

# ELECTRIC MOTOR CONDITION MONITORING FOR PREDICTIVE MAINTENANCE

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## ACCSENSE VERSA LOG PROVES RELIABLE IN MACHINE HEALTH MONITORING



CAS DataLoggers provided the stand-alone, motor condition monitoring solution for a factory producing machine parts. Worn down by years of use, an electric motor critical to the business would occasionally fail due to extended operation at high temperatures. This would often cause process delays or shutdowns, hurting profitability. To conduct [predictive maintenance](#), the factory needed reliable condition monitoring before problems could get worse, and also required local alarm notification when temperatures went above 160°F.

### INSTALLATION

Management installed three [Accsense VersaLog TH Thermistor Data Loggers](#) which are now mounted on three operating motors. Designed for multi-point temperature monitoring, Accsense VersaLog dataloggers are a portable, stand-alone solution for data recording applications that also require a local alarm notification. Models commonly feature 7-8 channels with models to log temperature, humidity, current, voltage, pulse or strain bridges.

Motor condition monitoring of the operating temperature is the most effective indicator of failure and the Versalog data loggers now continually monitor the motor temperatures. Each logger features seven 10K thermistor input channels to cover wide measurement requirements. For environmental applications, one on-board thermistor channel can monitor the device's ambient temperature.

The temperatures of each motor gearbox is recorded by one Versalog data logger. Each logger is connected to five high-accuracy thermistor temperature sensors (with cable lengths up to 20 feet in length) to monitor the temperature of all 5 points. The thermistors are contact-mounted to get accurate measurements. User-set sampling rate is flexible and can be set anywhere from 30 seconds to every 24 hours.

Each data logger also has an LED for local alarm notification and two user configurable alarm thresholds per channel. Using the SiteView software, users have set alarms for each thermistor channel in use at 160°F.

## RETRIEVING THE DATA

All Accsense VersaLog data loggers have a built-in USB port for connection to a PC for configuration and downloading data, plus an auxiliary serial port and 8-Megabytes of memory. Here, users are relying on USB as a simple way to retrieve data.

An optional USB device server allows multiple Accsense VersaLog loggers to be connected to a single Ethernet port allowing remote, network access. These devices can report alarm status to host PC via USB, Modem or Ethernet Device Server using Accsense SiteView software.



## ANALYSIS SOFTWARE

VersaLog SiteView software is compatible with Windows XP, Vista or Windows 7, 8, 10. It can be used to configure the data loggers, retrieve stored data, graph the measurements and save or export the data. It also offers the ability to view real-time data from any connected loggers, a powerful calibration tool, and an alarm management tool to allow local notification or an email notification of an alarm condition.

## BENEFITS

With Accsense VersaLog fully deployed, the factory now has reliable notification of unsafe motor temperatures. In turn this helps its processes to run uninterrupted since equipment maintenance and repairs can be scheduled ahead of time. The loggers are both affordable and a low-power way to cover all the necessary monitoring points.

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For more information on [Accsense VersaLog products](#), motor condition monitoring 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).