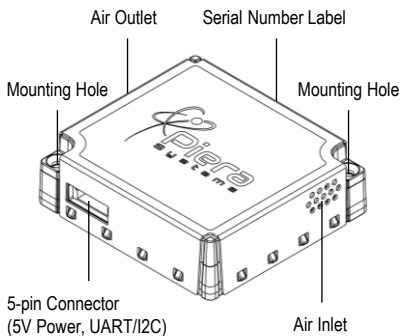




IPS-7100 Evaluation Kit

QUICK START GUIDE

IPS-7100 DIAGRAM



Do not obstruct the air inlet and outlet during operation.



Do not operate in a heavily contaminated environment.

INCLUDED IN THIS KIT



1. IPS-7100 Sensor



2. UART to USB Serial Converter



3. Quick Start Guide

STEP 1

Connect the Piera IPS-7100 sensor directly to a PC running Windows 10 or MacOS (10.15 or above) using the UART-USB cable included in the box.



STEP 2

Download SenseiAQ software at <https://github.com/PieraSystems/SenseiAQ> and follow on-screen installation instructions. The Piera Sensor icon on the upper-right hand corner turns green when SenseiAQ software is communicating with your sensor.



SenseiAQ will immediately begin displaying PM concentrations in the dashboard in $\mu\text{g}/\text{m}^3$. AQI values are displayed after the first 60 seconds and then updated every minute.

Serial output from the sensor will be displayed in the SenseiAQ Application. The default out-of-the-box update interval is 1 second for all readings.

STEP 3

To test sensor responsiveness, smoke detector tester spray can be used at a distance of 3 feet from the sensor. Do not spray directly into the sensor! Notice all PM 1-10 Values will significantly rise immediately and AQI values will rise during the next AQI update interval. Alternatively, you can use an incense stick, or other sources, to create and see smoke in the air near the sensor.



STEP 4

Data for all PM sizes can be seen in the Analysis tab, including smaller PM 0.1-0.5 values that are not displayed on the Dashboard. The EPA does not offer AQI conversions for these smaller particles so values are currently not calculated or shown on the Dashboard.



The Analysis Tab offers a number of views to analyse your data over time. Data will be recorded and reported to the cloud whenever SenseiAQ Application is running. For more detailed descriptions see the SenseiAQ User Guide.

Congratulations!

You are now in possession of the world's most accurate and responsive particulate sensor.

Next Steps:

- To learn more about the features of the SenseiAQ software, please refer to the SenseiAQ User Guide.
- To further evaluate the capabilities of your IPS-7100 sensor, please refer to the IPS-7100 Datasheet
- For information on communicating with the sensor directly in UART or I2C modes or for any other questions about integrating with your product, please refer to the IPS-7100 Datasheet or contact us at support@pierasystems.com.
- More resources at www.pierasystems.com.