Alertex Air Safe Vape Sensor
User Instructions

The **Alertex Air Safe Vape Sensor** is designed for wall or ceiling installation and supports **Wi-Fi and Bluetooth connectivity**, along with a companion PC application. Configuration is performed via a web interface accessible on the local network. This document covers installation, setup, operation, maintenance, troubleshooting, and guidance on privacy and appropriate use.

1 — Safety Information

- Please read these instructions in full prior to installation and use.
- Install the device in a location where it will not be exposed to water, direct sunlight, or excessive heat.
- Do not attempt to dismantle or modify the unit. The device contains sensitive components which may be damaged.
- Keep the device out of reach of children and animals.
- Use only the manufacturer-approved power supply and authorised replacement parts.
- This device is intended for detection and notification purposes only. It does not extinguish fires and must not be used as a substitute for approved smoke or carbon monoxide alarms. Ensure appropriate life safety systems are installed in accordance with relevant regulations.
- The device must be used in compliance with applicable privacy laws and site policies. Ensure appropriate permissions are in place before installation in shared or public areas.

2 — What is in the box

- 1 × vape sensor (main unit)
- 1 x 12-volt power adaptor
- 4 × screws + wall plugs
- 4 × enclosure fixing screws.
- Quick-start instructions

If anything is missing or damaged, contact the vendor before installation.

3 — Placement & mounting

Recommended mounting locations:

The unit should be installed in indoor areas where vaping is a concern, such as corridors, communal areas, or similar spaces. Installation is recommended on the ceiling or at high level on a wall, as vape aerosols naturally rise and disperse upwards. The device should not be positioned directly above air vents, near windows, fans, or in areas of significant airflow, as this may reduce detection effectiveness.

When ceiling-mounted, a minimum clearance of 30 cm from adjacent walls should be maintained to ensure adequate airflow around the sensor. For optimal performance, one sensor should be installed per room, as detection between separate rooms (for example, through doorways) cannot be relied upon.

Mounting steps:

1. Use the back plate as template, mark screw holes.
2. Drill holes and install wall plugs if needed.
3. Connect the cables.
4. Place the sensor onto the back plate and secure it using the four side screws provided.

Height guidance:

- **Ceiling-mounted:** The unit should be installed **directly onto the ceiling surface**, ensuring it is not positioned immediately adjacent to walls, corners, or obstructions that may restrict airflow. A minimum clearance of **100–300 mm from walls or nearby obstructions** is recommended.
- **Wall-mounted (where required):** Install the unit at high level, approximately **150–300 mm below the ceiling**.

5 — Power & connectivity

Power:

- Use the supplied adapter. Do not use adapters rated for higher voltage than specified. Voltage range twelve volts DC. Connect to the green terminal and ensure correct polarity.
- The unit can also be powered by PoE. In this instance, you do not require the 12-volt adaptor.
- The unit will have one LED lit when powered up. There will also be an initial bleep to indicate that it is operating.

6 — App features & notifications

Load the PC app on all computers that you wish to receive notifications on using the QR code.

- Alertex PC App

The companion application provides **toast notifications** when events are detected.

All configuration and system settings are managed via the **local web interface**, which can be accessed by entering the device IP address followed by port **:8081** (for example, *192.168.1.100:8081*) into a web browser on the same network.

Web Interface Features

- Live readings, including **VOC (ppm)** and particulate levels
- Adjustable sensitivity levels (**Slow Analytic / Responsive**)
- Option to enable **motion (radar) detection** for event verification
- Audible alert (bleeper) enable/disable.
- Event log with timestamps for detected activity

Notifications

- Desktop toast notifications via the companion application
- Email and SMS alerts (if configured and enabled)

Configuration Guidance

- Use **Responsive sensitivity** for smaller or enclosed areas requiring rapid detection
- Use **Lower sensitivity** in busier environments to minimise false alerts
- Review event logs before adjusting sensitivity, as short spikes may be caused by steam or similar sources

Access & Security

To access the web interface, use the default password:

- **Password:** *password1234*

It is recommended that the default password is changed via the **Settings** page after initial setup.

7 — Setting Up Email and SMS Alerts

Before beginning, ensure that your network has active internet access.

Email Alerts

1. Right-click the application icon to open it and display the list of connected units.
2. Select a unit and click its IP address. This will open the device's configuration page in your browser.
3. Navigate to Integrations, then scroll to Email Settings.
4. Add the email addresses where you would like to receive notifications. Alerts will be sent from vape@alertex.co.uk.
5. Alternatively, you may configure your own SMTP settings and then add the desired notification email addresses.

Text (SMS) Alerts

1. Create and configure a Twilio account.
2. Obtain and assign a phone number within your Twilio account.
3. Copy the required Twilio credentials into the Vape Sensor settings.
4. Add the mobile numbers that should receive SMS alerts.

Note: SMS messages incur a charge for each message sent, and the Twilio phone number carries a fixed monthly rental fee.

8— Sensitivity & thresholds

The device provides two sensitivity modes, allowing adjustment based on the environment and required response speed:

- **Slow (Analytic):** Prioritises stability and reduced false alarms by analysing trends over a longer period. Suitable for areas with variable air conditions or where minimising false positives is important.
- **Responsive:** Provides faster detection of changes in air quality, enabling quicker alerts. Recommended for smaller rooms or areas with strict no-vaping policies.

Configuration via Bluetooth

You need to use a Bluetooth terminal app on your mobile smartphone in order to setup the IP bridge. In the Bluetooth terminal, you can obtain the IP address, set up the site number and subnet codes. You can also connect the IP masthead to WiFi, removing the need for the Ethernet cable. Default pin is 123456.

Available Commands in BLE Terminal

passkey=<current pin>;<new pin>

This is done to set the IP bridge's BLE password. The pin can only be 6 digit ranging from 000000 to 999999. Values are separated by a semicolon.
Example and default passkey=123456

wifi= <wifi SSID>; <Password>

This command can be used to input the WIFI credentials in the IP Bridge. The name of the Wi-Fi is the SSID. Values are separated by a semicolon.
Example wifi=Luminite; Test123123

Networking

The IP bridge network interface supports IPv4 and is designed to work within a private network. By default, the IP bridge relies on DHCP to automatically acquire its IP and all the other network parameters. However, it is possible to manually assign an IP to the bridge if DHCP is not available or a static IP is required. Under IPv4 standard, a device IP address must be chosen from a subnet reserved for private networks. An assigned IP address on the IP bridge therefore should be within a subnet, chosen only from the following IPv4 address blocks:

IP BLOCK TYPE	IP ADDRESS BLOCK (CIDR)	STARTING IP ADDRESS	ENDING IP ADDRESS
Private Network IP's	10.0.0.0/8	10.0.0.0	10.255.255.255
	172.16.0.0/12	172.16.0.0	172.31.255.255
	192.168.0.0/16	192.168.0.0	192.168.255.255
Link-Local Addresses	169.254.0.0/16	169.254.0.0	169.254.255.255

The only exception to this rule is the assigned DNS IP address. You may assign an alternative or public DNS IP address, but such an IP address should NOT be within any of the IP address blocks as given below. These IP address blocks are reserved for special purposes and should not be used for any general network communication.

IP BLOCK TYPE	IP ADDRESS BLOCK (CIDR)	STARTING IP ADDRESS	ENDING IP ADDRESS
Reserved	0.0.0.0/8	0.0.0.0	0.255.255.255
Loopback	127.0.0.0/8	127.0.0.0	127.255.255.255
Reserved	240.0.0.0/4	240.0.0.0	255.255.255.255
Reserved	255.255.255.255/32	255.255.255.255	255.255.255.255
Multicase	224.0.0.0/4	244.0.0.0	239.255.255.255

To manually set the network interface, the following parameters must be

defined:

- The unit assigned local IP address.
- The local network subnet, defined by its netmask.
- The local network Gateway IP address (i.e., the router/switch IP address)
- The local or public Domain Name Server (DNS) IP address

[NOTICE]
Changing the network interface parameters could render the bridge in operational if the network is restricted or there are IP address conflicts. Please contact the network administrator to ensure that the assigned network parameters are all valid for the local network. To define a local subnet and set a fixed/static IP on the bridge, you can use the following command:

ip=<IP in CIDR format>

To set a Static IP and Subnet mask for the bridge in CIDR format. The first IP is calculated 'automatically' and set as the Gateway and DNS IP address. The IP address must belong to a Private Network IP block (refer to Networking table). Example: ip=192.168.0.14/24

The unit is assigned a fixed/static local IP address of 192.168.0.14The local network netmask is 255.255.255.0, so the IP addresses start from 192.168.0.0 and end at 192.168.0.255

Both Gateway and DNS IP addresses are 'automatically' set to 192.168.0.0 which is the first IP If you need to specify the Gateway IP address manually, use the below command instead:

ip=<IP in CIDR format>;<Gateway IP address>

To set a Static IP and Subnet mask for the bridge in CIDR format. The IP address must belong to a Private Network IP block (refer to Networking table). However, the Gateway and DNS IP addresses are 'manually' specified and set to <Gateway IP address> instead (values are separated by a semicolon) Example: ip=192.168.0.14/24;192.168.0.10

The unit was assigned a fixed/static local IP address of 192.168.0.14
The local network netmask is 255.255.255.0, so the IP addresses start from 192.168.0.0 and end at 192.168.0.255

Both Gateway and DNS IP addresses are 'manually' set to 192.168.0.10 instead.

You may change the DNS IP address manually to a different IP address, e.g a public DNS IP address:

dns-ip=<A private or public DNS IP address>

Here the DNS IP is set to a private local DNS IP address on the current subnet, as assigned before.
Example: dns-ip=192.168.0.80

ip=dhcp

Then manual settings will be erased and the network interface will reset with DHCP enabled.

9 — Maintenance & cleaning

The unit should be inspected monthly to ensure there is no build-up of dust or obstruction to airflow. The exterior may be cleaned using a soft, dry cloth; liquids should not be sprayed directly into the vents or openings. In environments with higher levels of dust, compressed air may be used from a short distance to clear the vents, taking care not to apply excessive force.

Troubleshooting (common issues)

Problem: Device will not power on

- Check that mains power is reaching the power adaptor and that the twelve volts are connected the right way round to the sensor.

Problem: Device offline / cannot connect to Wi-Fi

- Confirm router is 2.4 GHz and SSID/password are correct. Reboot router. Move sensor closer to router for setup. Check for MAC filtering.

Problem: False positives (detects vape but none present)

- Check for cooking, steam, perfume, aerosols, candles, or heavy dust. Lower sensitivity. Move to less drafty location.

Problem: No detection during a test

- Ensure sensor had time to auto-calibrate (12–24

hours). Assess with a controlled puff at recommended distance. If still no detection, contact support.

Problem: Cannot find some of the sensor when using the app

- Ensure that all sensors are on the same network. If the network is divided with managed switches, then the network will have different sub nets and alerts will not show on all computers.
- In this scenario you will have to rely on email alerts which are sent out regardless of the network set up however, it is necessary that the network allows connection to the internet.
- If you have set up a Twilio account, you will also be able to send text messages however you will require an internet connection on your network.
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10 — Data, logs & privacy

- The sensor records event timestamps and may store recent sensor readings. Browse to each sensor to check these individual logs.
- If installed in shared or public areas, comply with local privacy laws and building policies. Inform occupants if monitoring is in use.

11 — Legal & compliance notes

- This product is for detection and notification only. It is **not** a law enforcement tool.
- Follow all local laws and building rules before installing monitoring devices in shared spaces.
- Do not use the device to secretly monitor private activities. If you are a landlord or manager, disclose monitoring per local regulations.

12 — Specifications

- Detection: PM1/2.5/5/10 and VOC (SEN55)

- Power: 12V DC / PoE
- Connectivity: Wi-Fi 2.4 GHz, Bluetooth
- Operating temperature: 0–40°C
- Dimensions: 90 × 90 × 40 mm

13 — FAQs

Q: Will this detect cigarette smoke and vaping equally?
A: The sensor detects aerosols and many VOCs; it will usually detect both, but detection characteristics (sensitivity, signature) can differ between sources.

Q: Can it tell who is vaping?
A: No. The sensor detects presence and concentration of vape — it does not identify persons.

It can however be used in conjunction with CCTV to see who entered and left an area at the time of vape detection.

Q: How many sensors do I need?
A: For full coverage, use one sensor per enclosed room. For long hallways, place them spaced evenly (every 6–10 m) depending on room size and airflow.

14 — Support & warranty

- Keep your proof of purchase and device serial number.
- For support, contact:(info@luminite.co.uk) or call [+44 (0) 208 368 7887].