

Canāree I5 Vape Detector and Monitor for Schools

For the detection of vaping/smoking and generation of instant alerts

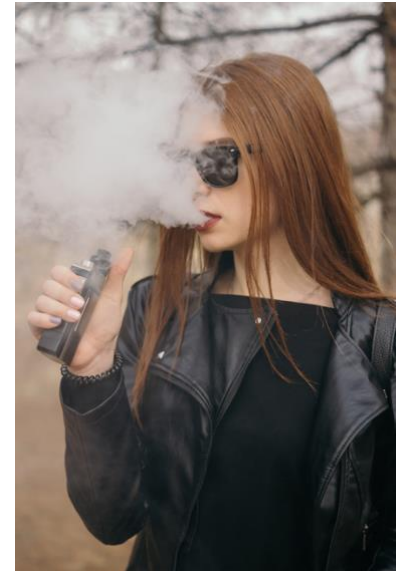


Who invented the Canāree monitor?

Piera Systems Inc. (Mississauga, Ontario, Canada) designs and builds hardware to monitor air quality. These monitors successfully detect when air quality is poor but were previously unable to isolate the source of pollutants. Piera then partnered with MACSO.ai (Auckland, New Zealand) a technology business that has researched and designed a world-first platform to replicate the brain's sensory receptors using artificial intelligence (AI). By combining MACSO's proprietary algorithms with Piera System's hardware, the Canāree Monitor can now intelligently determine what type of aerosol it detects and make decisions on whether the aerosol is harmful, e.g. vaping or cigarette smoke. It successfully distinguishes between vaping aerosols or those from deodorants or air fresheners.

<https://pierasystems.com/products/canaree-i5/>

<https://www.macso.ai>



Who currently uses the Canāree monitor?

Schools and hospitals throughout North America and Australia are adopting the monitor. For example, Avon-Maitland District School Board operates more than 40 schools in Ontario, Canada. They were concerned about students vaping in the bathrooms and set up a trial unit in a girls' toilet block. That one block immediately began detecting three to four vaping events a day and they are subsequently rolling out the monitors across their schools. The Canāree is set up with the SenseiAQ dashboard which sends text messages (or e-mails) to the Principal and Vice-Principals each time it detects a vape/smoke event. Their initial sensor can be viewed live here, via the SenseiAQ platform:

<https://sensei.pierasystems.com/device/299>



What makes the Canāree monitor better than any other solution?

- Canāree gives an instant reading because it uses an AI model to detect vape at the edge, not in the cloud. It operates from an edge processing device, that is, a microprocessor, which updates on the device automatically and performs

inference/calculations on the device itself for genuine, real-time alerts. No sending of results to the cloud for analysis.

- Once an alert is raised, a text message (or e-mail) alert is sent to a school principal and/or other nominated staff to take action. By the time a student is on the second or third puff/hit, staff have entered the bathroom and are able to catch a student (or more usually a group of students) in the act.
- Canāree can be easily deployed using existing network access points (eg. Aruba or Cisco) or anywhere where power can be derived from a USB port (eg. televisions)
- Competitors like Zeptive or HALO (by IPvideo), use a gas sensing solution in combination with a low-cost PM2.5 particulate matter sensor to detect vape. They are prone to false readings from particulates also found in school bathrooms, e.g. body sprays and hair sprays. Many schools who use these detectors find that kids figure this out quickly, rendering the monitor next to useless. In contrast, Canāree detects and distinguishes between different types of aerosols and vaping/cigarette aerosols, only generating alerts when it detects vaping and cigarette smoke, even the most minute amount.
- Competitors are also up to three times more costly than Canāree to buy, install and maintain. They are also less effective. Nevertheless, in some schools, competitors have secured ‘first to market’ advantage.



How much does the Canāree monitor cost?

The Canāree’ solution costs USD \$595. Included are:

- Model Canāree i5 monitor
- SenseiAQ monitoring service for 12 months
- Smoke/Vape detection and alerts (via text and email)
- Mounting Kit which includes a protective cover (capable of withstanding baseball bats), 5V/2A USB-A power adapter, and 1m USB-A extension cable

Award Winning Canāree

Canāree has won the accolades of many in the industry. In 2023, the product has won an Innovation Award at CES 2023 and is the Product of the Year from the Edge/AI Vision Alliance:



+1.647.374.0101 **main**
www.pierasystems.com

3359 Mississauga Rd. Innovation Complex, Suite L1240
Mississauga, ON L5L 1C6
Canada