CAS DATALOGGERS

Remote Monitoring & Alarming For Chemical Storage Safety

Networked Data Logging System Works with Smartphones

CAS DataLoggers supplied the remote monitoring and alarming solution for a processing plant storing various temperature-sensitive industrial materials for use in chemical processes. Plant supervisors needed to prove to their end users that these compounds were safely kept within temperature specification while in storage. During their initial search, staff requested a real-time monitoring system that could be used over their wired LAN network with software to provide proof of the company's best practices and their chemical storage safety. The main feature that management wanted was the ability to continually monitor the conditions and receive alarms on their mobile devices and remote office PCs.

Installation

The plant installed 4 [T&D TR-71NW Temperature Data Loggers](#) in their storage rooms with the sensors placed adjacent to the stored material. The data loggers came complete with sensors, cables and software. Once installed, the T&D loggers each began recording measurements on 2 channels using external temperature sensors with a measuring range from -40°C to 110°C (-40°F to 230°F). Measurement resolutions are accurate to 0.1°C, with current readings clearly shown on the LCD display. Each temperature monitor can store up to 8,000 data sets to enable extended logging.

The T&D dataloggers came equipped with a built-in connection to the Internet over the plant's LAN network to automatically upload and display the temperature data online providing vital chemical storage safety. With a few simple configuration steps, users also setup the dataloggers to periodically send designated users data via E-mail so they can track the data without the need for an onsite PC.

USAGE

Users regularly access [T&D's free WebStorage](#) and WebViewer Services from their smartphones, giving them instant access to current readings, all recorded data and device settings anytime from anywhere. WebStorage provides long-term cloud storage space (up to 20MB) for customers' data files, and also allows for the simultaneous viewing, sharing and printing of data by multiple parties across distances for efficiency. The small size of T&D data files ensures extensive storage capability, saving time otherwise spent hunting for information.

Additionally, T&D Graph Software gives users greater management and analysis of the data, allowing them to read larger numbers of recorded data files into the same graph, merge the data, and save it in several different ways. This versatile graph tool gives users direct access to data stored in the WebStorage Service, and they can also specify conditions such as specific time periods to view and analyze specific data. From here, users sample and filter data, add memos, write comments directly on the graph, and save data to .CSV format for use and printout with Excel and other spreadsheet software.

Benefits

The TR-71NW's wired LAN network connection ensures that users get alarm messages sent by E-mail to their mobile devices and remote PCs. For local alarming, users connected a siren to each data logger, and this warning is accompanied by an alert report email the moment that upper and/or lower temperature limits are exceeded, when a sensor error occurs, or to show a recovery from one of the preset warning conditions. This enables fast response times from nearby workers and helps prevent extremely costly material loss.

Using their T&D networked data loggers, the plant is able to use its Internet connection to provide management with a low cost way to remotely view and store the product temperature data online. Smartphones let them manage their temperature data and get alarms on the go or at home. Staff can view and print full electronic documentation showing proof for regulatory compliance.

For further information on [T&D TR-71NW Temperature Data Loggers](#), chemical storage safety 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.