

LAB GOES PAPERLESS WITH A DIGITAL CHART RECORDER

BRAINCHILD DATA LOGGER RECORDS TEMPERATURE ON 6 CHANNELS

CAS DataLoggers provided a digital chart recorder to a medical research laboratory performing experiments which required real-time temperature monitoring. For years staff relied on older paper chart recorders but these devices were getting increasingly difficult to support and maintain. In addition, they wanted to make the switch to digital data storage and avoid wasting time hunting for hardcopy. Initially, the cost of several of the systems they considered were beyond their budget.



INSTALLATION

After the lab called in and described the requirements of their application, CAS DataLoggers provided them with a low-cost [Brainchild PR-10 6-Channel Paperless Chart Recorder](#). Technicians connect the data logger's 6 analog input channels to their existing thermocouples, went through a simple set-up process and immediately began measuring and recording data. This digital chart recorder shows all current readings on its customizable 4.3" Color Touch Screen display. The model the lab chose includes the optional portable case for easy placement wherever needed.

Offering flexible screen configuration and multiple display styles, the Brainchild is a stand-alone real-time monitoring solution with an interactive dialogue and convenient touch screen enabling quick navigation so staff can scroll back to review historical trends. The digital chart recorder has a fast sampling rate up to 10 Hz, accepts a wide range of thermocouple types plus RTD, voltage and 4-20 mA current inputs. It also offers optional mathematical capabilities including statistics with instant, average, and min/max values.

USAGE

Users configured the paperless recorder's alarms to get instant notification when temperatures suddenly go out of specification, a feature that was not available on the older paper recorders. This had the benefit of helping to ensure that experiments are completed with the correct conditions. The recorder lists all alarm records along with relevant information and can remind users of the alarm status in different colors. Users can browse through this alarm list or acknowledge alarms easily via the touch screen.



Additionally, the digital chart recorder's standard Ethernet interfaces enable operators to access stored data over the network using the Observer software supplied with the unit. Data from experiments can be easily downloaded and archived, eliminating the need for cabinets of paper records and the hassle of manual searching through them. For critical experiments they could remotely view real-time temperature data over the network using the optional Observer II PC software package.

Being a digital chart recorder, the PR10 stores the measured data in 256 MB of internal, non-volatile flash memory, on a removable SD memory card or on a USB memory stick via one of the 2 USB host ports. The PR10 is one of a family of 3 paperless recorders which feature a flexible, expandable, modular architecture with up to 48 analog input channels plus options for digital I/O cards for [DAQ](#) and control applications, such as activating relays, reading switches or turning on warning light or buzzer.

BENEFITS

The Brainchild PR10 paperless recorder is already saving staff valuable lab hours since it enables instant visualization of the temperature data. Now users can monitor temperature remotely in real time to help ensure that their experiments are operating with the correct parameters. The recorder's user-friendly setup and operation provides quick startup for new experiments. By storing data electronically, the recorder simplifies 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, [expanded models](#) are available with up to 48 channels for bigger projects. Finally, if future regulatory needs dictate it an optional FDA CFR 21 part 11 option allows secure data storage.

For further information on the [Brainchild PR-10 6-Channel Paperless Chart Recorder](#), other [digital chart recorders](#), 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.