



Avigilon Halo 4 Smart Sensor

Environmental, Safety & Vape Features

The [Avigilon Halo 4 Smart Sensor](#) is designed to provide comprehensive monitoring of environmental conditions and enhance safety. This versatile device offers a range of features to detect various events and conditions, from air quality factors to potential safety concerns.

Environmental Monitoring

The Avigilon Halo 4 Smart Sensor can help monitor environmental conditions and air quality by providing data on various factors:



Health Index

Provides an indication of potential environmental risk factors. Health Index factors include: Carbon Dioxide (CO₂), Particulate Matter (1 µm, 2.5 µm, 10 µm), Humidity (RH), Total Volatile Organic Compounds (TVOCs), and Nitrogen Dioxide (NO₂).



Carbon Dioxide (CO₂)

High levels of CO₂ can affect cognitive function and decision-making performance, making it important to monitor in spaces where concentration and productivity are key.



Carbon Monoxide (CO)

Exposure to carbon monoxide can cause adverse reactions, including confusion and memory loss, highlighting the need for monitoring to ensure safety.



Nitrogen Dioxide (NO₂)

Long-term exposure to NO₂ may cause severe health problems, making monitoring important for long-term health and well-being.



Air Quality Index

Provides a measurement of overall air quality. Air Quality Index factors include:

- Particulate Matter (2.5 µm, 10 µm): Measures the concentration of particulate matter relevant to air quality ratings.
- Nitrogen Dioxide (NO₂): Measures the level of nitrogen dioxide, a key component in air quality assessments.
- Carbon Monoxide (CO): Measures the level of carbon monoxide, a key component in air quality assessments.



Temperature & Humidity

Monitoring temperature and humidity helps to maintain comfort and prevent conditions that promote mold and mildew growth, which can cause structural damage and health problems.



Total Volatile Organic Compounds (VOCs)

TVOCs are gases emitted from various materials that can have short- and long-term health effects, necessitating monitoring to identify and address potential sources of these compounds. Sources of TVOCs include cleaning fluids, disinfectants, paints, varnishes, and burning fuels.



Particulate Matter

Particulate matter is a mix of particles and droplets in the air that can be inhaled and cause respiratory issues and exacerbate existing conditions. Monitoring PM helps to assess air quality and protect health.

Safety Monitoring

The Avigilon Halo 4 Smart Sensor can also contribute to safety monitoring by providing capabilities that enhance response and awareness:



Help (Spoken Keyword)

The Halo 4 Smart Sensor can detect pre-configured spoken keywords to trigger alerts, enabling individuals to call for assistance in various situations.



Tamper Detection

Detect vibrations caused by tampering, helping to protect the device from vandalism or unauthorized interference.



Gunshot Detection

Identify potential gunshots using sound patterns, enabling rapid response to potential threats.



Audio Analytics

Enhance safety and minimize harm by instantly identifying critical incidents through distinct sounds like screaming, glass breaking, fire alarms, and more.



Motion Detection¹

Detect movement or occupancy. When used with a rules engine in Avigilon Unity or Alta Video, it can alert on trespassing after hours.



Occupancy Monitoring¹

Identify the number of people in a location and configure alerts for abnormalities, allowing for better management of spaces and responses to unusual situations.



Light Level Monitoring

Measure light levels, which can be useful for automating lighting systems, detecting intrusions, or assessing environmental conditions.

¹ Available only with the Avigilon Halo 4 OC model.





Vape Detection

The Avigilon Halo 4 Smart Sensor includes specific capabilities for vape detection, addressing a growing concern in various environments:



Marijuana (THC) Detection

Detection of THC content in vape pens for proactive monitoring and enforcement of policies.



Vape Detection

Detect vaping, enabling the identification of vaping activity in prohibited areas.



Masking Detection

Detect attempts to mask vaping, helping to identify and address vaping even when individuals try to conceal it.

For more information, visit avigilon.com/halo-4-smart-sensor

