VAPE-FREE SCHOOLS

Vape Sensors – Protecting School Environments from Hidden Vape Use

Vaping among students has become a growing concern for schools worldwide. Many students discreetly use e-cigarettes or vapes in toilet cubicles and changing rooms, putting their health at risk and violating school policies.

To tackle this rising issue, Alertex introduced its advanced Vape Detection System — a smart, wireless solution which uses the school's local network, designed to detect vape use in real time and alert school staff immediately.

The Challenge

According to a survey by NASUWT (teachers' union), 85% of teachers believe vaping is a problem on school premises.

The Tobacco and Vapes Act makes it an offence to sell tobacco and vape products to anyone born after 1st January 2009 but we know the problem persists.

Despite strict school rules, many students find ways to vape in toilets and changing rooms where cameras are not allowed. Traditional monitoring methods fail to detect this behaviour, leaving schools helpless to enforce discipline and maintain a healthy learning environment.

Key challenges faced by schools:

• Students vaping secretly in certain areas.
• Difficulty identifying offenders without surveillance cameras.
• Poor air quality caused by aerosol vapours.
• Health risks for non-vaping students exposed to second-hand aerosols.
• Lack of immediate notification to staff.

These challenges emphasise the need for a smart and reliable solution to detect vaping in real time

The Solution: Alertex Vape Sensor System

The Alertex Vape Sensor is a wireless, intelligent air quality monitoring device that detects vape emissions in real-time.
Once vape particles are detected, the sensor instantly sends an alert to designated staff members via the NX-VAPE
software — ensuring swift action and student accountability

Key features include:

- Highly sensitive detection of vaporised chemicals (nicotine, THC, and aerosols).
- Precise engineering and calibration minimise false alarms and only trigger when vaping is detected.
- Instant alerts via email, SMS, screen pop-ups or control panel notifications.
- Wireless connectivity – no complicated wiring or installation.
- Cost effective with no subscription charges or licence fees.
- Discreet design that blends into the school environment.
- Data logging for record-keeping and trend analysis.
- No cameras or audio, ensuring full privacy compliance.
- Anti-ligature design.

The Alertex Vape Sensor plays a vital role in promoting a safe and healthy learning environment. By detecting vape emissions instantly, it helps schools take immediate action and discourage future incidents.
Its discreet, camera-free design ensures privacy while maintaining full monitoring efficiency. Sensors can be connected via ethernet or wi-fi and can be powered by PoE or 12v DC. With simple installation and wireless functionality, it seamlessly fits into any school setup.
The sensor's accurate detection minimizes false alarms and builds trust in the system's reliability.
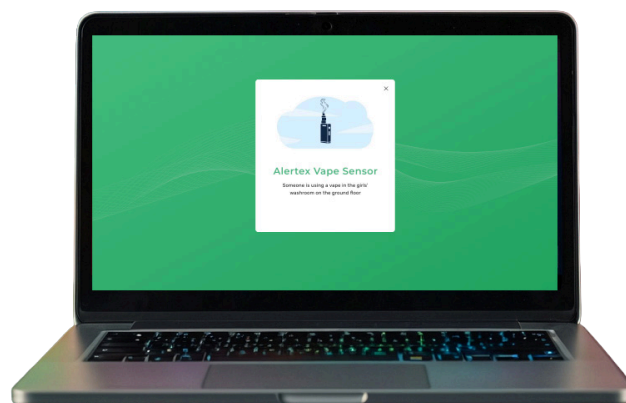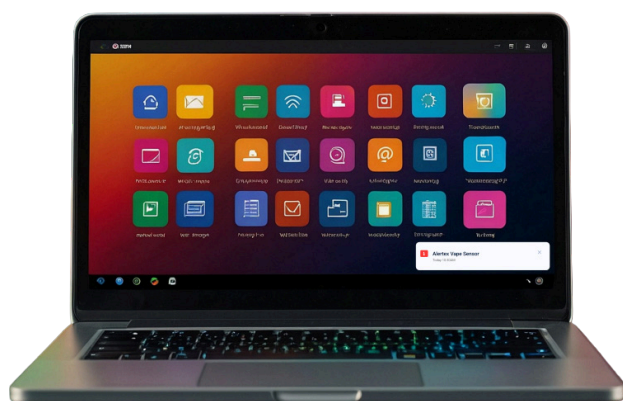The sensors can be used in conjunction with visual verification such as CCTV allowing quick review of video footage from before and after the alarm event. For schools in particular this helps link environmental sensor data with visual evidence for enforcement or review purposes

Get Instant Notifications on PC or Laptop

When vape is detected within a 30 sq m area, the Alertex Vape Sensor immediately sends a real-time alert to connected devices — including PCs, laptops, tablets, and mobile phones. The system uses the Alertex alert dashboard, where staff can:

• View the exact location of the incident.
• Receive pop-up notifications or desktop alerts in seconds.
• Monitor air quality levels and history logs.
• Take immediate action, such as dispatching a staff member to investigate.
• This ensures the school's response is fast, efficient, and discreet, minimising disruption while maintaining a safe and
• vape-free environment.

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All alerts are automatically logged for review, helping track patterns and pinpoint areas of concern.
The system minimises classroom disruptions while keeping students safe and informed. It promotes a proactive approach to maintaining air quality and enforcing school policies. Notifications are clear, precise, and timely, ensuring no incident goes unnoticed.
The dashboard allows staff to monitor historical data and improve preventive measures over time. Integration with multiple devices ensures that alerts are received promptly across the school's local network. The discreet nature of the notifications prevents panic while encouraging accountability. Administrators can alert settings to suit operational needs. Overall, the system fosters a secure, healthy, and focused learning environment for all students.