

Agilent Technologies, Inc. - Agilent 6100 Series Single Quadrupole Mass



GENERAL DESCRIPTION:

Agilent 6100 Series Single Quadrupole LC/MS Systems deliver unmatched analytical performance and proven day-after-day reliability. Available with performance characteristics to match your needs and budget, they offer best-in-class data quality in a space-saving benchtop package. The 6100 Series Single Quadrupole Systems are compatible with electrospray ionization (ESI), atmospheric pressure chemical ionization (APCI), simultaneous ESI and APCI, and atmospheric pressure photoionization (APPI) for the introduction and ionization of liquid samples. Additionally, the 6100 series instruments can be combined with desorption electrospray ionization (DESI) and/or direct analysis in real time (DART) ionization sources for the introduction and ionization of compounds desorbed from solids. To maximize your return on investment, the performance capabilities of Agilent 6100 Series LC/MS systems can be easily upgraded to keep pace with your future requirements. The easy-to-use 6100 Series platform gives you the capability to:



- Rapidly screen compounds and confirm molecular weights
- Purify target compounds in complex mixtures
- Quantitate target compounds
- Identify impurities Simple, intuitive operation saves time and improves results
- Intuitive Agilent OpenLAB CDS ChemStation Edition software lets you set up and control the LC and MS from a single screen.
- Agilent's powerful Autotune feature boosts productivity by eliminating the need for manual recalibration.
- Comprehensive automation features allow multi-user, walk-up sample submission and unattended operation

TECHNICAL DESCRIPTION:

The 6100 series Single Quadrupole LC/MS system is a family of instruments comprised of 3 different models of single quadrupole mass spectrometers. These instruments have a variety of performance characteristics from the budget friendly 6120 to the 6150 with its unsurpassed data quality for UHPLC and high-throughput screening, enabled by scan speeds up to 10,000 Dalton/s and the Agilent Jet Stream ion source technology for enhanced sensitivity. All of these instruments are capable of detecting multiple different analytes from the same sample in one injection.

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
MOBILE Laboratory	●	●	N/A
DIAGNOSTIC Laboratory	◐	●	N/A
ANALYTICAL Laboratory	◐	●	N/A

Survey Source

Vendor Supplied Information

CONTACT INFORMATION

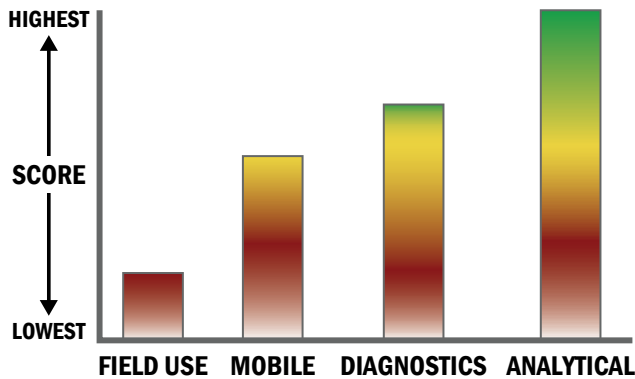
Agilent Technologies, Inc.
 8825 Stanford Blvd. Suite 300
 Columbia, MD 21045
 POC: Beverly Lesko
 beverly_lesko@agilent.com
 443-285-7854
 www.agilent.com/chem

COST

- \$130,000-\$175,000/system
- N/A/analysis

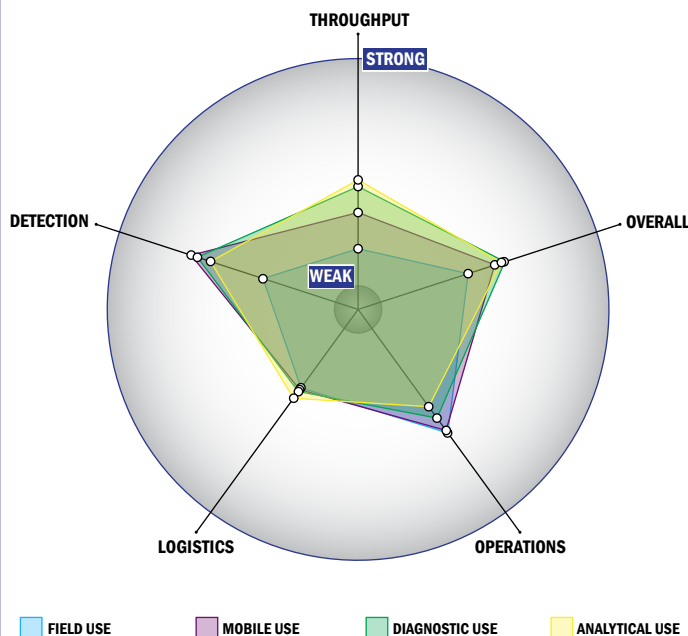
Scoring Analysis

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.



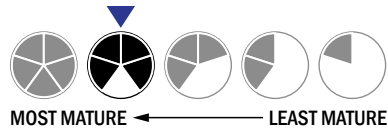
Evaluation Criteria

Throughput:

- Between 15 and 30 minutes for detection
- Multiple samples, multiple tests/sample per run
- 95-32 samples every 2 hours
- The system or device is currently fully automated
- Device or system is intended for multiple detection assays
- 10-20 minutes is required for setup
- Almost instantaneous detection

Logistics:

- A day of training and technical skills are required
- Approximately the size of a carry-on luggage suitcase
- More than 50 kg
- Wireless and wired connections are available
- System or device has 220V electrical requirement



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
- 5-10 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
- Not possible for the system to achieve FDA approval
- Excellent specificity. System has occasional false alarms under certain conditions (<2%)
- System currently can identify aerosolized chemical agent
- System currently can identify liquid chemical agent