

## **NEXSENSE B**

### **RAPID, ROBUST AND RELIABLE DETECTION AND IDENTIFICATION OF BIOLOGICAL PATHOGENS**

**We are one of Europe's leading sensor solutions companies and act as the UK's primary supplier of electronic systems for military platforms in the air, at sea and on land.**

Working with key technology partners, our company has developed the NEXSENSE product range. NEXSENSE products capture cutting edge technologies in easy to operate, ruggedised systems that enable the rapid, robust and reliable identification of CBE threats.

NEXSENSE B is a man-portable biological threat detection and identification system that enables rapid and robust on-scene analysis of airborne biological pathogens. Utilising intelligent lab-on-a-chip and rapid PCR technologies, NEXSENSE B delivers proven and reliable technologies in a real-time biological identification system.

#### **LABORATORY CAPABILITIES AVAILABLE IN THE FIELD**

Ruggedised and portable, NEXSENSE B enables specialist laboratory standard confirmatory analysis in the field. A 'plug and play' system, NEXSENSE B utilises primer cartridges that are specific to the threat under test. A wide range of single use cartridges are available.

#### **EASE OF USE**

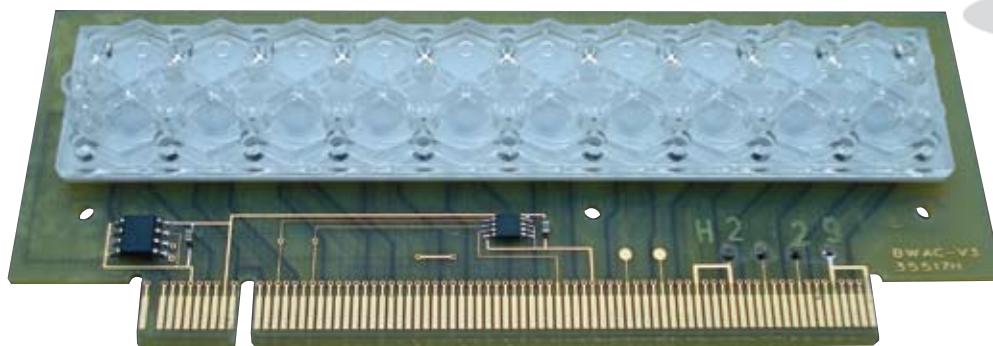
Designed with operational needs at the forefront, NEXSENSE B is intended for use by non-specialists. It can be operated with ease in full personal protection equipment.

#### **NETWORKED FOR REMOTE CONTROL**

NEXSENSE B communicates wirelessly with other equipment and can be controlled from a stand-off distance.

#### **KEY BENEFITS**

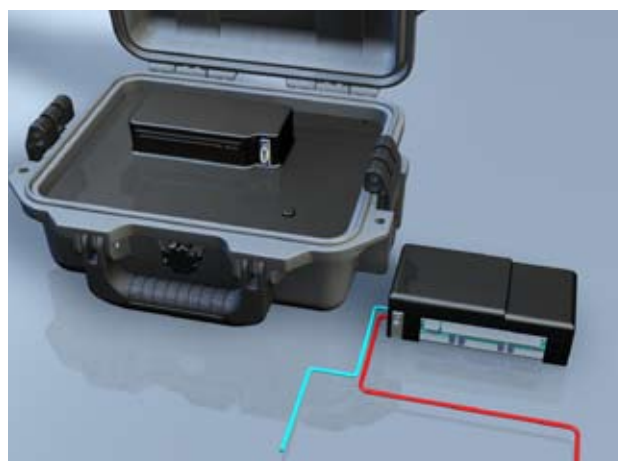
- Man portable
- Identification on-site
- Rapid response: results within 30 minutes of threat alert
- Designed to identify known targets
- Point-and-shoot vapour sampling capabilities
- Reputable identification technique
- Straightforward test procedure requiring minimal operator training
- Reliable intelligence provided in a simple, easily understandable format
- Ruggedised and self-contained system designed for trouble-free decontamination
- Original sample retained for further analysis as required.



NEXSENSE B utilises the ilochip bioscience compact diagnostic laboratory. This biochip performs all laboratory procedures required to accurately and reliably identify biological pathogens.

## TECHNICAL SPECIFICATIONS

<b>Weight</b>	<10kg
<b>Size</b>	299x248x119 mm
<b>Power</b>	Internal rechargeable batteries, mains power or a car cigarette lighter can power NEXSENSE B Rechargeable batteries have >3 hours field use
<b>Technology</b>	NEXSENSE B employs rapid PCR analysis to accurately detect the presence of target biological pathogens
<b>Operational Time</b>	Within 30 minutes of a threat alert NEXSENSE B can test for the presence of a target biological agent
<b>Sample Type</b>	Electrostatic capture and Electro Lysis techniques are employed to capture an airborne sample and maximise the extraction of DNA/ RNA components.
<b>Operational Capabilities</b>	Operational in extreme weather and temperatures Meets Military Standard ranges Ruggedised and waterproof Wireless capability Bluetooth enabled indoor and outdoor capability
<b>User Interface</b>	Simple and highly reliable human-machine interface Simple, step-by-step, operation instructions Microsoft Windows operating system Run on lightweight portable device to allow remote operation e.g. PDA
<b>Decontamination</b>	This system is housed within a sealed compartment to ensure a simple decontamination procedure
<b>Cartridge</b>	A range of threat specific cartridges available Non-specific cartridges available that can be prepared for any known threats One chamber of original sample remains untouched for further testing



NEXSENSE B has been designed for simple decontamination. All of the complex system components are housed within a sealed compartment leaving only external surfaces and test cartridges exposed to the environment.

In the event of a positive test the cartridge containing the biological threat can be detached and safely disposed of or retained for further analysis.

