

# RAE Systems - GammaRAE II R



## GENERAL DESCRIPTION:

The GammaRAE II R is a gamma radiation detector and full-range dosimeter in a single instrument. Designed specifically to meet the needs of first responders, it has rapid response of detection and the accurate dose measurement of a dosimeter.

## TECHNICAL DESCRIPTION:

The GammaRAE II R uses a sensitive CsI scintillator for excellent search capability and fast response. It also has an energy-compensated PIN diode sensor for high dose rate range and accurate dosimeter capability.



## 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	<span style="color: red;">●</span>
<b>MOBILE Laboratory</b>	N/A	N/A	<span style="color: red;">●</span>
<b>DIAGNOSTIC Laboratory</b>	N/A	N/A	<span style="color: red;">●</span>
<b>ANALYTICAL Laboratory</b>	N/A	N/A	<span style="color: red;">●</span>

## CONTACT INFORMATION

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## COST

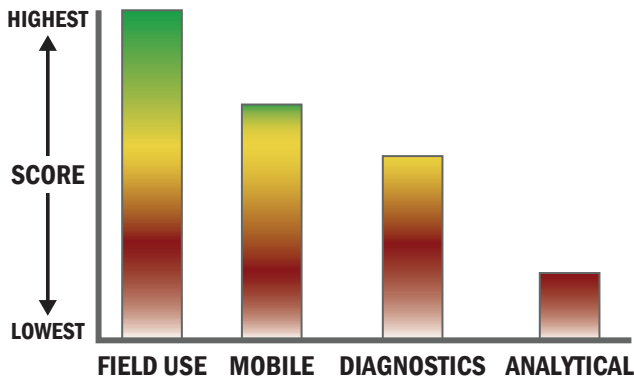
- \$1,318/system
- N/A/analysis

## Survey Source

Vendor and Internet Supplied Information

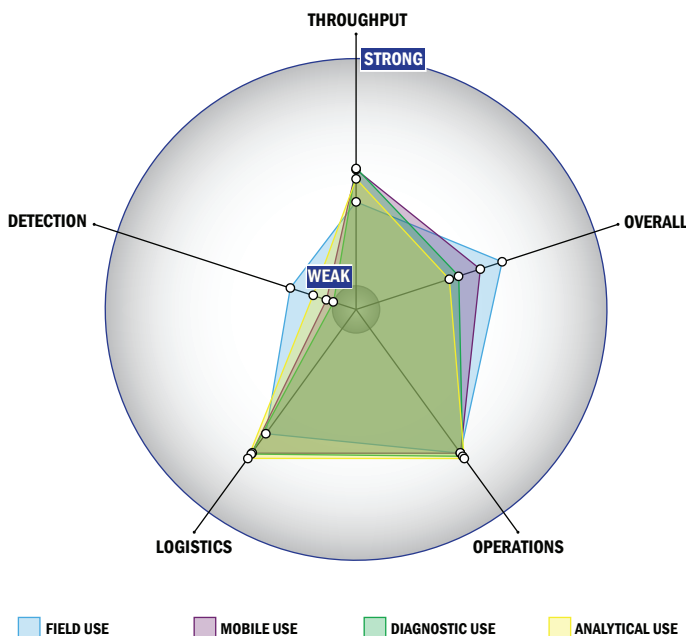
## Scoring Analysis

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.



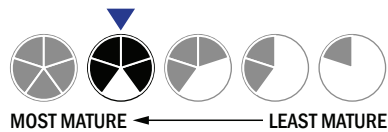
## Evaluation Criteria

### 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
- 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
- Wireless and wired connections are available
- System or device uses batteries



### Operations:

- Components must be stored at room temperature (27 °C)
- Performance is not influenced by relative humidity
- Between 1 to 3 years shelf life
- 1-3 years expected life
- Results can be viewed in real-time
- The system or device is currently fully autonomous
- 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
- Superior specificity. System has a false alarm rate approaching zero (~0%)
- Total dose, dose rate and count rate
- System is used for surveying