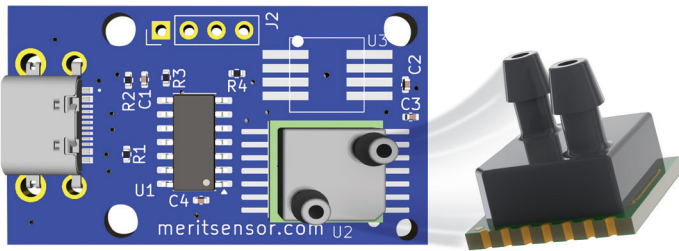


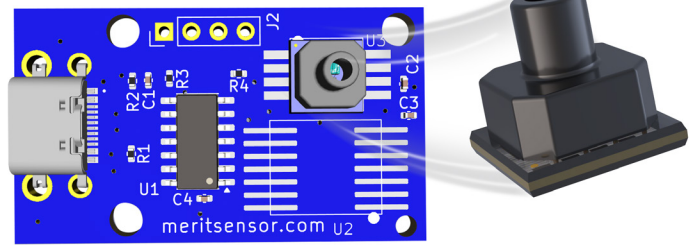


The **miniPEK2** is a small low-cost printed circuit board that includes either Merit Sensor's LP2 Series or CMS Series. It provides a simple way to evaluate pressure in your application and to test the performance of one of these pressure sensors. In addition to the PCB, the evaluation kit includes Merit Sensor's custom software, which is available for free download at meritsensor.com/products/minipek/. All you need is some tubing and a USB-C cable, and you'll be ready to evaluate pressure.

miniPEK2 with LP2 Series pressure sensor



miniPEK2 with CMS Series pressure sensor



Overview

Merit Sensor's miniPEK2 is a 1.5" x 0.9" printed circuit board (PCB) that includes either an LP2 Series or CMS Series digital-output pressure sensor. The miniPEK provides a simple way to evaluate pressure on your application and to test the performance of the pressure sensor on board.

What is included?

- miniPEK2 PCB with L2P Series or CMS Series pre-soldered on board

What is needed?

- Computer with Windows 10 or 11
- Software, which is available for free download at meritsensor.com/products/minipek/
- Tubing (1/16" ID)
- USB-C cable

Setup Instructions

1. Open the packaging and remove the miniPEK2.
2. Follow the instructions below based on the pressure sensor that has been soldered to the PCB.

LP2 Series: If you are measuring differential pressure, connect one end of both pieces of tubing to the ports of the pressure sensor and the other end of both pieces to the ports of the pressure source that you are testing, e.g., an air duct. If you are measuring gauge pressure, connect one end of tubing to the top pressure port and the other end to the pressure source, leaving the bottom pressure port open.

CMS Series: Connect one end of tubing to the pressure port and the other end to the pressure source.

3. Connect the USB 2.0 connector to your computer and the USB-C connector to the miniPEK.
4. Power up your computer, if necessary.
5. Install the free Merit Sensor Evaluation Software.

Note: Windows 10 or 11 automatically installs the driver for the Merit Sensor Evaluation Software. The driver can also be installed manually by downloading it from the following link: <http://www1.microchip.com/downloads/en/DeviceDoc/MCP2221%20Windows%20Driver%202014-10-09.zip>.

- a. Go to meritsensor.com/products/minipek/ and select the button "Download Software." A zipped folder named "miniPEK-software" will become available on your computer.
- b. Save the software to an appropriate drive on your computer.

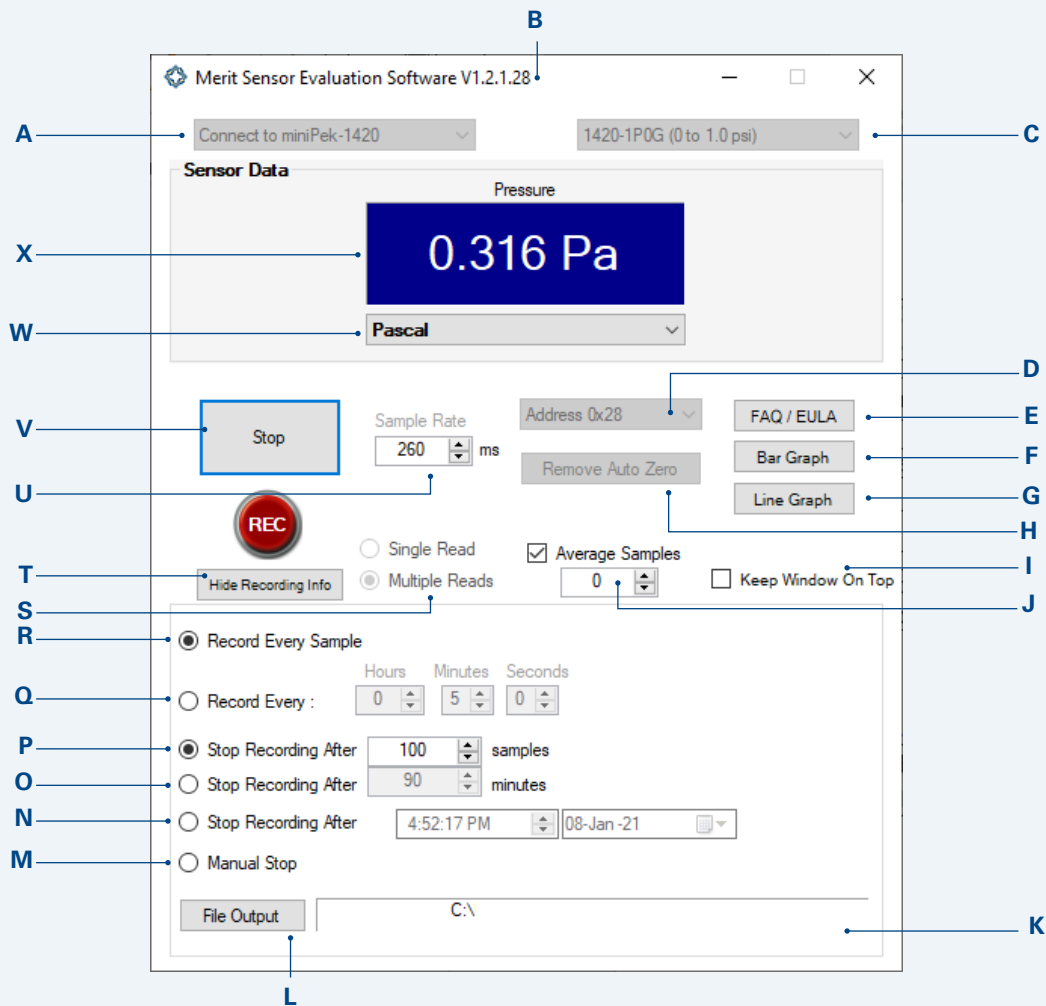
miniPEK Part Numbers

MINIPEK2 XXXX

Full-Scale Pressure

0500 – 500 pascal (LP2 part included)
2500 – 2500 pascal (LP2 part included)
1P0P – 1 psi (CMS part included)

- d. Double-click or right-click on the “setup.exe” file to open it.
 - e. If you are prompted with any security warnings, it is safe to install or run the software.
 - f. If your computer prompts you to install the .net framework, which is necessary for the software to function appropriately, do so.
Note: The framework installation can take a while depending on your internet connection and computer hardware.
 - g. The application will launch.
6. Once the software is running, select the appropriate miniPEK part (1440 for LP2 or 1610 for CMS) and the pressure sensor that has been soldered to the PCB from the drop-down menus in the top two fields of the software window.
 7. Make any other adjustments to the software settings, as necessary. To learn more about the options, refer to the information below.



- | | |
|--|---|
| <p>A Choose the evaluation kit to connect
1440 = LP2
1610 = CMS</p> <p>B Software revision</p> <p>C Select the sensor soldered to the PCB</p> <p>D Address of the sensor</p> <p>E Show FAQs and the End-User License Agreement</p> <p>F Show or hide a bar graph</p> <p>G Show or hide a line graph</p> <p>H Auto-zero any offset</p> <p>I Keep the miniPEK software window on top of other windows</p> <p>J Smooth out turbulent pressure readings</p> <p>K Location of the file where recorded information is saved</p> <p>L Choose where to save recorded information</p> | <p>M Stop the recording instantly</p> <p>N Stop recording after a certain time and date (works with "Record Every Sample" or "Record Every" selected)</p> <p>O Stop recording after a certain number of minutes (works with "Record Every Sample" or "Record Every" selected)</p> <p>P Stop recording after a certain number of samples (works with "Record Every Sample" or "Record Every" selected)</p> <p>Q Record a sample at specified intervals</p> <p>R Record every sample taken (per the selected sample rate)</p> <p>S Perform individual or continuous pressure readings</p> <p>T Show or hide recording options</p> <p>U Choose the data sample rate (in milliseconds per sample)</p> <p>V Start or stop pressure reading</p> <p>W Choose the pressure units to display</p> <p>X Pressure-reading display</p> |
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