

24/7 Automated Remote Monitoring

HEALTHCARE



Are You Prepared for Your Next Regulatory Inspection?

Hospitals, pharmacies, laboratories, and other healthcare providers worldwide are responsible for executing an ever-expanding list of refrigeration monitoring requirements from a myriad of governing agencies. Yet many struggle to maintain compliance, resulting in costly consequences. Here are a couple of recent examples to consider:

In 2017, A Pediatrician at Southern Ocean Pediatric and Family Medicine was ordered to pay **\$156,220** in penalties for administering improperly refrigerated vaccines to nearly **900** children.

Source: *NJ.com*



In March 2018, **thousands** of frozen eggs and embryos stored at Pacific Fertility Clinic in San Francisco became compromised as a result of rising temperatures that went unnoticed by employees in between **manual readings**.

Source: *The Washington Post*



While these examples may seem exceptional, the fact remains that no facility is immune from the risks of refrigeration failures. Just one incident can cost thousands of dollars in wasted inventory, regulatory fines, lawsuit judgments, equipment repair and replacement, and reputational damage control.

Manual Monitoring Isn't Worth the Risk or Expense

Proper refrigeration is vital for preserving the integrity and safety of medications, vaccinations, laboratory specimens, operating rooms, and much more.

Many facilities manually monitor refrigeration systems, but it's impossible to manually monitor equipment 24 hours a day. Even periodic monitoring is difficult to sustain. It's expensive, labor intensive, the readings may not be accurate, and monitoring efforts are often duplicated in order to meet overlapping regulatory requirements. Operational efficiency suffers as a result, increasing the risk for non-compliance.

COSTLY MANUAL MONITORING

# of units monitored	100
# of readings each day (per unit)	6
# of readings per month (all units)	18,000
# of minutes to check one unit	1
Avg. employee hourly rate	\$65.00
Cost per reading	\$1.08

**Total cost per month to monitor
\$19,500.00**

IoT Solutions are designed to support the regulatory requirements of major governing agencies:

- The Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
- Food & Drug Administration (FDA)
- Environmental Protection Agency (EPA)
- Center for Disease Control (CDC)
- United States Pharmacopeia (USP)
- American Association of Blood Banks (AABB)



HOSPITALS



LABORATORIES



PHARMACIES

The Complete Solution

IoT Solutions automate refrigeration monitoring for the healthcare industry, delivering substantial time and money savings. Our solution solves unique and complex remote monitoring challenges by combining efficient wireless sensors and gateways with industry-leading monitoring applications, real-time reporting, and instant SMS text message alerts.



Wireless Sensor & Gateway

Connect any refrigeration unit within minutes



Remote Monitoring

Monitor refrigeration systems at any time, from anywhere



Compliance Reporting

Maintain compliance with detailed activity reports

Automated Remote Monitoring Features



Quick & Easy Setup

Wireless sensors are installed in minutes. Automated temperature and humidity readings are captured instantly.



Compliance Visibility

Ensure CDC, JCAHO, and FDA regulatory compliance with accurate data recording and printable reports.



Actionable Alerts

Receive timely alerts via sms text messages and emails. Set sensor reading thresholds and configure alert settings.



Enterprise Ready

Industrial grade sensors with low power and long range capabilities for monitoring facilities of any size.



Corrective Action

Quickly document the necessary course of action required to address alerts associated with incidents and workflows.



Security & Privacy

Highest standards of HIPAA-compliant data protection, ensuring end-to-end embedded AES encryption.

HOSPITAL USE CASE

The Challenge

A hospital department leader wanted to automate temperature monitoring for over 100 refrigeration units. Staff members had been manually recording the refrigeration temperatures, but they struggled to keep up with all of the required readings. The hospital was at risk of incurring costly regulatory compliance violations.

The Solution

Sensors were installed in each refrigeration unit to instantly and automatically record temperatures around the clock. This wireless hardware offers up to 15KM of range, giving the hospital added flexibility and scalability. Compliance reports were scheduled to ensure regulatory compliance at all times, and notifications were set to instantly alert designated employees if temperatures fall out of predetermined ranges.

100
Refrigerators

10X
More
Compliant

\$18.6K
Monthly
Savings

SIGNIFICANT ROI

	Before	After
# of units monitored	100	100
# of readings each day (per unit)	6	72
# of readings per month (all units)	18,000	216,000
# of minutes to check one unit	1	n/a
Avg. employee hourly rate	\$65	n/a
Cost per sensor per month	n/a	\$9
Cost per reading	\$1.08	\$0.004
Total cost per month to monitor	\$19,500	\$900

SAVE OVER
\$2,000
per refrigerator
per year

TOTAL SAVINGS = \$223,200 PER YEAR

A low-angle photograph of a modern, multi-story building with a white facade and large, teal-tinted glass windows. The building is set against a clear blue sky with a few wispy clouds. The perspective is looking up at the building, creating a sense of height and modernity.

Get Started Today with a **FREE 30-Day Trial**

- ✓ **No upfront costs**
- ✓ **Free installation**
- ✓ **Lifetime service and support**

Our Commitment to You

We are committed to delivering a superior monitoring solution that supports all of your needs. Here's what you can expect once the solution has been installed.



Immediate Cost-Savings

Employees won't have to manually monitor refrigeration systems anymore. That means you'll begin saving money from day one!



Around the Clock Compliance

If refrigeration temperatures ever fall out of range, you'll receive instant, actionable alerts so that you can immediately address issues before they become costly regulatory violations.



24/7/365 Support

We'll always be available to answer any questions or concerns you have about the solution and its features.



Lifetime Guarantee

We stand by our solution 100%. Should any sensor stop working, we'll replace it for free.



About VAST IoT Solutions

VAST IoT Solutions provides turnkey, fully-automated refrigeration monitoring solutions for healthcare facilities.

Our real-time, sensor-driven solutions save time and money for hospitals, pharmacies, laboratories, and other healthcare service providers by enabling users to effortlessly monitor refrigeration systems at any time, from anywhere, and substantially improve product quality, regulatory compliance, and patient safety.

Additional sensors for pest control, motion detection, opened and closed doors, carbon dioxide, and hundreds of other problems are available to enhance our solution.

**For more information about our automated
monitoring solutions visit our website at
VASTIoTolutions.com**

