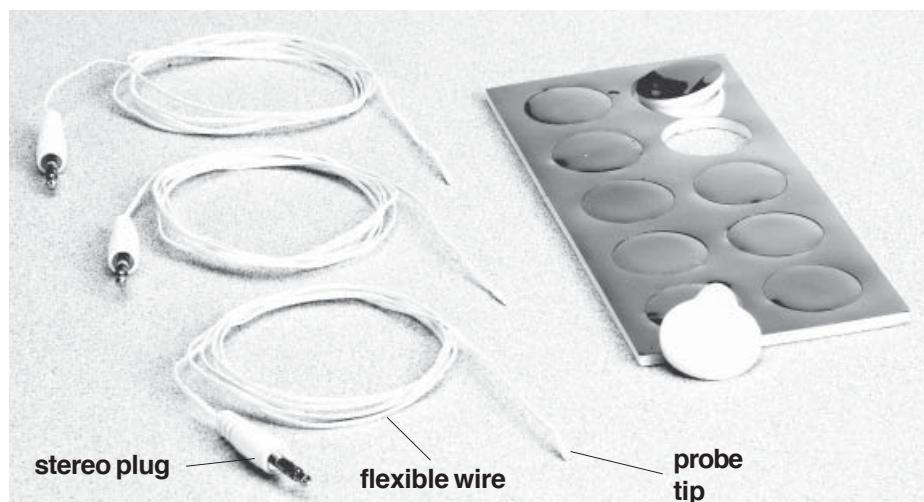


**Instruction Sheet  
for the PASCO  
Model PS-2135**

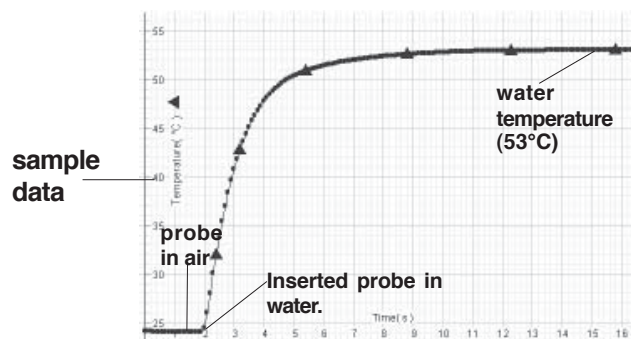
## **Fast Response Temperature Probe**



### **Introduction**

The Fast Response Temperature Probe (PS-2135) measures temperature in degrees Celsius ( $-10\text{ }^{\circ}\text{C}$  to  $+70\text{ }^{\circ}\text{C}$ ) and plugs into any PASPORT™ Temperature Sensor or a *ScienceWorkshop*® Thermistor Sensor. The Fast Response Temperature probe has applications for studying temperature gradients, evaporative cooling, outdoor air temperature, and environmental studies.

The probe can be placed on the surface of an object, on skin, in water, or even in mild chemical solutions. It has a 1-meter flexible wire, making it convenient for taking measurements in long flasks, between objects, or below the surface of a liquid. The adhesive mylar foam covers are designed to hold the probe tip and adhere it to a participant's skin or to other flat surfaces. The mylar reduces environmental influences.



### **Available Replacement Equipment**

- Adhesive Mylar Covers 10 Pack (PS-2525)

### **Additional Equipment Required**

- PASPORT Temperature Sensor (PS-2125) or *ScienceWorkshop* Thermistor Sensor (CI-6527A)
- PASPORT interface and DataStudio (version 1.7 or later)

OR

*ScienceWorkshop* interface and DataStudio (version 1.8.5 or later)

## Specifications

Range: -10 to +70 °C

Accuracy:  $\pm 0.5$  °C

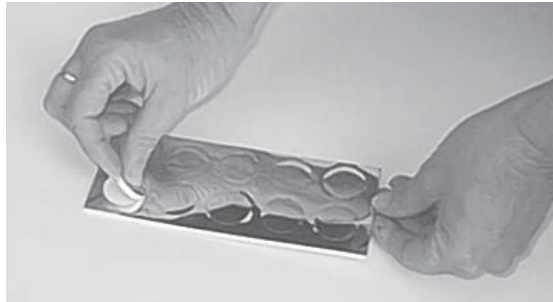
Resolution: 0.01 °C or better

## Setup Procedure

1. Insert the stereo plug on the Fast Response Temperature Probe into the port on a PASPORT Temperature Sensor box or a *ScienceWorkshop* Thermistor Sensor.
2. Connect the Temperature Sensor to either a PASPORT interface or a *ScienceWorkshop* interface.
3. To collect data, place the probe in the liquid or object to be measured, open DataStudio, and click the **Start** button.

## Using the Adhesive Mylar Cover

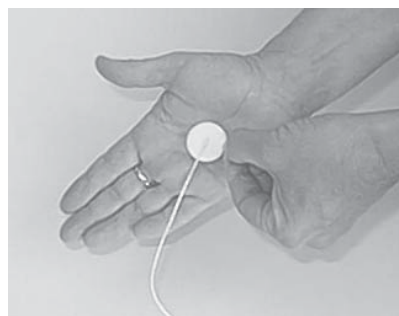
1. Remove one of the adhesive mylar foam cover disks from the sheet set.



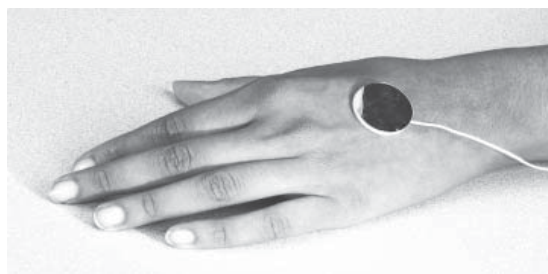
2. Carefully remove the protective backing paper.



3. Place the Fast Response Temperature Probe sensing tip in the center of the disk adhesive.




4. Place the adhesive mylar foam disk on a smooth (preferably hairless) skin surface



## Procedure Notes:

- Calibration of the PS-2125 Temperature Sensor and Thermistor Sensor are generally not required. However, if you wish to calibrate the PS-2125, follow the instructions on the card supplied with your sensor or in the DataStudio online help. If necessary, download the instructions from PASCO's website ([www.pasco.com](http://www.pasco.com)).
- If using the probe with the Thermistor Sensor, set up your experiment in DataStudio before collecting data. (i.e. In the Setup window, click on the Thermistor Sensor icon and drag it to an analog channel on the picture of the interface.)

## Safety Precaution

-  To prevent damage to the probe, do not use the probe in an open flame, on a hot plate, or beyond the recommended temperature range.