

Temperature monitor, Data loggers, Chart Recorders

**Data loggers and Chart Recorders are two different types of temperature monitors.**

Data loggers are modern digital devices that monitor temperature electronically. They are stand-alone devices that are programmed with a computer to collect temperature data over a period of time. They are often used to gather temperature data in harsh environments such as on a mountain-top, under the ocean or in isolated desert areas.

They can also be used to monitor the temperature of a refrigerator, freezer or a pharmaceutical storage facility to comply with government regulations or professional standards.

Data loggers have replaced older mechanical chart recorders as temperature monitors because they don't require paper charts, or pens. Their big disadvantage is that the user can't access the collected temperature data until it is downloaded into a computer. If the data logger is programmed and then left unattended for several months to gather the temperature this isn't a problem, however there are situations where the user wants to be able to see what the temperature is or what the trend has been over the last week or month.

For example, if the indoor environment of a museum or art gallery is monitored it is very important that someone view the temperature data periodically to insure that the HVAC systems are operating properly. Month old data doesn't help in this situation. It must be accessed immediately if damage to art works or priceless antiques is to be prevented. Traditionally, chart recorders have been used to monitor temperature where immediate access to the data is required.

There is a newer alternative that combines the best features of data loggers and chart recorders to not only monitor temperature but to display a historical record or chart without the need for periodic maintenance. The Master Thermometer collects data like a data logger and displays a chart electronically on an LCD like a chart recorder. It doesn't require a computer to program or see the data and it doesn't need periodic maintenance or paper charts and pens. It also has an alarm so the user knows immediately if the temperature moves outside user-set parameters.