

# Salvus<sup>™</sup> Detection Technology for Food



When it comes to the food industry, nothing ruins trust or a business' reputation faster than an outbreak of foodborne illness. Most restaurants, industrial kitchens and food packaging plants do their best to adopt and practice excellent safety protocols, but sometimes it isn't enough.

What if we had the power to better protect consumers by detecting the presence of pathogens like Campylobacter and E. coli in food preparation settings, delivery trucks or grocery stores?

### **TECHNOLOGY TO MOVE US FORWARD**

Introducing Salvus™ Detection Technology: the world's first handheld chemical and biological interferometric detector. This groundbreaking device has the ability to rapidly identify pathogens or contaminants in liquid, air or surface environments. Backed by years of research and testing, Salvus has demonstrated fast and effective detection capabilities across numerous applications.

It's an advanced solution that's ready to drive humanity forward.



Salvus<sup>™</sup> is a lightweight, handheld and easy-to-use device that can simultaneously detect multiple contaminants, chemical or biological, providing fast and precise results within minutes. Each unit consists of an analyzer unit and disposable cartridge that are easy to operate and use in many food industry environments.

### **COMPONENTS & FEATURES**

### **ANALYZER**

- Size: 9.6" x 4.25" x 3.33"
- Weight: < 2.5 lbs.</li>
- 4x6" color touch screen display
- · Ethernet, Bluetooth, Wi-Fi or USB connectivity
- · Vibration and impact resistant
- · Easy to clean and disinfect
- Powered via battery or universal AC

### **CARTRIDGES**

- Size: 3" x 2" x 0.4"
- · Discrete and disposable
- · Multi-plex capabilities
- · Rapid deployment for new chemical or biological targets

# Salvis

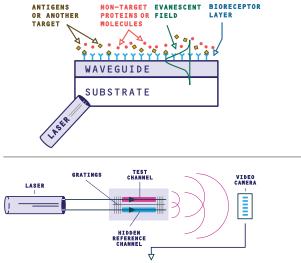
ANALYZER AND INTERCHANGEABLE DISPOSABLE CARTRIDGE

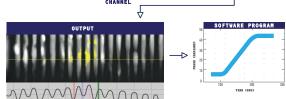
## **HOW IT WORKS**

Salvus can test a variety of sample types such as liquids (water, swabs, etc.) and air using many sensitive materials as a receptor. The receptor may include antibody, antigen, aptamer, RNA, DNA or MIP. Cartridges are pre-configured and ready to use.

Here's how Salvus works:

- 1. Waveguides are embedded on the cartridge substrate.
- 2. Bioreceptors or chemically sensitive materials are coated onto the waveguide.
- 3. A laser illuminates the waveguide creating an evanescent field that encompasses the sensing coating.
- 4. The test sample is introduced.
- 5. Binding of the bioreceptor and the target affects the effective index of refraction of the waveguide.
- 6. The index of refraction is measured and reported. Speed, sensitivity, specificity and quantitative reporting are hallmarks of the Salvus technology.





INTERFERENCE PATTER

### **PARTNER WITH US**

Partner with us to further develop and exclusively represent and launch Salvus in the food industry. To learn more about this opportunity, contact:

Ron Levin 704-451-4749

rlevin@salvusdetect.com

