CAS DATALOGGERS

CAS DataLoggers Provides the ISP with Server Room Monitoring System

Turnkey dataTaker System Handles a Large-Scale Temp/RH Application

CAS DataLoggers provided the turnkey server room monitoring system for an ISP with a large server storage room requiring continual temperature and humidity monitoring at 750 points over wall-length 23" air-conditioned storage cabinets. Management wanted an integrated monitoring and alarming setup using data loggers with remote transmission to send the data over their network where users could view it on office PCs. The company considered wireless devices but these were discarded as too costly for such a large monitoring scale—a logger would be needed for every server rack and there were too many. With summer approaching, if any server went down due to a failed AC compressor, the business would only realize it when the calls started coming in. For her part, the IT supervisor wanted to make the server storage room ASHRAE compliant by monitoring each rack at the required 6 points. Ideally this would all be done using a single system which could connect to both sensor types.

Installation

CAS DataLoggers provided the ISP with a dataTaker DT85 Universal Input Data Logger which was installed into a control cabinet mounted to the wall opposite the door. The DT85 is a cost-effective logger expandable for truly demanding projects to 300 channels with 600 isolated or 900 single-ended analog inputs using channel expansion modules.

To monitor the hundreds of inputs in this application, the dataTaker is connected to 12 [dataTaker CEM20 Channel Expansion Modules](). Each CEM20 turns 1 of the data logger's universal analog channels into 20, giving users up to 60 analog inputs per expansion module to work with. This setup meets the required 750 input count since it gives users up to 768 analog inputs. The modules are compact and have fit easily onto a table beneath the control cabinet, consuming very little power. The DT85 and its CEMs now log readings from hundreds of thermistor probes and humidity sensors located at rack height per ASHRAE guidelines.

USAGE

The DT85 model features a maximum of 48 universal analog channels which connect to most sensors so that almost any physical value can be recorded, including temperature and humidity. Up to 16 channel expansion modules can be added to the DT85 yielding a maximum of 320 channels and 960 inputs. Featuring a clear built-in display, the dataTaker's large memory stores up to 10 million data points in user-defined memory at high precision with independent control of schedule size and mode.

With the system's turnkey operation, users don't have any hassles with operation, whether checking readings or changing settings. The data logger's built-in Web and FTP server sends the data over the company's network so users have remote access to logged data, configuration and diagnostics, with no extra software needed. This alarm data is also automatically archived for later analysis.

Users have created their own data logging schedules so that twice a day, the dataTaker logger pushes its data over FTP for effective remote monitoring. The dataTaker's FTP interface can also access logger configuration and diagnostics. Additionally, using a 3rd party mobile application named DT-Remote (iPhone/iPad/Android), designated staff now view mimics of their data in real time from their smartphones. Users can also configure settings and view graphs of the data this way.

Benefits

The dataTaker system gave the ISP an easy way to cover all their monitoring points in this demanding application. The dataTaker's large memory reliably stores the readings, which are also remotely accessible at any time from office PCs and staff smartphones using the inexpensive DT-Remote app.

Now if an AC unit suddenly fails, staff will get alarms no matter where they are and can work to get the servers back down to safe temperatures again. The DT85's flexibility of connection allows every server rack to be continually monitored at every point for both temperature and humidity values. Likewise the channel expansion modules are an easy way to cover every point and expand the input count further if needed. Only the dataTaker system could monitor all these points at a cost-effective price.

For further information on the dataTaker DT85 data logger, server room monitoring system, 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.