A RESEARCH LAB GOES PAPERLESS

Brainchild Data Logger Records Temperature on 6 Channels

CAS DataLoggers has provided the paperless chart recording device for a medical research laboratory undertaking a set of experiments requiring real-time temperature monitoring. For years staff relied on outdated paper chart recorders but now they wanted to make the switch to digital and avoid wasting time hunting for hardcopy. However, several of the systems they considered earlier were outside their budget.

After the lab called in and mentioned their application, CAS DataLoggers provided them with a low-cost **Brainchild 6-Channel Paperless Chart Recorder**. Technicians just connect the data logger's **6 isolated analog input channels** to their thermocouples to begin logging data. The data logger shows all current readings on its **high-resolution 6.4" VGA Color LCD display** (true VGA, 640x480 pixels). The model the lab chose includes the optional panel mount for easy placement wherever needed.

Offering flexible screen configuration and multiple display styles, the Brainchild is a stand-alone solution with an interactive dialogue and convenient soft function keys enabling quick navigation so staff can scroll back to review historical trends. The digital chart recorder has a fast sampling rate within 200msec for all analog channels at high accuracy and also performs several mathematical and programmable capabilities including statistics with instant, average, and min/max values.

Users setup the recorder's variable alarms and messages to get instant notification when temperatures suddenly go out of specification—this ensures that processes are completed at the correct parameters. The device lists all alarm records along with relevant information and also reminds users of the alarm status in different colors. Users can browse through this alarm list or acknowledge alarms easily via function keys on the vertical bar.

Additionally, the Brainchild's standard Ethernet and optional RS-232/RS-422/RS485 communication enable operators to access data onscreen or onsite from a remote location via the RS serial interface or Ethernet networking. The device's expandable modular architecture offers high flexibility, with additional options for digital I/O cards for DAQ and control applications, such as activating a warning light or siren in case of emergencies.

Users are currently storing their data on the removable Compact Flash memory card's 128MB standard storage space, but if desired they could also store their data on a remote host PC for data evaluation and printout, or on the device itself via Flash ROM. Data retention is specified at a minimum of 10 years with zero power data retention. The Brainchild connects to a PC via Ethernet cable allowing users to access the included software, allowing for streaming live data or downloading the data to an Excel spreadsheet to further organize information for reports.

The Brainchild is already saving staff valuable lab hours since it enables instant visualization of the temperature data. Now users monitor it live in real time to help ensure that their process is operating at all the correct parameters, getting instant alerts when it's not. The recorder's user-friendly setup and operation ensures that customers quickly get up and running with their projects. The digital paperless recorder also handles the project's data archiving while integrating into users' existing systems to improve accuracy and data accessibility. With all these capabilities, users are able to monitor, record, and evaluate the temperature data using the same system. In case the lab takes on more demanding applications, an expanded channel version is also available with 18 channels for more demanding applications.

For further information on the Brainchild 6-Channel Paperless Chart Recorder, the 18-Channel model, or to find the ideal solution for your application-specific needs, contact a CAS Data Logger Applications Specialist at (800) 956-4437 or visit the website at **www.DataLoggerInc.com**.