

THALES Defense&Security - BIOWARD



GENERAL DESCRIPTION:

The BIOWARD is a portable aerosol dosimeter. It is designed to be carried by a non-specialist soldier or a first responder all along his mission, even several days, to record a sample of the aerosols he is breathing. The device can be used for any kind a threat, be it biological, chemical or radiological, as long as it is present as aerosol.



TECHNICAL DESCRIPTION:

The BIOWARD use a filter sampling principal, with a flow rate mirroring human breath. It can achieve a operational autonomy of several days. The filter itself can be adapted to the threat.

CONTACT INFORMATION

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COST

N/A

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
FIELD USE System			
MOBILE Laboratory			
DIAGNOSTIC Laboratory			
ANALYTICAL Laboratory			

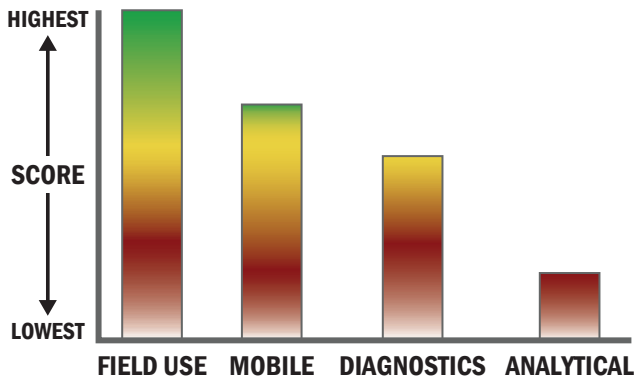
Survey Source

Vendor and Internet Supplied Information



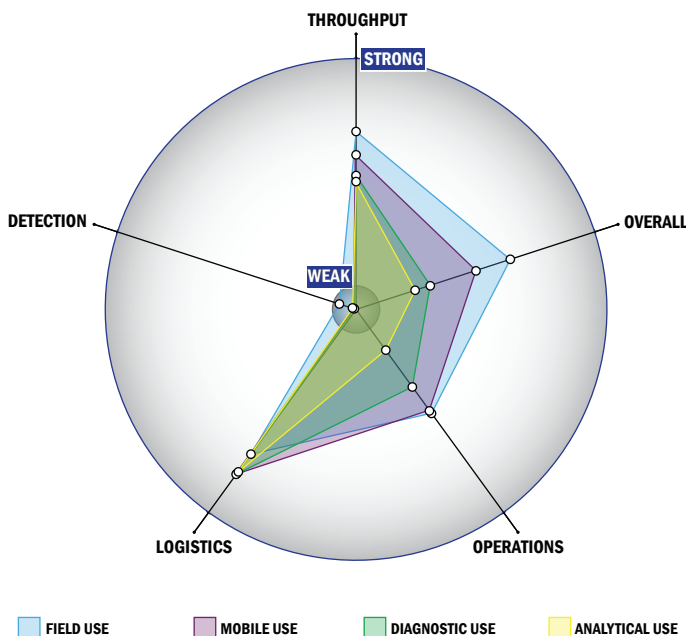
Scoring Analysis

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.



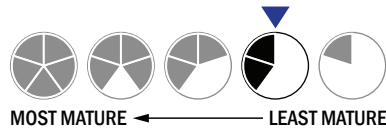
Evaluation Criteria

Throughput:

- 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
- 1 component
- No set-up of the system is required

Logistics:

- Very brief (minutes-hours) training and minimal technical skills
- Approximately the size of a soda can
- Less than 1 kg
- This system is not capable of transmitting data
- System or device uses batteries



Operations:

- Can be used from 25 °C to 37 °C
- Can be used from < -21 °C to > 42 °C (All temperatures)
- Components must be stored at room temperature (27 °C)
- Performance is not influenced by relative humidity
- Greater than 3 years shelf life
- 3-5 years expected life
- Results cannot be viewed in real-time
- The system or device is currently fully autonomous
- 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
- Not possible for the system to identify aerosolized chemical agent
- Not possible for the system to identify liquid chemical agent