

Temperature monitoring, data loggers, chart recorders.

There are three methods used for temperature monitoring.

Manual

To manually monitor temperature an employee is assigned to look at the thermometer built into a refrigerator, freezer, incubator, etc and to manually record the temperature on a periodic basis; usually once every eight hours or one a day.

Mechanical

Temperature monitoring can be done mechanically with a chart recorder or strip recorder. These instruments use a sensor to collect temperature data and draw a line on a round paper chart or on a long strip of paper. The chart is periodically changed and filed away to prove that the temperature was maintained within certain limits or to trouble shoot a problem. The big disadvantage of this method is the need to constantly replace the chart. The pens also run out of ink and must be replaced periodically.

Electronic

A newer method of temperature monitoring is by using data loggers. A data logger is an all-electronic instrument that is programmed with a computer to collect temperature samples and store them in RAM memory. At some later time the data is downloaded to the computer and printed out or archived electronically. This method eliminates the need for paper charts and pens, but the information is not available to the user until it is downloaded to the computer.

A new device, the Master Thermometer overcomes the limitations of the chart recorder and data logger. It samples data electronically but it also displays the temperature as a chart on an LCD display. It doesn't need computers, paper charts, pens or maintenance. Additionally it can monitor and alarm up to four different refrigerators or freezers simultaneously. It is a much better solution to the temperature monitoring needs of today.