

# **KRAKEN**<sup>™</sup>

Autonomous Pathogen Detection Platform for Environmental Monitoring in Healthcare





### ELIMINATE LAG TIME & RETAKE CONTROL

around swift and accessible pathogen detection. specifically tailored for healthcare environmental monitoring. Unlike conventional microbial testing protocols with lengthy turnaround KRAKEN™ periods. enables autonomous water testing in just 1 hour. Leveraging real-time amplification techniques and cloud-based data processing, our system revolutionizes pathogen detection speed. With no sample preparation or manual labor needed, KRAKEN™ offers hassle-free continuous monitoring, programmable to your schedule. Its adaptable setup, whether indoors or outdoors, provides convenience, complemented by remote monitoring capabilities.





#### **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.

KRAKEN<sup>™</sup> sensors offer heightened sensitivity to targeted bacterial strains and viral variants, specifically tailored for healthcare environmental monitoring. They excel in detecting multiple pathogens concurrently, providing precise quantitative results on individual species' contamination levels (as low as 1 copy) while maintaining resistance to background interference from other contaminants.

### **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



## TECHNOLOGICA OVERVIEW



Kraken Sense handles all manufacturing inhouse, customizing solutions for healthcare environmental monitoring. Our skilled team designs custom all-in-one systems to meet your project's specific needs, ensuring KRAKEN™'s microfluidic chip delivers accurate and reliable testing for targeted contaminants.



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.

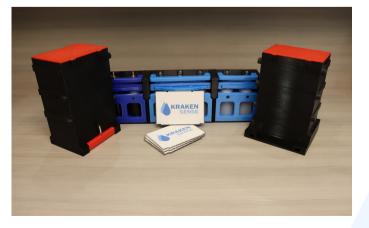


All processing and analysis are completed within the device. Excess liquid is safe to release back to the source since KRAKEN<sup>™</sup> does <u>not</u> grow or cultivate any pathogens internally.



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.



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[KRAKEN<sup>™</sup>'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



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