

S.E. International, Inc. - Radiation Alert Inspector



GENERAL DESCRIPTION:

The Inspector is a small, handheld, microprocessor-based instrument which offers excellent sensitivity to low levels of alpha, beta, gamma, and x-rays. The digital readout is displayed with a red count light and a beeper sounds with each count detected. Other features include an adjustable timer, external calibration controls and adjustable alert.



TECHNICAL DESCRIPTION:

Gieger Mueller Tube based hand held radiation detector for alpha, beta, gamma, and x-ray.

CONTACT INFORMATION

S.E. International, Inc.
 PO Box 39
 Summertown, TN 38483, USA
 931-964-3561
 www.seintl.com

COST

- \$540/system
- \$0/analysis

Tier Selection

Final tier assignment is based on overall product score.

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

RANKINGS

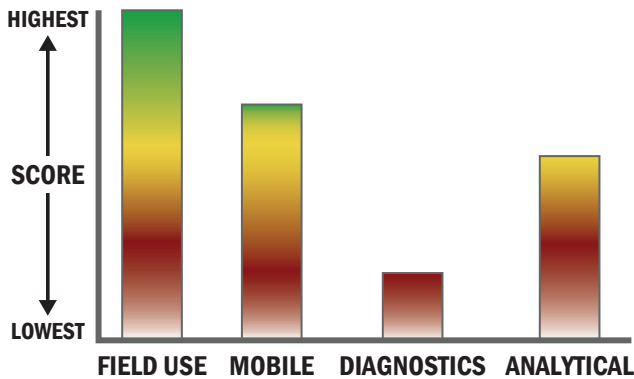
	Biological	Chemical	Radiological
FIELD USE System	N/A	N/A	
MOBILE Laboratory	N/A	N/A	
DIAGNOSTIC Laboratory	N/A	N/A	
ANALYTICAL Laboratory	N/A	N/A	

Survey Source

Vendor and Internet Supplied Information

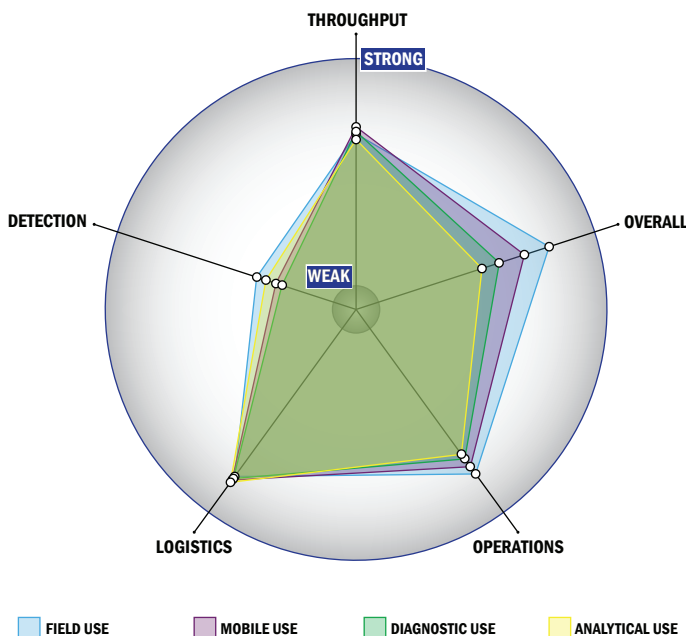
Scoring Analysis

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.



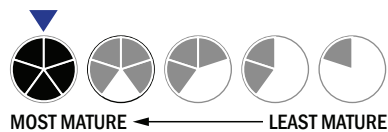
Evaluation Criteria

Throughput:

- 2 minutes or less for detection
- Multiple samples, single tests/sample per run
- System is continuous and provides real time analysis with no defined tests/samples
- The system or approach is not amenable to full or semi-automation
- Device or system is intended for multiple detection assays
- 0-1 solutions, buffer, eluents, and/or reagents
- 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
- Less than 1 kg
- Wired connections are available
- System or device uses batteries
- 4-8 hours battery life



Operations:

- Can be used from -21°C to $> 42^{\circ}\text{C}$ (All temperatures)
- Performance is not influenced by relative humidity
- Greater than 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:

- This system does not test liquids
- Only total dose and dose rate
- Down to background level radiation for dose rate
- System is used for personnel detection