

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



Applying crop inputs and crop protection products are a necessary part of running a profitable farm operation but confirming the cleanliness of tanks, sprayers and applicators, and controlling the application of crop protection products creates challenges to farm businesses and their freedom to operate.

What if growers, retailers, agronomists and others in the agriculture industry could quickly detect unwanted contaminants and pathogens, and make real-time decisions to improve management strategies?

## **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™ 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 agricultural environments.

### **COMPONENTS & FEATURES**

### **ANALYZER**

- Size: 9.6" x 4.25" x 3.33"
- Weight: < 2.5 lbs.
- 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

# Salvils

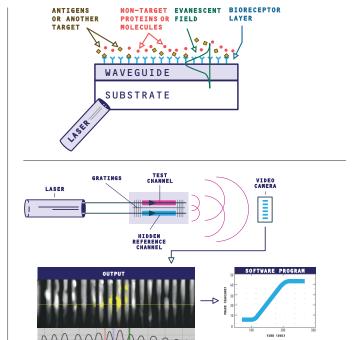
ANALYZER AND INTERCHANGEABLE DISPOSABLE CARTRIDGE

### **HOW IT WORKS**

Salvus can test a variety of sample types such as liquids 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.



### **PARTNER WITH US**

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

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