JMAR Technologies, Inc. - BioSentryPlus



GENERAL DESCRIPTION:

Product provides continuous monitoring of water for Biological and Chemical contamination events. Online, real time monitor for bacteria, spores, or cysts along with chemical sensors to provide a minute by minute measurement of the safety of water. The system can be operated autonomously and reports automatically when it detects an "out of normal" condition. No analysis consumables required.



TECHNICAL DESCRIPTION:

The biological sensor uses MIE light scattering detection and the chemical sensors include temperature, pH, conductivity, and Oxidation Reduction Potential (ORP). Additionally the system calculates a free chlorine reading.

CONTACT INFORMATION

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COST

- \$24,900-\$29,990/system
- \$0/analysis

Tier Selection



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:

- Between 2 and 15 minutes 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
- Device or system is intended for multiple detection assays
- 0-1 solutions, buffer, eluents, and/or reagents
- 1 component
- 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 home dishwasher
- More than 50 kg
- Wireless and wired connections are available
- System or device has 110V electrical requirement



Operations:

- Can be used from 4°C to 37°C
- This system does not require consumable components
- Device or system has peak performance at normal relative humidity conditions
- Greater than 3 years shelf life
- 5-10 years expected life
- 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:

- 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
- Superior specificity. System has a false alarm rate approaching zero (~0%)
- 100-1,000 CFU per mL
- Spore lysis not necessary for detection by system.