

# PathSensors, Inc. - BioFlash-E



## GENERAL DESCRIPTION:

Incorporating the CANARY<sup>®</sup> technology, the BioFlash-E<sup>®</sup> Biological Identifier provides rapid, sensitive and specific identification of up to 21 biological threat agents. The portable and compact BioFlash-E<sup>®</sup> Biological Identifier offers breakthrough capabilities in sampling performance, reliability and operational cost.

## TECHNICAL DESCRIPTION:

The BioFlash-E<sup>®</sup> Biological Identifier uses proprietary aerosol collection technology and MIT Lincoln Labs developed CANARY<sup>®</sup> detection technology to offer a complete, stand-alone solution for biological identification.



## Tier Selection

Final tier assignment is based on overall product score.

- Top Tier    ◐ Second Tier    ○ Third Tier
- ◑ Fourth Tier    ● Bottom Tier

### RANKINGS

	Biological	Chemical	Radiological
<b>FIELD USE System</b>	○	N/A	N/A
<b>MOBILE Laboratory</b>	○	N/A	N/A
<b>DIAGNOSTIC Laboratory</b>	◑	N/A	N/A
<b>ANALYTICAL Laboratory</b>	◐	N/A	N/A

## CONTACT INFORMATION

PathSensors, Inc.  
 800 West Baltimore Street  
 Baltimore, MD 21201  
 POC: David Parrish

## COST

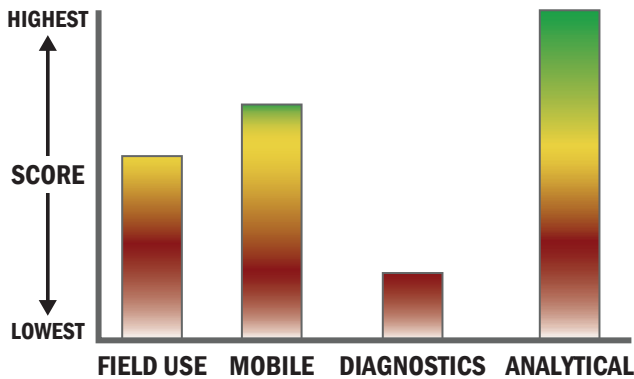
- \$35,000/system
- \$96/analysis

## Survey Source

Vendor Supplied Information

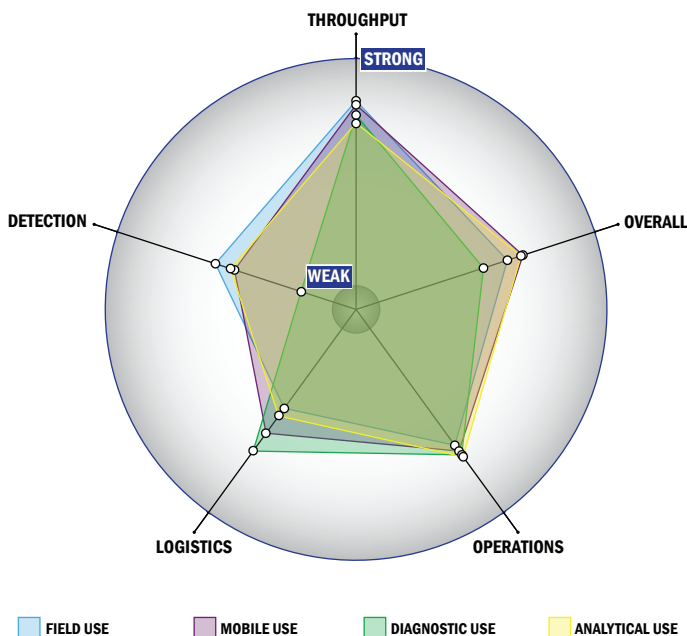
## Scoring Analysis

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.



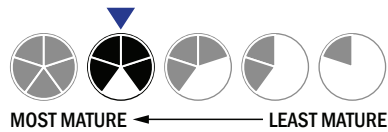
## Evaluation Criteria

### Throughput:

- 2 minutes or less for detection
- Multiple samples, multiple tests/sample per run
- 95 - 32 samples every 2 hours
- 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
- 1 component
- No set-up of the system is required
- 1-2 steps are required for detection

### Logistics:

- Very brief (minutes-hours) training and minimal technical skills
- 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



### Operations:

- Can be used from 4 °C to 41 °C
- Components must be stored at 4 °C
- Performance is not influenced by relative humidity
- Between 1 to 6 months shelf life
- 5-10 years expected life
- Results cannot be viewed in real-time
- The system could easily be adapted into a fully autonomous system
- 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
- Less than 50 µL
- Superior specificity. System has a false alarm rate approaching zero (~0%)
- 1-100 CFU per mL
- 100-1,000 PFU per mL
- Spore lysis not necessary for detection by system