

## FDA COMPLIANT BLOOD STORAGE AND PRESERVATION

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### ACCSENSE MONITORING SYSTEM AUTOMATES DATA ARCHIVE AND ALARMING



CAS DataLoggers provided the temperature alarming and monitoring system to a hospital blood bank looking to replace their old paper chart recorders as they became unreliable and spare parts were harder to find. For proper blood storage and preservation, the lab's medical units needed to maintain storage temperatures between 2°C to 6°C (36°F to 43°F), given the perishability of blood components. The facility also maintained a supply of frozen plasma which had to be maintained around -30°C (-22°F). The lab technician required a system that could connect with RTD probes for highly accurate

temperature readings and which could automatically store all the data for compliance with [FDA](#) and CAPA regulations. The lab technician called in to CAS DataLoggers for information on temperature monitoring equipment that would be affordable and easy for staff to use.

## INSTALLATION

The blood bank installed 2 [A2-05 Ethernet Temperature Data Loggers](#) in its medical storage room. Each data logger has inputs for 3 external sensors; 2 RTDs and a thermocouple. Staff ran 4 RTD probes out to the facility's 2 blood storage refrigerators and a reagent fridge, with the RTDs recording high precision temperature readings. If the lab ever needs to expand the temperature range,

Accsense is also ideal for monitoring ultra-low supplies stored in medical freezers down to -200°C (-328°F) using the optional Type T thermocouple probe.

The system's turn-key operation meant there were no expensive training sessions and only minimal IT department involvement—staff just plugged in the data loggers and installation was finished. Accsense temperature loggers are easy to use and data transmission is securely encrypted in line with regulatory demands.



## USAGE

Once installed, the data loggers performed continuous monitoring and automated archiving to save staff the hassle of storing and hunting for the data on hardcopy, all for about the same cost as replacing a paper chart recorder. Each data logger includes a power adapter and Ethernet cables, supporting Power over Ethernet for a lower cost and easier maintenance compared to traditional wiring.

In the event of a network connection loss or power failure, these pods will keep recording for another 6 hours on their internal lithium batteries and automatically continue to buffer temperature data.

By now, hospital staff have become familiar with every aspect of the system's user-friendly operation. The automated alarms increase their existing safety measures and decrease response times while automatically sending all the data to the secure Accsense cloud servers. This way staff can view the data on the cloud in real time whenever they need to prove FDA compliant blood storage and preservation.

Accsense also provides the lab with advanced alarm functionality, sending out emails, texts and phone calls to designated personnel whenever fridge or freezer temperatures go out of specification. This provides them with peace of mind, especially over the weekend and holidays when no one is present to keep an eye on the medical units. Using any Web browser, blood bank staff can login from anywhere an Internet connection is available to get reports and graphs or modify the system's configuration.

Ever since their purchase, the hospital could rely on CAS DataLoggers' free tech support for their new monitoring and alarming system. This helped the lab to get the best use out of their new system post-installation.

## BENEFITS

With Accsense, the blood bank's constant regulatory concerns have now become obsolete. Staff no longer must manually check the temperature or hunt for hardcopy records to prove FDA compliance. Here the Accsense system showed its main benefit, removing the lab's previous concerns about regulatory compliance and eliminating the errors from manual measurements. The data loggers keep a continuous temperature record of all storage devices. Every piece of data is stored in the Accsense cloud servers and accessible in real time. As a result, the lab has replaced their traditional temperature recorder charts for about the same cost.

CAS DataLoggers has provided its custom monitoring and alarming solutions for many clients including the Cleveland Clinic Foundation, New York Hospital Queens, Stanford Hospital and Clinics, the Smithsonian Institute, and the US Navy Medical Center, among many others.

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For more information on [Accsense Temperature Monitoring Systems](#), blood storage and preservation or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or [www.DataLoggerInc.com](http://www.DataLoggerInc.com).