

KRAKEN[™]

Autonomous Pathogen Detection Platform for Real-Time Water Monitoring



Streamlining Microbial Monitoring

Unlike traditional testing methods that often entail lengthy turnaround periods, the KRAKEN[™] system offers autonomous water testing in as little as 1 hour. Leveraging real-time amplification techniques and cloud-based data processing, our technology ensures unmatched speed in pathogen detection. With no sample preparation or manual intervention needed, the KRAKEN™ can be scheduled for continuous monitoring of your water sources. Easily adaptable for indoor or outdoor setups, our system can be conveniently installed at your site and monitored remotely, providing seamless, efficient testing solutions.





Autonomous

KRAKEN™ autonomously samples without any manual preparation, taking samples at any set schedule.



Specific

KRAKEN™ employs **strain-specific** sensors to accurately detect & quantify pathogens in just **60 minutes.**



Real-time

Simultaneously monitor multiple pathogens in real-time. Results are available as raw data and graphs.



Usability

KRAKEN™ is **simple to install**, only requiring power, WiFi/GSM connection, & access to a water line.

The KRAKEN[™] sensors exhibit high sensitivity to specific bacterial strains and viral variants, remaining immune to background interference from other contaminants. Capable of simultaneous monitoring for multiple pathogens, our system provides precise, quantitative results detailing contamination levels for each species, reaching as low as 1 copy detection.

Detectable Pathogens

Our catalog of available pathogen sensors is always expanding. We are typically able to develop a new target sensor for you in under 6 weeks. We can also measure physical attributes such as redox potential, pH, oxygenation, conductivity, temperature, and more. Our current readily available catalog includes:

- E. coli (including 0157:H7)
- Salmonella
- Legionella
- Listeria monocytogenes
- Vibrio
- Campylobacter
- SARS-CoV-2
- Monkeypox
- CrAssphage
- PMMoV





TECHNOLOGICAL OVERVIEW



Kraken Sense conducts all manufacturing inhouse, customizing it to fit your project's unique needs. Our adept team of Microbiologists and Engineers ensures the creation of a bespoke, all-in-one system precisely aligned with your project requirements. The KRAKEN™ microfluidic chip rigorously tests various targets against controls, ensuring unmatched reliability and accuracy in your testing processes.



KRAKEN™ can be installed in-line with virtually any water source, including water pipes, runoffs, canals, liquid containers, open bodies of water, and more.



Concentrated sample is analyzed using single-use pathogen-specific sensors. Each test takes only 60 minutes to complete. Our refillable cartridges can hold up to 66 single-use sensors.

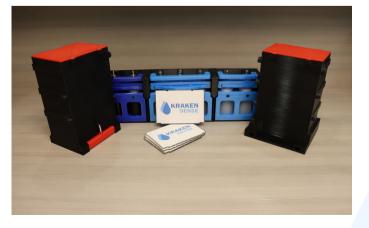


All processing and analysis are completed within the device. Excess liquid is safe to release back to the source since KRAKEN™ does <u>not</u> grow or cultivate any pathogens internally.



KRAKEN™ only requires power and WiFi or a GSM connection. The results of each test are available via a mobile app or web-based dashboard.

Microfluidic chips are customized with relevant target sensors



CUSTOMER STORY

As Canada's airports returned to full capacity following the COVID pandemic, Kraken Sense had the opportunity of working with the Greater Toronto Airport Authority to conduct wastewater testing at Pearson Airport for Monkeypox and Omicron (SARS-CoV-2 variant) without interrupting passengers or staff.



99

(manna) (0000.

111111

[KRAKEN[™]'s] ability to provide rapid, on-site, automated [sic] pathogen testing has been invaluable to provide us with an early warning to allow us to put mitigants in place for the protection of our passengers and our employees. Its ability to be rapidly deployed, its user-friendliness has allowed our employees to be able to use this equipment quite easily. We are very grateful to Kraken Sense for their ability to work with us, to customize the system to meet the needs of Toronto Pearson [Airport]. And I highly recommend Kraken Sense to any organization out there that is looking to have on-site pathogen testing available.

Dwayne Macintosh

Director of Safety, Security, & Health, Greater Toronto Airport Authority



Kraken Sense works with you on system design and set up customized to your needs



KRAKEN SENSE

Revolutionizing Real-time Pathogen Detection



info@krakensense.com

www.krakensense.com

