## Environics Solutions for BWA Threats





## Bio100 Early Warning System<sup>™</sup> Bio200 BioAlarm System<sup>™</sup>



## www.environics.fi

#### **Bio100 Early Warning System**

The Bio100 Early Warning System (Bio100 EWS) is a continuously-operating sensor designed to detect potentially harmful airborne biological agent releases and bio-threats.

The Bio100 operate as early warning detector of bio threat and is a key component of EnviScreen CBRN (Chemical, Biological and Radiological/Nuclear) Monitoring System.

The Bio100 is cutting-edge security technology for seamless and transparent personnel and property protection.

The Environics Bio100 EWS detects changes in concentration of active airborne biological particles with a diameter range of 1 to 10 microns. The device also automatically collects a particulate sample when elevated levels of biological materials are detected.

#### **Bio200 BioAlarm System**

Bio200 BioAlarm System (Bio200 BAS) is an instrument designed to measure the presence of toxic biological aerosols in ambient air. The instrument has been designed to have excellent selectivity to artificially spread bioaerosols, sensitivity for even low bioaerosol concentrations, and fast response time. The system includes a background aerosol detection system to eliminate false warnings caused by non-toxic aerosols typically present in potentially hostile dissemination circumstances.

The Detecto-to-Warn system is based on size selective sampling (< 7  $\mu$ m) and sample concentration, particle size determination and monitoring of the backround aerosols. An automatic sample is prepared when an alarm is generated.

# Biological Warfare Agent Detection

Environics provides both military and civil defence with rapid and reliable detection systems for biological warfare agents. The ChemPro Reader Module is an optional accessory for the ChemPro100 Chemical Detector and compatible with Environics ENVI Assay System immunochromatographic biodefence tests

#### **ChemPro Reader Module**

The ChemPro100 is no longer only a Chemical Detector - the ChemPro Reader Module adds new functionality in the form of handheld biological detection. The optional accessory is intended for reading commercial immunoassay tests applying gold- or fluorescence-labelled antibodies. The device contains a digital camera with an image recognition algorithm and LEDs as light sources. The ChemPro100 provides the Reader Module with power, a processor, a user interface and a display. The reader lid can be changed according to the test cartridge used.

The Reader Module is compatible with Environics ENVI Assay System Gold and ENVI Assay System FL biodefence kits. Depending on the reading mode, the test cartridge is inserted into the Reader Module straight after applying a sample or after a specified incubation time. The Reader provides the user with qualitative test results (Positive/Negative) which are stored in the device memory.



## ENVI Assay System<sup>™</sup>

#### **ENVI Assay System Gold**

ENVI Assay System Gold includes easy-to-use, sensitive and reliable immunochromatographic tests for qualitative detection of the presence of biological warfare agents. Each test package contains one test cassette, a sampling swab, a buffer solution vial and a filter cap with a gold-antibody conjugate - all what is needed for performing an assay with solid or liquid samples in the field or in laboratories.

The members of ENVI Assay System are test kits for Ricin Toxin, Staphylococcal Enterotoxin B. and Botulinum Toxin Tests. Based on the evaluations, the Ricin Toxin and SEB Tests are specific and sensitive immunochromatographic tests well suited for qualitative first response detection of the presence of these toxins from different kind of suspicious samples.

#### **ENVI Assay System FL**

The ENVI Assay System FL is a complete collection of highly sensitive biodefence tests. The product family consist of four individual tests for Anthrax, Botulinum Toxin, Pox and Ricin Toxin, and as with ENVI Assay System Gold, they are designed for easy application and for fast and reliable results.

The ENVI Assay System FL tests are Immunochromatographic lateral flow tests based on fluorescence-labelled antibodies. The tests are highly sensitive and provide accurate results in less than 15 minutes, which can be read with the ChemPro Reader Module. Fluorescence-labelled antibody test results are near invisible to the naked eye so the Reader Module is needed to view the results.



### www.environics.fi



#### Solutions for Security

Environics Oy P.O. Box 349 FI-50101 Mikkeli Finland Tel: +358 201 430 430 Fax: +358 201 430 440 E-mail: sales@environics.fi Environics USA, Inc. 4401 Eastport Parkway Port Orange, FL 32127 USA Tel: +1 386 304 5252 Fax: +1 386 304 5251 E-mail: sales@environicsusa.com www.environicsusa.com