

Bio-Rad Laboratories - Bio-Plex 200 Suspension Array System



GENERAL DESCRIPTION:

The Bio-Plex 200 System is a laboratory analysis tool designed for protein detection and analysis using immunoassay xMAP technology.

TECHNICAL DESCRIPTION:

The Bio-Plex 200 system is based on xMAP technology, a proprietary technology that color codes beads which are then used in sandwich immunoassay analysis. These assays are multiplexable.



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	<input checked="" type="radio"/>	<input type="radio"/> N/A	<input type="radio"/> N/A
MOBILE Laboratory	<input checked="" type="radio"/>	<input type="radio"/> N/A	<input type="radio"/> N/A
DIAGNOSTIC Laboratory	<input checked="" type="radio"/>	<input type="radio"/> N/A	<input type="radio"/> N/A
ANALYTICAL Laboratory	<input checked="" type="radio"/>	<input type="radio"/> N/A	<input type="radio"/> N/A

CONTACT INFORMATION

Bio-Rad Laboratories
 2000 Alfred Nobel Drive
 Hercules, CA 94547
 POC: Michelle Heim, Bio-Plex Business Unit Manager

COST

- \$69,000/system
- ~\$5.00/analysis

Notes

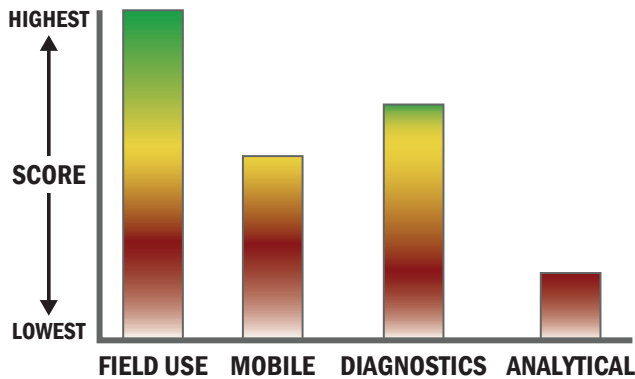
xMap technology also used on Luminex MAGPIX device.

Survey Source

Vendor and Internet Supplied Information

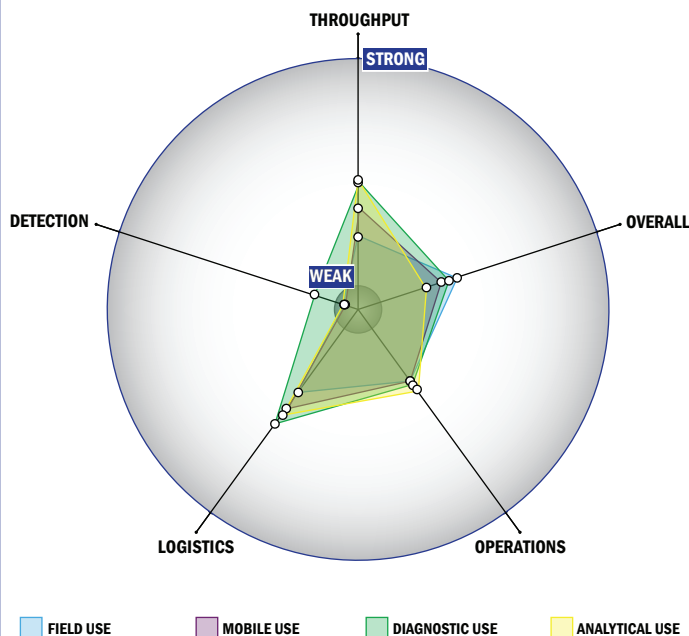
Scoring Analysis

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.



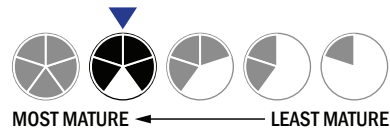
Evaluation Criteria

Throughput:

- Between 60 minutes and 8 hours for detection
- Multiple samples, multiple tests/sample per run
- 49-96 samples every 2 hours
- The system or device is currently fully automated
- Device or system is intended for multiple detection assays
- 5 or more components
- Greater than 20 minutes is required for set-up
- 3-5 steps are required for detection

Logistics:

- A day of training and technical skills are required
- Approximately the size of a carry-on luggage suitcase
- Between 25 and 50 kg
- Wireless and wired connections are available
- System or device has 110V electrical requirement



Operations:

- Can be used from 25 °C to 37 °C
- Components must be stored at 4 °C
- Between 1 to 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:

- Not possible for the system to achieve 510K clearance
- Not possible for the system to achieve FDA approval
- Less than 50 µL