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