CLIENT PROFILE

Client: Astoriom

Location: Global presence with multiple sites in the US (East and West Coast), the UK, and Ireland

Industry: Stability Storage, Biorepository, Service & Validation, and Disaster Recovery

Departments Served: Sample Management, Biorepository Operations, CAP-accredited Storage Facilities

Solutions Utilized:

- Environmental Monitoring System (EMS)
- Wireless and hardwired sensors across LN2, -80°C, -20°C, 4°C freezers, room temperature, and humidity
- Generator ATS switch monitoring
- Door switch alarms and LN2 room oxygen monitoring
- Failover node for backup monitoring and compliance assurance
- Comprehensive calibration, validation, and service support

ABOUT ASTORIOM

Astoriom is a global quality leader in safeguarding sample assets, with over 30 years of expertise in stability and biorepository storage. With multiple facilities worldwide, including two in the UK, one in Ireland, and two in the U.S. (San Diego, CA and Research Triangle Park, NC), Astoriom supports customers in more than 20 industries.

Their services span stability storage, biorepository management, service & validation, and disaster recovery. Controlled environments range from +60°C to -196°C, ensuring preservation for even the most sensitive samples. Astoriom operates under strict quality licenses and certifications, including ISO 9001, ICH Q1A & Q1B, FDA 21 CFR Part 11, CAP, GxP, Controlled Drug License in the UK, CAP accreditation, and HTA compliance.

“Safeguarding every sample matters. That is why we treat each sample entrusted to us with the utmost care. Our mission is to ensure our customers’ assets are protected and preserved to support their scientific advancements, product safety, compliance, and innovation.” – Maria Buitrago, Marketing Manager

At the RTP site, Katie Barnard, Sample Management Supervisor and CAP Biorepository Director, oversees daily operations and client confidence in the integrity of sample storage.

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THE CHALLENGE

Before working with Rees, Astoriom's RTP site was relying on an outdated monitoring system that presented significant limitations:

- Paper-based records: Staff had to print and store binders of temperature graphs, creating heavy administrative burden.
- No remote visibility: If the system went down, staff had to come on-site, even outside business hours, to verify temperatures.
- Hard-wired infrastructure: Messy cabling limited flexibility and scalability.
- Generator blind spots: Power outages were difficult to track after hours without electronic insight into backup systems.

These inefficiencies made compliance harder to maintain and reduced the team's ability to act quickly when issues arose.

THE SOLUTION

Astoriom selected the Rees Environmental Monitoring System for its reputation and versatility.

"Rees was a well-known brand that lots of other people in our industry use, which told us it was a good system to switch over to. I also love how many things you guys are able to monitor. You have a probe for everything — it makes our lives easier!"

— Katie Barnard, Sample Management Supervisor

Astoriom now monitors:

- LN2, -80°C, -20°C, and 4°C freezers, plus room temperature and humidity
- Generator ATS switches, ensuring immediate awareness of backup power events

- Door switches, preventing units from warming due to doors left open
- Oxygen levels in LN2 storage rooms for staff safety

A critical feature has been the failover node, which provides backup monitoring if the primary system is interrupted, ensuring uninterrupted oversight and instilling confidence for both staff and clients.

THE RESULTS

Compliance Without Compromise

Astoriom must comply with CAP, eCFR, ICH, and other rigorous guidelines. Rees enables compliance not just for temperature, but for backup monitoring as well. The failover node has been particularly valuable, giving clients peace of mind and reducing the burden on staff.

"The failover node allows us to have a backup system in place that takes less burden off our staff and instills confidence in our clients that we truly have 24/7 eyes on the equipment housing their assets."

— Katie Barnard, Sample Management Supervisor

EFFICIENCY THAT PROTECTS TIME AND ASSETS

With generator ATS probes, Astoriom can respond to power outages immediately, minimizing risk to critical samples. Electronic graphing has also eliminated the need for paper binders, streamlining processes and freeing staff from administrative tasks. By automating more parameters, the team has greater visibility and more time to focus on client requests and sample care.

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EASE OF USE THAT BUILDS CONFIDENCE

The Rees system's intuitive interface allows staff to act quickly and confidently. Proactive alerts, such as door alarms, prevent issues before they escalate, something not possible with the old system.

"The system makes a difference every day. Especially when something goes wrong in the middle of the night, the system is there to let me know something is up. It allows us to be proactive, like when the door alarm goes off, we can get to it before it causes a unit to warm up." – Katie Barnard, Sample Management Supervisor

FUTURE OUTLOOK

As Astoriom continues to expand, the team plans to increase its use of Rees monitoring:

- Adding probes for LN2 levels and generator data, reducing the need for manual logging
- Scaling with additional temperature probes as more freezers are added
- Continuing to automate monitoring to reduce administrative burden and strengthen client confidence

"The more things we can automate, the less time the staff has to spend on admin work and the more time they can spend doing the things they need to do, like taking care of client requests and samples." – Katie Barnard, Sample Management Supervisor