Environics - Envi BioScout



GENERAL DESCRIPTION:

ENVI BioScout[™] provides a robust and sensitive bioaerosol detection solution that monitors continuously ambient air, triggers early-warning for detected potential airborne biological threats and initiates automatic air sample collection when a biological alarm is issued. The bioaerosol detector is intended to operate as an integral part of fixed and mobile EnviScreen CBRN Monitoring Systems with Operix/ Manifix 2010 software, but it is easy to integrate to 3rd party systems as well. ENVI BioScout[™] is compatible with various communication methods and its modular design enables broadening of the device capabilities: an additional sample collector, a remote alarm



unit, a BWA identifier or other optional modules can be connected to ENVI BioScout[™] through various interface options. The device can be adapted to different outdoor and indoor environments through its adjustable, advanced alarm algorithm. It has been designed to tolerate demanding environmental conditions with continuous use, ease of maintenance and feasible lifecycle costs in mind. ENVI BioScout[™] applications include both civilian and military protection in the form of building and area monitoring, mass event and critical infrastructure protection and NBC reconnaissance vehicles etc.

TECHNICAL DESCRIPTION:

Not provided.

CONTACT INFORMATION

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COST

• \$55,000/system

\$25/analysis

Tier Selection



Survey Source

Vendor Supplied Information

Scoring Analysis

System scores are compared across the four scenarios and ranked from highest to lowest.



Impact Chart

The Impact Chart is a spider graph representing specific categories and designed to give the reader a visual depiction of how a particular system is expected to operate across the four different scenarios. The score for each of the seven categories is presented as the percentage of the total possible score. Higher category scores extend the spokes of a graphic toward the outer edge of the chart. The area graphed for each of the four scenarios relates to how well the system performed in that scenario. Graphics for each of the four scenarios are super-imposed for ease of comparison.



Evaluation Criteria

Throughput:

- 2 minutes or less for detection
- System is continuous and provides real time analysis with no defined tests/samples
- The system or device is currently fully automated
- Device or system is intended for multiple detection assays
- 0-1 solutions, buffer, eluents, and/or reagents
- 2 components
- Less than 5 minutes is required for set-up
- 1-2 steps are required for detection

Logistics:

- An afternoon of training and some technical skills required
- Approximately the size of a carry-on luggage suitcase
- Between 5 and 25 kg
- Wired connections are available
- System or device has 110V electrical requirement
- 2-4 hours battery life



Operations:

- Can be used from < -21°C to > 42°C (All temperatures)
- Performance is not influenced by relative humidity
- Between 1 to 3 years shelf life
- Greater than 10 years expected life
- Results can be viewed in real-time
- The system could be adapted to a fully autonomous system with some effort
- The system software is closed and not available for modification
- The system hardware is closed and not available for modification

Detection:

- Not possible for the system to achieve 510K clearance
- Not possible for the system to achieve FDA approval
- This system does not test liquids
- Good specificity. System has a consistently low level of false alarms (2-5%)
- Spore lysis not necessary for detection by system