Initially intended for schools to combat the vaping and school shooting epidemics, HALO IOT Smart Sensor has now expanded across industries. The HALO detects environmental changes that occur in privacy concern areas. As a device on the network, it will send alerts to security personnel.

With HALO, designated personnel will be alerted when environmental changes occur in typically unsupervised areas. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can also detect noise level fluctuations and can send alerts when unusual activity occurs. HALO will also analyze room occupancy through light detection. HALO includes a built-in tamper detection alert.

Utilizing the latest in smart technology, HALO adds a layer of security in places not covered by traditional surveillance cameras.

With HALO, security staff can now monitor areas where cameras are not allowed. Staff can get these alerts through the web or traditional burglar, video management systems, access control or building management tools.

**Air Quality Monitoring**
- Detection of vaping and smoking
- Detection of dangerous chemicals
- Temperature and humidity

**Room Occupancy**
- Light detection

**Sound Frequency Monitoring**
- Detection of aggressive behavior
- Detection of gunshots (optional)

**Chemical Detection**
- Whippets (Nitrous Oxide)
- Propanol and Hydrogen levels
- Ammonia
- Total volatile organic compounds (glue solvents)
- Carbon Dioxide
- Carbon Monoxide

**Alerting**
- Email or SMS text alerts
- Alerts to Video Management & Access Control
- Low voltage relay outputs

*HALO IOT Smart Sensor - Patent Pending*

**Other Features**
- Flush mounting to ceilings
- Unit is 5 ¾” diameter by 3” deep
- PoE connectivity
General Specifications

- **Operating Temperature**: 32°F - 122°F (0°C - 50°C)
- **Operating Humidity**: 0 to 90% Relative Humidity (non-condensing)
- **Power Supply**: PoE (IEEE 802.3af Class 3 Compliance) 4W
- **Dimensions**: 5.75” x 3.08” (146mm x 78mm)
- **Weight**: 0.8 lbs (0.365 kgs)
- **Mounting Options**: Ceiling Flush Mount, Surface Mount (optional)
- **Vandal**: Vandal proof housing with Tamper Alert

Interface Specifications

- **Live Image Resolution**: 1024 x 768
- **Frame Rate**: 1 FPS
- **Video Compression**: MJPEG
- **Audio**: MEMS Microphones (2) [Audio Analysis Only] No Recording of Live Stream
- **Relays Outputs**: 2, Normally Open or Closed, 48VDC at 1 amp
- **VMS Integrations**: Milestone, Panasonic, Axxonsoft
- **Status Light**: Alarm Condition, Multi-Color, Programmable
- **Speaker**: Alarm Condition, Pre-Recorded Files, Programmable

Network Specifications

- **Ethernet**: RJ-45 (10/100 Base-T)
- **Alarm Triggers**: Particulates, Carbon Dioxide Equivalents, Total Volatile Organic Compounds, Carbon Monoxide, Oxidizing Agents, Ammonia, Temperature/Humidity, Light Level, Sound Levels, Tamper, Vape, Vape THC, Aggression
- **Protocols**: TCP/IP, UDP, IPV4/6, HTTP, HTTPS, RTP, RTSP, DHCP, ARP, Bonjour
- **Maximum Users Connections**: Live MJPEG Stream, 8 Users

**Image display of sensor readings only.**

**All information is subject to change without notice.**