APPLICATION NOTE

CAS DATALOGGERS

Verifying Temperatures on an Appliance Testing Wall

DataTaker Provides High Analog Input Count

Appliance testing walls form a convenient way to perform product verification for testing appliances from ovens to dishwashers to stoves. A common example of these product verification setups involves measuring exactly where the appliance's heat output is coming from. Some facilities use specialized test walls of various sizes designed for this purpose, holding stacks of units undergoing testing/verification. This enables users to connect many different types of equipment to the units (motors, etc.) to examine the products in detail. However, due to the need to test multiple units at once, these applications often demand a high analog input channel count. Now CAS DataLoggers has the cost-effective solution for these test setups with the Series 4 dataTaker DT85 Data Logger.

Installation

The application typically uses a DT85 datalogger, which offers 16 to 48 universal analog sensor inputs for connection with several temperature sensors including thermocouples, thermistors, and RTDs. If more analog inputs are needed, the dataTaker can also be connected to dataTaker CEM20 Channel Expansion Modules, each adding 20 more inputs to the total. These standalone data loggers make 18-bit resolution measurements at a ±50 VDC input range and can easily accommodate larger-scale applications, being expandable up to 960 inputs. All current readings are viewable on the logger's integrated display.

Usage

The dataTaker's large memory can store as many as 10 million data points for extended appliance testing runs, and users have full control of schedule size and mode so they can log only as long as each test's duration. The logged data can easily be retrieved by USB Flash stick or users can have it sent automatically to an office PC using FTP. This way, all the data goes directly to the office over the local area network without needing any polling or specific host software. Offering flexible communications, dataTaker loggers feature RS232 with modem support, Ethernet and USB ports so that users can choose to connect to the DT85 locally, remotely or over the Internet. This versatility is increased with the logger's multiple SDI-12 sensor networks, Modbus for SCADA systems, and Web interface.

Using dataTaker's native intelligent capabilities, users can also archive data on alarm event to generate a list of temperature anomalies. Additionally, the popular dataTaker range offers a rugged design and construction, which is capable of withstanding accidents and extreme environments to provide years of operation.

Every dataTaker data logger is packaged with graphical interface software for setup and analysis. dEX is a user-friendly resource enabling users to speed through configuration and view real-time sensor measurements as mimics, trend charts, or tables, and retrieve historical data for analysis. This free software comes built-in with no installation needed, runs directly from a web browser, and can be accessed either locally or remotely anywhere including worldwide over the Internet using a TCP/IP connection. With the logger's built-in communications ports including Ethernet, USB and RS-232, users choose how they want to access the dataTaker software.

Benefits

With its versatility to connect to a large number of inputs and measure nearly any physical value at high accuracy, the dataTaker is a really cost-effective solution for these product test applications. The data logger's standalone operation and intelligent monitoring/control features lead to cost savings on labor and time otherwise wasted on unnecessary troubleshooting. Additionally, the Browser style interface is easy to learn–soon users will be programming like pros.

For further information on the dataTaker DT85 data logger, appliance testing, 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.