

Quanterix SR-X™ Sole Source Specifications

The Quanterix SR-X Ultra-Sensitive Biomarker Detection System featuring Simoa® technology is solely manufactured, distributed and serviced by Quanterix Corporation.

The Quanterix SR-X Ultra-Sensitive Biomarker Detection System is an integrated platform comprised of the SR-X instrument, disposable microfluidic array discs and dedicated assay reagents.

The Quanterix SR-X system and Simoa reagents are generally covered by patents as listed below. There are no licensed systems or products offered by third party providers that are able to use any components or methods of the Quanterix Simoa technology platform.

- USPTO patent # 8,236,574B2 Ultra-sensitive detection of molecules or particles using beads or other capture objects
- USPTO patent# 8,222,047B2 Ultra-sensitive detection of molecules on single molecule arrays
- USPTO patent# 8,415,171B2 Methods and systems for extending dynamic range in assays for the detection of molecules or particles

Quanterix SR-X General Features

- The SR-X utilizes the Simoa technology to measure individual single molecules immobilized on the surface of 2.7 micron magnetic particles. Each magnetic particle is encapsulated in a 15 femtoliter sized well within an array of 216,000 wells. Analytes of interest are labeled with an enzyme and the product of the enzyme is detected by imaging the Simoa disc array.
- The SR-X system supports multiplex measurements of up to 4 unique analytes per reaction.
- The SR-X supports throughput of analyzing 96 samples in under two hours
- The SR-X is capable of measuring concentrations of soluble protein biomarkers in multiple sample matrices including serum, plasma, CSF, urine, saliva and exhaled breath condensate.
- The SR-X is compatible with a menu of over 70 ultra-sensitive Simoa assays with detection limits averaging 1,000X lower than plate-based ELISA methods and CV less than 10%.
- The SR-X enables simultaneous use of digital (single molecule counting) and analog (integrated fluorescence intensity) measurements to provide ultra-sensitive single molecule detection with dynamic range of 4 logs.

- The SR-X supports the use of Simoa homebrew assays allowing users to create custom assays for both protein and nucleic acid detection.

Quanterix SR-X Features and Specifications

- Bench-top form factor (width = 22 in., depth = 29 in., height = 22 in., weight = 150 lb.).
- Power source 100/240 VAC, 50/60 Hz.
- On-board robotic arm with full X,Y,Z-axis motion for automated positioning of fluidic operations and Simoa discs
- Safety door lock sensors on the chassis for operator safety
- Automatic control of focusing for image analysis.
- Front mounted touch screen control
- Sample plate holder allows 96-well plate for input samples
- Temperature control of imaging and detection of Simoa discs (30°C).
- Integrated barcode scanner for recording details of reagents and samples processed on the instrument
- Integrated machine vision to verify run setup and detection of labware
- Automatic internal error detection system supports user warning and minimizes sample and reagent waste.
- Remote assist software for technical support, troubleshooting and diagnostics in consultation with Quanterix service and support personnel.
- Integrated reagent and waste reservoirs with sensor systems to detect and prompt user to replace or empty reservoirs as needed.
- Designed to meet international safety standards.
- Easy service accessibility.

Quanterix SR-X Software

- SR-X software controls the instrument and automates the loading and imaging of samples into Simoa discs and coordinates all operational steps.
- The software features an intuitive user interface and simplified protocol setup to support users of all levels.
- Advanced data analysis and curve fitting algorithms provide results in a number of user-defined report formats.
- Software can be installed on offline windows PCs to allow users to create plate maps, define protocols and analyze results.

Simoa Microplate Washer

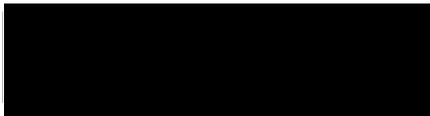
- The Simoa Microplate Washer is manufactured exclusively for Quanterix.
- The device configuration is optimized for automating the Simoa assay washing steps of the workflow for the SR-X system.

- Includes pre-programmed system settings, protocols and calibration for Simoa assays.
- The Simoa Microplate Washer is the only automated plate washer qualified to deliver consistent assay performance and is the only automated plate washer supported by Quanterix Field Service, Field Applications and Technical Support.

Simoa Microplate Shaker

- The Simoa Microplate Washer is manufactured exclusively for Quanterix.
- The device configuration is optimized for automating the Simoa bead resuspension and assay incubation steps.
- The Simoa Microplate Shaker is the only incubating plate shaker qualified to deliver consistent assay performance and is the only incubating plate shaker supported by Quanterix Field Service, Field Applications and Technical Support.

Sincerely,



Jeremy Lambert
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