



HALO Smart Sensor FAQs

What can the HALO Smart Sensor actually detect?

HALO has a host of sensors to perform multiple detections. 12 or 16 sensors to be exact depending on which sensors you have. The hundreds of combinations it detects expands its capabilities to be able to differentiate between substances as well. In respect of vape detection, for instance, HALO can distinguish between a person vaping and a person vaping with a substance laced with THC. The things HALO can detect include:

- Particulate matter
- Humidity that produces mould and other Fungi
- VOCs
 - Trichloroethylene
 - Xylene
- Ammonia
- Carbon Monoxide
- Carbon Dioxide
- Vape
- E-cigarettes
- THC
- Light
- Tamper
- Aggression
- Temperature
- Sound Abnormalities

I've got an air quality sensor with a Tuya App, what does that mean?

Well firstly it means you have to use the Tuya app for the entire lifecycle of the device to enable the device to connect and operate. You will also need wifi, so wherever you install the sensor you will need excellent wifi connection at all times to ensure the sensor can work. This also means that the sensor will be connected to your wifi network leaving you vulnerable from an IT security aspect. Most of the devices are 2.4GHz so if you have a 5GHz wifi network they will not connect.

What does PM2.5 Laser Scattering Sensor mean?

Particulate matter, or PM, is a mix of particles and droplets in the air. PM varies in shape and size, but those of 10 micrometers in density or smaller can adversely affect your health because they can be inhaled. PM 2.5 refers to fine particulate matter – with a density of two-and-one-half microns or less.

Sufficient exposure to PM can irritate the eyes, nose, throat, and lungs, leading to allergy-like symptoms and shortness of breath in otherwise healthy people. It can also exacerbate existing medical problems, such as asthma and heart disease. PM 2.5 is considered the world's single biggest environmental health risk.

Indoor PM levels can be influenced by outdoor sources like vehicle exhaust, wildfires, and power plant emissions. But many indoor activities produce PM as well: cooking, burning fuel in fireplaces, and smoking are just a few common sources.

Do I need a subscription with the Halo Smart Sensor?

The quick answer is No. The Halo Smart Sensor will work perfectly well without any apps or other interventions, however if you do want to manage all of your devices in one place at one time there is a cloud subscription if you choose to use it.

Why do I need a tamper alert?

The tamper alert is very handy to have, you get notified the minute someone starts to mess with your device enabling you to go to the device and find out what is going on. There have been instances up and down the country of students ripping the devices off the ceiling and throwing them away and because they don't have tamper alerts the schools have been none the wiser.

What does IK10 rating mean?

The Halo Smart Sensor is vandal resistant and has an IK10 rating, so whilst it is sleek in its design it is extremely hardy and has undertaken various stress conditions to make sure it will withstand the toughest of conditions.

Why is the aggression alert useful?

The aggression alert will be activated when noise levels in the room rise which could be an indication of a fight due to break out or indeed vandalism about to take place. If a member of staff could attend the area you could stop a fight or indeed save money on repairs by stopping anything getting broken etc. No recording of the noise is made, the alert simply means that any incident of loud noise can be investigated.

Where can you use the HALO Smart Sensor?

The HALO Smart Sensor can be placed in a range of indoor locations where you need vape detection or you're looking to protect students, staff, visitors or guests. The vape detectors/vape sensors can be installed in private areas, such as washrooms, changing rooms where you may believe student vaping is taking place, staff rooms or guest bedrooms. Therefore, they are ideal for buildings such as hotels, schools, colleges, educational institutions, commercial offices, hospitals, manufacturing plants or residential care homes.

Do I need HALO cloud for the Smart Sensor to work?

No, this is an optional extra as HALO is an intelligent sensor and can be used as a standalone device.

Who manufactures the HALO Smart Sensor?

The HALO Smart Sensor is the newest product manufactured in the USA by IP Video Corporation. This company harnesses the power of the Internet of Things (IoT) and incorporates artificial intelligence (AI) and machine learning to deliver a range of open platform physical security, sensor and audio/visual solutions. It aims to design and manufacture solutions for a smarter and safer world! IP Video Corporation is a subsidiary of Advance Convergence Group.

Does the HALO Smart Sensor come with a warranty?

IP Video Corporation provides a two-year warranty for the Halo 2C and a 5-year warranty for the Halo 3C. If you encounter any problems with the HALO smart sensor you need to inform us as soon as possible and we will either arrange a repair of the HALO Smart Sensor or a replacement of the product will be offered. Multi-year extended warranties are sold separately.

Who can install the HALO Smart Sensor?

The HALO Smart Sensor is a new product in the UK market and the Ecl-ips team is one of the few trained installers. The HALO Smart Sensor can also be integrated with the rest of your security system.

Will the HALO Smart Sensor work out of the box?

HALO does work right out of the box since its recent firmware update (version 1.32). Ecl-ips will take care of setting up the HALO Smart Sensor for you, including ensuring the firmware is always up to date and that all your requirements for detection are set up correctly. Once HALO is powered on, it requires 24 hours for the sensors to self-calibrate, but it will start to detect immediately.

Is this vape detector a useful school safety device?

The Halo is a useful school safety device through its monitoring of vaping allowing you to protect students. However, it can also detect poor ventilation and dangerous gases through its air quality and health monitoring.

Does the Halo have a tamper siren to protect against vandalism?

The HALO has a tamper alert, which can be an email notification or an audible tamper siren, should anyone attempt to move or damage the device.

Can you receive HALO notifications through text alerts?

The easiest way for us to set up the HALO and for you to receive notifications from the HALO is via email but with further integration text alerts are possible.

Will the HALO detect cannabis/marijuana vape smoke?

The HALO detects THC, which is the chemical component found in marijuana. This means it can detect THC when added in oil for vapes but also within cannabis/marijuana smoke.

What are the additional features within the HALO 3C?

- **Emergency Escape and Alert Lighting:** LED coloured lighting options that can be programmed to show escape routes for safety such as a red, yellow, and green pattern. You can create unique colours for different alerts such as purple for Air Quality alerts or blue for Health alerts. The lights themselves are projected onto the ceiling around the HALO for extended visibility.
- **Motion Detection:** Identify and alert on movement for occupancy and trespassing.
- **Panic Button:** Users can trigger alerts via an external 3rd party panic button or via the HALO cloud app. The location of the trigger is associated to the HALO device in closest proximity.
- **Occupancy and People Counting:** Identify how many people are within the HALO location and configure to alert on abnormalities. (Only available on HALO 3C-PC)
- **5 year warranty**

What are the benefits of the improved HALO Cloud and the new HALO app?

Allows users to receive push notifications of any HALO alert, trigger a panic button, and provide the indoor air quality information of the actual room being occupied.

Will a smoke detector detect vaping?

A smoke detector may be able to detect higher levels of vapour in the air but it won't be able to differentiate between this or smoke from a fire. This has led to some schools being inconvenienced because they initiate a full evacuation of the school and this has happened several times before they understand the reason for the alarm being triggered. The HALO Smart Sensor can now detect smoke as well as being an accurate vape sensor so schools can take the correct measures based on the alert received.

What is a 'Heat Not Burn' vape?

'Heat not burn' or 'smokeless tobacco' products are electronic devices that, unlike e-cigarettes, contain tobacco. The tobacco is heated to a high temperature, without setting it alight and creating 'smoke' that the user sucks in. They contain nicotine, additives and are often flavoured. IP Video Corporation announced in April 2022 that it was awarded three additional U.S. patents for its HALO IoT Smart Sensor, the world leader in vape and vape with THC detection technology adding Heat-Not-Burn (HNB) vaping detection to its protection portfolio. The heat not burn vapes will not be detectable by PM2.5 sensors or indeed by any other sensors apart from Halo Smart Sensors.

What is the difference between the Health Index and the Air Quality Index?

The Health Index provides a real-time indication of the potential risk for the spread of airborne infectious disease in a building while the Air Quality Index is a measurement of air quality based on a scale developed by the US Environmental Protection Agency (EPA). As detailed below they are produced through a range of factors being detected and there is an overlap in those used for the indices.

To provide the information for the health index the HALO detects:

Carbon Dioxide (CO₂): Higher levels of this gas can be an indication of an unhealthy indoor space as people naturally breathe out this gas and high concentrations will occur when areas are too crowded and there is poor ventilation.

Particulate Matter (1 µm, 2.5 µm, 10 µm): This is a mix of particles and droplets in the air. PM sized 10 micrometres or smaller can be considered to be a risk to health as they can be inhaled but additionally high concentrations can indicate the presence of infectious diseases.

Humidity (RH): if the humidity is high the air feels warmer than the official, recorded temperature and it can contribute to feelings of low energy and lethargy.

Volatile Organic Compounds (VOC): These are gases emitted from a variety of materials that can have short- and long-term health effects and tend to be found in higher concentrations inside.

Nitrogen Dioxide (NO₂): High levels of nitrogen oxide are associated with respiratory diseases and higher prevalence of asthma, which can result in hospital admissions.

What are VOCs?

Volatile Organic Compounds (VOC): These are gases emitted from a variety of materials that can have short- and long-term health effects and tend to be found in higher concentrations inside. Short-term exposure to low levels of VOCs can cause throat irritation, nausea, fatigue, and other minor complaints. Long-term exposure to high concentrations of VOCs has been linked to more severe respiratory irritation as well as liver and kidney damage.

Sources of VOCs include many common products, including cleaning fluids, disinfectants, paints, and varnishes. Burning fuels like wood and natural gas also produce VOCs. Products can emit VOCs even when they're in storage, though to a lesser extent than when they're actively being used.

The factors detected for the air quality index are:

Particulate Matter (2.5 µm, 10 µm): Many indoor activities produce particulate matter: cooking, burning fireplaces, and smoking are just a few common sources.

Carbon Monoxide (CO): This is an odourless, colourless gas which in high concentrations can be deadly.

Nitrogen Dioxide (NO₂): This gas occurs naturally but can be increased by human activity, primarily through the combustion of fossil fuels.