

# Fast Response Temperature Probe

PS-2135

## Introduction

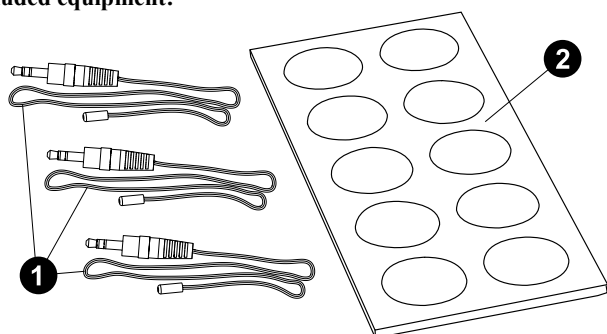
The Fast Response Temperature Probe can be used with a variety of PASCO temperature sensors to measure temperature in the range of  $-30^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$ . The probe has applications for studying temperature gradients, evaporative cooling, and outdoor air temperature, as well as for environmental studies.

The probe can be placed onto the surface of an object, on skin, or even into mild chemical solutions without harm. Its one meter flexible wire makes 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, adhere it to a participant's skin or another flat surface, and reduce environmental influences.

**⚠ IMPORTANT:** To prevent damage to the probe, do NOT use the probe in an open flame, on a hot plate, or in any environment beyond the recommended temperature range.

## Equipment

### Included equipment:



- ❶ 3× Fast Response Temperature Probes
- ❷ 10× adhesive patches

### Available replacement equipment:

- Adhesive Patches (100 Pack) (PS-2525)

### Required equipment:

- Any of the following temperature sensors:
  - Wireless Temperature Sensor Link (PS-3222)
  - PASPORT Temperature Sensor (PS-2125)
  - PASPORT Quad Temperature Sensor (PS-2143)
- PASCO Capstone or SPARKvue data collection software

## Usage

### Setup

1. Insert the stereo plug on the Fast Response Temperature Probe into the port on a compatible PASCO temperature sensor.
2. Connect your chosen temperature sensor to SPARKvue or PASCO Capstone. For more information on this, see the manual for the temperature sensor and the SPARKvue or Capstone online help.
3. Place the probe into the liquid or onto the object to be measured, then begin data collection.

### Use the adhesive mylar cover

To attach an adhesive mylar cover to the probe:

1. Remove one of the adhesive mylar foam cover disks from the sheet set.
2. Carefully remove the protective backing paper from the disk.
3. Place the Fast Response Temperature Probe into the center of the adhesive side of the disk.
4. Attach the adhesive mylar foam disk to a smooth (preferably hairless) area of skin or other flat surface.

## Calibration

The temperature sensors compatible with the Temperature Probe generally do not need to be calibrated. However, if desired, you can calibrate your chosen sensor via the data collection software. For more information, see the PASCO Capstone or SPARKvue online help.

## Specifications and accessories

Visit the product page at [pasco.com/product/PS-2135](https://www.pasco.com/product/PS-2135) to view the specifications and explore accessories. You can also download experiment files and support documents from the product page.

## Experiment files

Download one of several student-ready activities from the PASCO Experiment Library. Experiments include editable student handouts and teacher notes. Visit [pasco.com/freelabs/PS-2135](https://www.pasco.com/freelabs/PS-2135).

## Technical support

Need more help? Our knowledgeable and friendly Technical Support staff is ready to answer your questions or walk you through any issues.

- ☐ Chat [pasco.com](https://www.pasco.com)
- ☎ Phone 1-800-772-8700 x1004 (USA)  
+1 916 462 8384 (outside USA)
- ✉ Email [support@pasco.com](mailto:support@pasco.com)

### **Limited warranty**

For a description of the product warranty, see the Warranty and Returns page at [www.pasco.com/legal](http://www.pasco.com/legal).

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