

Smiths Detection: PCR Identification in the Field

THE LLNL TECHNOLOGY

Handheld Advanced Nucleic Acid Analyzer, a portable, lightweight, battery-operated instrument that can rapidly detect and identify biowarfare agents.

COMPANY

Smiths Detection is a global leader in applying multiple technologies to rapidly identify a range of threats: bioagents, chemical agents, and explosives, narcotics, weapons, and illegal items. Smiths' customers include the military, first responders, transportation authorities, customs officials, and those responsible for protecting our critical national infrastructure.

PRODUCTS

Smith Detection's Bio-Seeq™ Plus, based on LLNL technology, is a fully field portable polymerase chain reaction (PCR) identifier, easy to use for first responders and military personnel who are not trained biologists. Bio-Seeq™ Plus, combined with Smiths Detection's proprietary variant of PCR, offers a capability comparable to laboratory testing to identify biological warfare agents.

The thermocycling system in Bio-Seeq™ Plus offers greater reliability and temperature stability, and an extended environmental temperature range. Other enhancements include an easy-to-use keyboard, an internal battery with an "intelligent" charging system compatible with both European and US voltages, an immunoassay module for anthrax pX01 and anthrax pX02, tularaemia, plague, orthopox, and a convenient, easy-to-use sample handling system with temperature-stable reagents.

IMPACT

The key feature of Bio-Seeq™ Plus is ease of use for an inexperienced operator with only minimal training. The unit contains a membrane keyboard with extra-large keys allowing the unit to be used with protective gloves. On-screen instructions are intuitive, and simple key presses initiate an assay. The results are displayed as an unambiguous traffic light, and there is an audible alarm if a positive result is found.



American soldier using Bio-Seeq™

“ *Smiths Detection's Bio-Seeq™ Plus provides an easy to use, field portable PCR identifier protecting first responders and military personnel worldwide.* ”

Damian Tracey,
President,
Smiths Detection-Military