



Who would benefit From our IoT Solution

If you need to **protect** your product and be **complaint** we can help. Our solution is for companies that already monitor or need to monitor continuously 24/7 and in real time. With the advent of IoT (Internet of Things) it is now possible to automate monitoring in an affordable manner across the organization.



Call us If you are a:

- Pharmaceuticals
- Life Sciences & Biotechnology
- Blood Banks
- Hospitals and clinics
- Forensic Labs
- Food and Nutrition
- Pharmacies
- Vaccines
- Repositories or Storage houses
- Laboratories
- Educational Institutions



Why Monitor Protection & Compliance

Products such as blood, tissue, biological samples, pharmacies etc. are expensive and their loss due to improper storage can be as high as \$100,000 for a single freezer. In addition, an alphabet soup of regulatory agencies regulate the storage and processing of these products. Regulators include: FDA, CMS, CLIA, Joint Commission, State Regulators, CDC, Vaccines for Children (VFC), AABB, CAP, USP 797.

Reasons as to why use an automated, continuous, real time monitoring solution:

Protect valuable product:

Sometimes the value of the product stored in a freezer can easily be \$50,000 or more. For example, breakdown of the freezer in a weekend can result in complete loss

Loss of product potency:

If during storage there is an incident that is not known the product may be in effective or worse harmful. There are many known instances of vaccines loosing their efficacy

Process efficiency:

Manufacturing and transportation are areas where volume of product moving around can create logistical nightmares. It is important the method of monitoring take into account the scale and distributed nature of operations

Compliance:

With a greater awareness of potential pitfalls of improper storage the regulatory agencies are conducting more audits and the cost of non-compliance can be significant from simple fines to complete shutdown of business







We monitor

- Temperature
- Humidity
- Differential Pressure
- CO2
- Dry contacts
- Leak
- and more

- Refrigerators
- Freezers
- Ultra Lows
- Incubators
- Liquid Nitrogen Units
- Ovens
- Shakers/Agitators
- Walk-in Refrigerators/Freezers
- Storage Areas





Why us and Why IoT

Monitoring is typically accomplished using data loggers with each group doing their own thing. An IoT solution makes it company wide with significant advantages

Why IoT

- Leverage your IT infrastructure (Wi-Fi)
- Leverage the Cloud
- Monitor all your facilities from one place
- Flexibility and Scalability
- Increase efficiency and reduce cost
- Standardize across company with minimum cost
- Improve security of your data

Why Us

- Can handle 10,000+ sensors across corporation using existing IT infrastructure
- Apply big data solutions to sensor data across the company to optimize efficiency
- We can make new sensors for customers based on needs
- We can customize solution to your need
- Enterprise class security
- Easy to integrate with existing systems







Clients that trust us:



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Pharmaceuticals Where to Monitor

Research and Development

- 1. Monitor equipment storing ingredients
- 2. Monitoring test environments
- 3. Identifying malfunctioning equipment
- 4. Compliance documentation and record keeping

Manufacturing

- 1. Monitor complete facility including areas medication is being produced, stored and transferred
- 2. Any place using manual methods to record for compliance
- 3. Any site that needs 24/7 monitoring of temperature, humidity, pressure, CO2 and leaks.

Enterprise-wide improvements

Continuous improvements in processes and efficiencies is possible with enterprise wide data collection from sensors. The data can be processed through algorithms (sometimes referred to as "Big Data Solutions") to identify efficiencies and improvements in processes as well as identify areas ripe for automation.







How does it work

Key Elements of our Solution













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