

# Six Questions to Consider Before Purchasing Air Sensor Technology

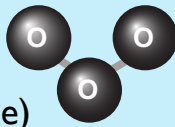
## What are your goals?

- Environmental education
- General air quality monitoring
- Pollutant emissions detection
- Understanding personal exposure



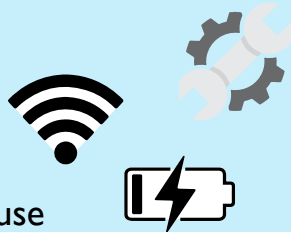
## What measurements are needed to meet my goals?

- Air pollutant type(s) (e.g., particulate matter, ozone)
- Meteorology (e.g., temperature, humidity)
- Other (e.g., GPS location, sound)



## What design features do I need?

- Portability and size
- Power source (e.g., battery, solar)
- Outdoor or indoor use
- Data display, storage, and transmission
- Maintenance needs



## What are some factors that can influence the cost of buying and operating a sensor?

- Loan, lease, or purchase of a sensor device
- Maintenance and/or replacement cost
- Data transmission and storage on a server
- Data ownership
- Data analysis and visualization tools



## How do I know if the air sensor is accurate?

- Seek information from the manufacturer and independent evaluations (e.g., Air Quality Sensor Performance Evaluation Center)
- Check if conditions (e.g., weather, pollutant levels) in which the sensor was evaluated are similar to your intended use
- Seek information on appropriate data quality checks from the manufacturer or other source



## What details should I look for in a user manual?

- Measurements collected by a device
- Capabilities of a sensor device (e.g., specifications)
- General installation, operating, and maintenance instructions
- Data transmission (e.g., WiFi, cellular)
- Data storage (e.g., local, remote server)
- Instructions on obtaining data
- Customer service support



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

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>