

FOOD TEMPERATURE MONITORING & ALARMING SOLUTION IN MEAT LOCKERS

ACCSENSE VERSA LOG RECORDS TEMPERATURE ON 8 CHANNELS

CAS Dataloggers provided the data logging solution for a slaughterhouse with meat lockers storing product requiring continuous temperature monitoring. The company also needed proof of best practices to show regulatory compliance and preserve their reputation. Their frozen meat needed to be maintained at -20°C (-4°F), and the fresh meat at -1.7°C ($+29^{\circ}\text{F}$). In the event of an air conditioner compressor failure, the meat could spoil and pose a health hazard, so management had an immediate need for a reliable yet affordable food temperature monitoring and alarming solution.



INSTALLATION

The slaughterhouse installed an [Accsense VersaLog TC Temperature Data Logger](#) for each of its 3 meat lockers, placing the loggers next to the racks so personnel could easily retrieve the data. These battery-powered stand alone recorders each feature 8 channels for flexible logging in [cold chain](#) applications. Each logger monitored the room's ambient temperature while its onboard thermistor recorded temperature from -40°C to 70°C (-40°F to 158°F) and also featured 7 external thermocouple inputs compatible with every type of thermocouple probe.

USAGE

For long hauls, each temperature logger has a non-volatile 4MB flash memory which can store up to 2 million measurements and lets users log for extended periods with the choice to stop or overwrite logging when the memory is full. The temperature loggers are compact and lightweight, featuring a rugged aluminum enclosure and conformal coated PCB, to stand up to extreme environments including the -40°C (-40°F) freezers. Users can set wide-sampling interval selections, such as once every 10 minutes, and an internal battery is standard with a life of about 10 years.

Slaughterhouse management connected each data logger to an office PC via USB ports for quick data retrieval to ensure best practices were followed. The Accsense VersaLog solution offers users convenient connection flexibility and are also accessible via modem or Ethernet connections.



Accsense VersaLog also handled the freezer alarming requirements. Each data logger has 2 configurable alarm thresholds available per channel, and the ALARM1 & A2/EXT terminals can be configured as alarm outputs so users be alerted to out of tolerance conditions. As a failsafe, users configured their temperature logger's local alarm outputs to trigger a siren whenever the product goes out of temperature specification, and the onboard LED lights in red when in alarm condition. Each VersaLog reports its alarm status to a host PC via modem, Ethernet device server, or USB.

Users also utilized the [Accsense VersaLog SiteView software](#) for configuration, downloading, plotting, analysis and alarm reporting. SiteView is an easy to use Windows-based application with an intuitive graphic interface and supports USB, serial port and Ethernet connections for easy local and remote access. Fast communication speed enables quick downloads, and users can view data in real-time via chart recording, zoom in/out and also add comments to graphs to provide a detailed view of results.

BENEFITS

The slaughterhouse benefited from installing Accsense VersaLog in their meat lockers in several key ways. These temperature loggers offered cost-effective functionality, accuracy and a large data storage memory. Using multiple VersaLog loggers gave the company a large number of channels to ensure comprehensive monitoring and to create its own customizable temperature monitoring system. The loggers were also indispensable for their alarming capability, while the Windows-based SiteView software came loaded with time-saving setup and configuration features. Now management would know exactly if and when the meat temperatures went out of specification, allowing them to quickly identify the causes. The relevant data were then printed out, helping to convince third parties of the slaughterhouse's correct procedures.

All considered, the data loggers were economical even compared to the cost of an external probe. As a shipping supervisor commented, "It's easy to use the loggers, and they're a good price compared to other products we looked at."

For further information on the [Accsense Versalog TC Temperature Data Logger](#), food temperature monitoring, or to find the ideal solution for your application-specific needs, contact a CAS Data Logger Application Specialist at **(800) 956-4437** or www.DataLoggerInc.com.