

FLIP-STICK THERMOMETER:

OVERVIEW:

Temperature is a measure of the thermal energy content of a living or non-living entity. Many biological processes are affected by temperature in a profound way. As a general rule, for every 10 °C rise in temperature there is a doubling of the rate of the biological process. As an example, the heart rate of a cold-blooded frog is 20 beats per min at a body temperature of 20 °C and doubles to 40 beats per min when body temperature rises to 30 °C. The body temperature of warm blooded animals (mammals and birds) is held constant so that biological processes maintain a stable or homeostatic state.

INSTRUMENTATION:

This thermometer consists of thermistor encased in a stainless steel probe body. The thermistor is a resistor that changes resistance with changes in temperature (°C and/or °F). However, one must realize that the amount of area that the sensor sees influences the accuracy of the measured temperature. The probe can be flip out from the main body at a 45, 90, 135, or 180 degree angle. In addition, the probe is rigid enough to be inserted into substrates such as soil.

INSTRUCTIONS:

To use the thermometer:

1. Extend the probe from the main body of the thermometer to the desired angle. This turns the unit ON.
2. Press the F/C button to choose temperature display in °C or °F.
3. Press the H/T button to allow the probe to read current temperature or to freeze the display with the last recorded temperature. If the word HOLD is flashing in the upper left corner of the display, press the H/T button to allow the unit to read current temperature. Press the H/T button to freeze the current temperature reading.
4. Press the MAX/MIN button to display the maximum and minimum temperatures the unit measured. To erase the MAX/MIN temperature from memory, flip the probe back to the OFF position and the turn the unit ON again by flipping the probe out.

