# Six Questions to Ask Before You Buy a Lower-Cost Air Sensor

#### What is the purpose?

- Education and information
- Hotspot identification
- Personal exposure
- Participatory science

## What pollutant or pollutants do you want to measure?

- Particulate matter
- A gas (ozone, nitrogen dioxide)
- 08 08
- Total volatile organic compounds (VOCs)

#### What are some of the features you should consider?

- Size, weight, and portability
- Demonstrated accuracy in the real-world
- Weatherproof



- Power source
- Storage capacity and wireless transmission
- Maintenance requirements

### How can you check the performance of your lower-cost air sensor?

- Compare results to a nearby regulatory monitor
- Conduct periodic quality control checks

- Check weather and other conditions that may impact performance
- Periodically review and evaluate data for errors or problems

#### How much do lower-cost air sensors typically cost?

- \$150-\$1,500 (1-2 pollutants)
- \$500-\$2,500 (1-3 pollutants)
- \$2,500-\$10,000 (4 or more pollutants or 1 pollutant)



### What should you look for in a user manual?

- Type of pollutants measured
- General operating instructions
- How to store and recover data
- Conditions of operation
  - Expected performance



• Customer service support

#### Learn more about how to select and use an air sensor:

Air Sensor Toolbox --

https://www.epa.gov/air-sensor-toolbox

Air Sensor Guidebook --

https://www.epa.gov/air-sensor-toolbox/ how-use-air-sensors-air-sensor-guidebook



