Agilent Technologies, Inc. - Exoscan/Flexscan Handheld FTIR



GENERAL DESCRIPTION:

Hand Held, Portable and small laboratory infrared spectrometers that can be used for the identification and quantification of liquid and solid chemical entities

TECHNICAL DESCRIPTION:

FTIR infrared spectrometers that provided chemical signatures or spectra of liquids and solids. This provides identification via commercial libraries or user built libraries



CONTACT INFORMATION

Agilent Technologies, Inc. 8825 Stanford Blvd. Suite 300 Columbia, MD 21045 POC: Beverly Lesko beverly_lesko@agilent.com 443-285-7854

COST

- \$35,000 \$50,000/system
- N/A/analysis

Tier Selection Final tier assignment is based on overall product score. Top Tier Second Tier Third Tier Generation Fourth Tier Bottom Tier RANKINGS **Biological** Chemical Radiological **FIELD USE** N/A N/A System MOBILE N/A N/A Laboratory DIAGNOSTIC N/A N/A Laboratory **ANALYTICAL** N/A N/A Laboratory

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:

- 2 minutes or less for detection
- 1 sample, single test/sample per run
- 95-32 samples every 2 hours
- The system or approach is not amenable to full or semiautomation
- Device or system is intended for multiple detection assays
- 0-1 solutions, buffer, eluents, and/or reagents
- 0 components
- 5-10 minutes is required for set-up
- 3-5 steps are required for detection

Logistics:

- An afternoon of training and some technical skills required
- Approximately the size of a toaster
- Between 1 and 5 kg
- Wireless and wired connections are available
- System or device uses batteries
- 2-4 hours battery life



Operations:

- Can be used from -21°C to 41°C
- Performance is not influenced by relative humidity
- Greater than 10 years expected life
- Results can be viewed in real-time
- 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
- Greater than 250 µL
- Good specificity. System has a consistently low level of false alarms (2-5%)
- 100 ppm-1 ppt
- Possible system can identify aerosolized chemical agent
- System currently can identify liquid chemical agent