Mirion Technologies, Inc. (MGPI) - HDS-101GN Search And Identification

GENERAL DESCRIPTION:

The HDS-101GN is designed to search for and identify radioactive materials and to respond to radiological threats such as illicit trafficking and RDDs. The HDS-101Gn can identify radionuclides and classify them as medical, industrial, naturally occurring radioactive materials (NORM) and special nuclear materials (SNM). The HDS-101G/GN are ideally suited for First Responders, Border & Customs inspectors, Law Enforcement Officers, Site Security in critical infrastructures, and for all applications related to the control of radioactive and nuclear materials.

TECHNICAL DESCRIPTION:

NORM Medical Discrimination algorithm (NMD) categorizes and identifies up to 4 isotopes simultaneously.

CONTACT INFORMATION

Mirion Technologies, Inc. (MGPI)
5000 Highlands Parkway, Ste 150
Smyrna, GA 30082
POC: Keith Spero
770-432-2744 x163
www.mirion.com

COST

- $9,500/system
- N/A/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	Bottom Tier
MOBILE Laboratory	N/A	N/A	Fourth Tier
DIAGNOSTIC Laboratory	N/A	N/A	Fourth Tier
ANALYTICAL Laboratory	N/A	N/A	Third Tier

Survey Source

Vendor and Internet Supplied Information

Scoring Analysis

System scores are compared across the four scenarios and ranked from highest to lowest.
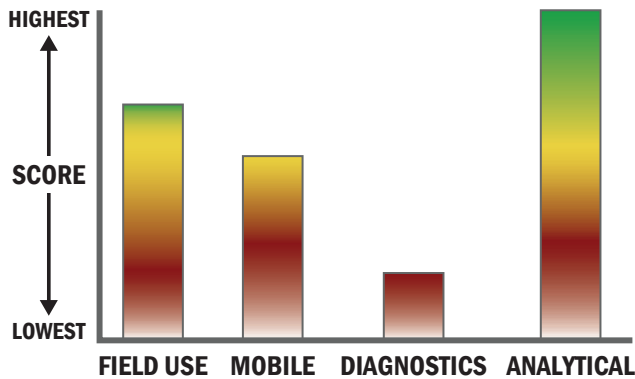
Impact Chart

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.


- FIELD USE
- MOBILE USE
- DIAGNOSTIC USE
- ANALYTICAL USE
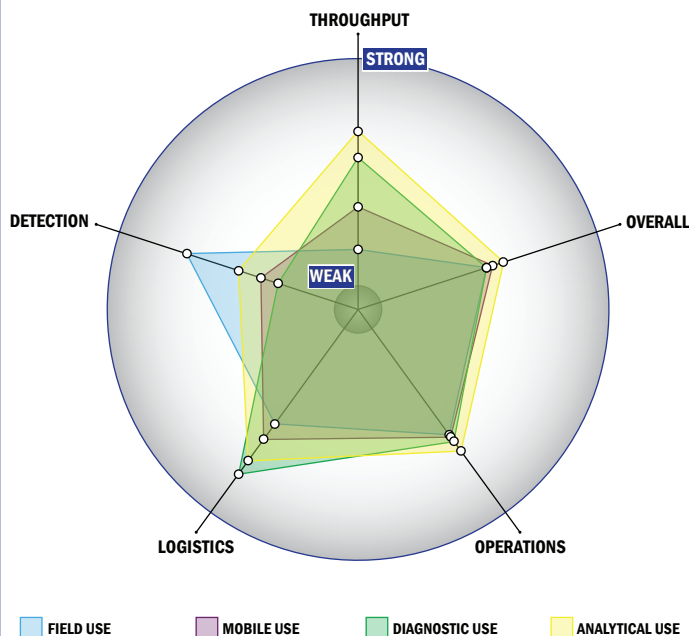
Evaluation Criteria

Throughput:
- 2 minutes or less for detection
- Multiple samples, multiple tests/sample per run
- System is continuous and provides real time analysis with no defined tests/samples
- The system or device is currently fully automated
- Less than 5 minutes is required for set-up

Logistics:
- An afternoon of training and some technical skills required
- Wireless and wired connections are available
- System or device has 110V electrical requirement
- 4-8 hours battery life

MOST MATURE ← LEAST MATURE
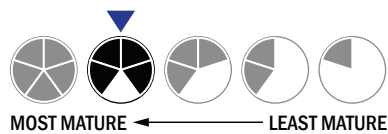
Operations:
- Can be used from -21°C to 41°C
- Results can be viewed in real-time
- The system or device is currently fully autonomous
- The system software is open but modification requires licensing
- The system hardware is open but modification requires licensing

Detection:
- This system does not test liquids
- Excellent specificity. System has occasional false alarms under certain conditions (<2%)
- Total dose, dose rate and count rate with simultaneous display readout and automatic differentiation between types of radiation detected
- Down to background level radiation for dose rate
- Down to background level radiation for count rate
- System is used for surveying