ANP Technologies, Inc. - NIDS-3000 BioThreat Detection Kit

GENERAL DESCRIPTION:

The NIDS BioThreat Detection Kit uses next generation multiplexed lateral flow assays to analyze powders and waters for biothreats. Coupled with the handheld reader, results are as accurate as those in a laboratory setting. The assays have 5 targets per ticket, can be stored at room temperature for up to 3 years, and do not suffer from the Hook Effect, a false negative at high concentrations.

TECHNICAL DESCRIPTION:

The next generation lateral flow assay uses our nano-manipulation technology that orients antibodies on the molecular level so that their biosensing region is always available for sensing, producing a highly sensitive assay that does not suffer from the Hook Effect as traditional lateral flow assays do.

CONTACT INFORMATION

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COST

- $4,500/system
- $50/analysis

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	Top Tier	N/A	N/A
MOBILE Laboratory	Top Tier	N/A	N/A
DIAGNOSTIC Laboratory	Second Tier	N/A	N/A
ANALYTICAL Laboratory	Second Tier	N/A	N/A

Notes

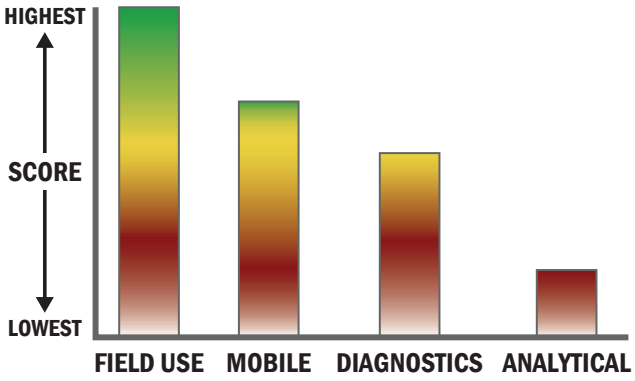
This system is the core technology in the DoD's Water Monitoring System.

Survey Source

Vendor Supplied Information

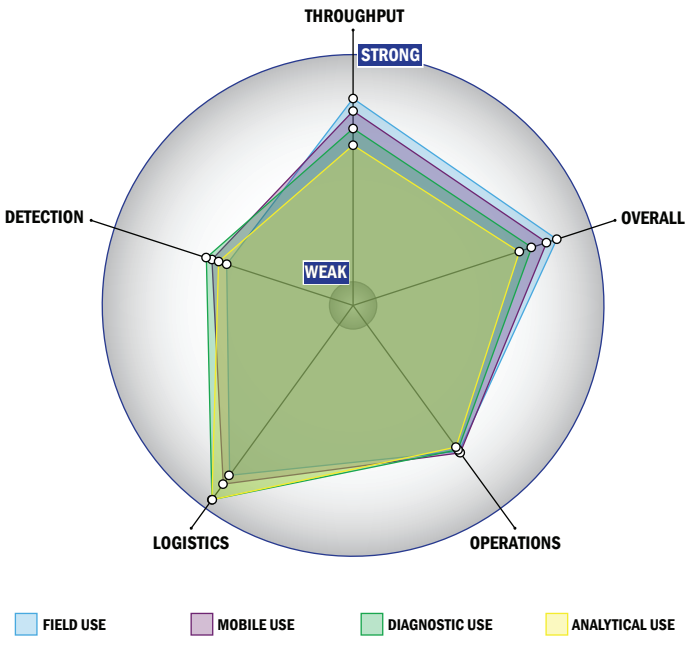
Scoring Analysis

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.



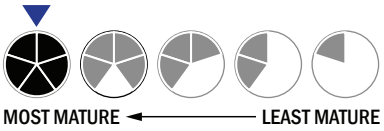
Evaluation Criteria

Throughput:

- Between 15 and 30 minutes for detection
- Multiple samples, single tests/sample per run
- 349-96 samples every 2 hours
- The system could easily be adapted into a fully automated system
- Device or system is intended for multiple detection assays
- 0-1 solutions, buffer, eluents, and/or reagents
- 2 components
- 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 soda can
- Between 1 and 5 kg
- Wired connections are available
- System or device uses batteries
- 4-8 hours battery life



Operations:

- Can be used from 4 °C to 37 °C
- Components must be stored at room temperature (27 °C)
- Performance is not influenced by relative humidity
- Between 1 to 3 years shelf life
- 5-10 years expected life
- The system is not capable of autonomy
- The system software is closed and not available for modification
- The system hardware is closed and not available for modification

Detection:

- Possible the system could receive 510K clearance, no current efforts at this time
- Possible the system could receive FDA approval, no current efforts at this time
- Less than 250 µL
- Excellent specificity. System has occasional false alarms under certain conditions (<2%)
- 10,000-100,000 CFU per mL
- Greater than 100,000 PFU per mL
- 1-10 ng per mL
- Spore lysis not necessary for detection by system