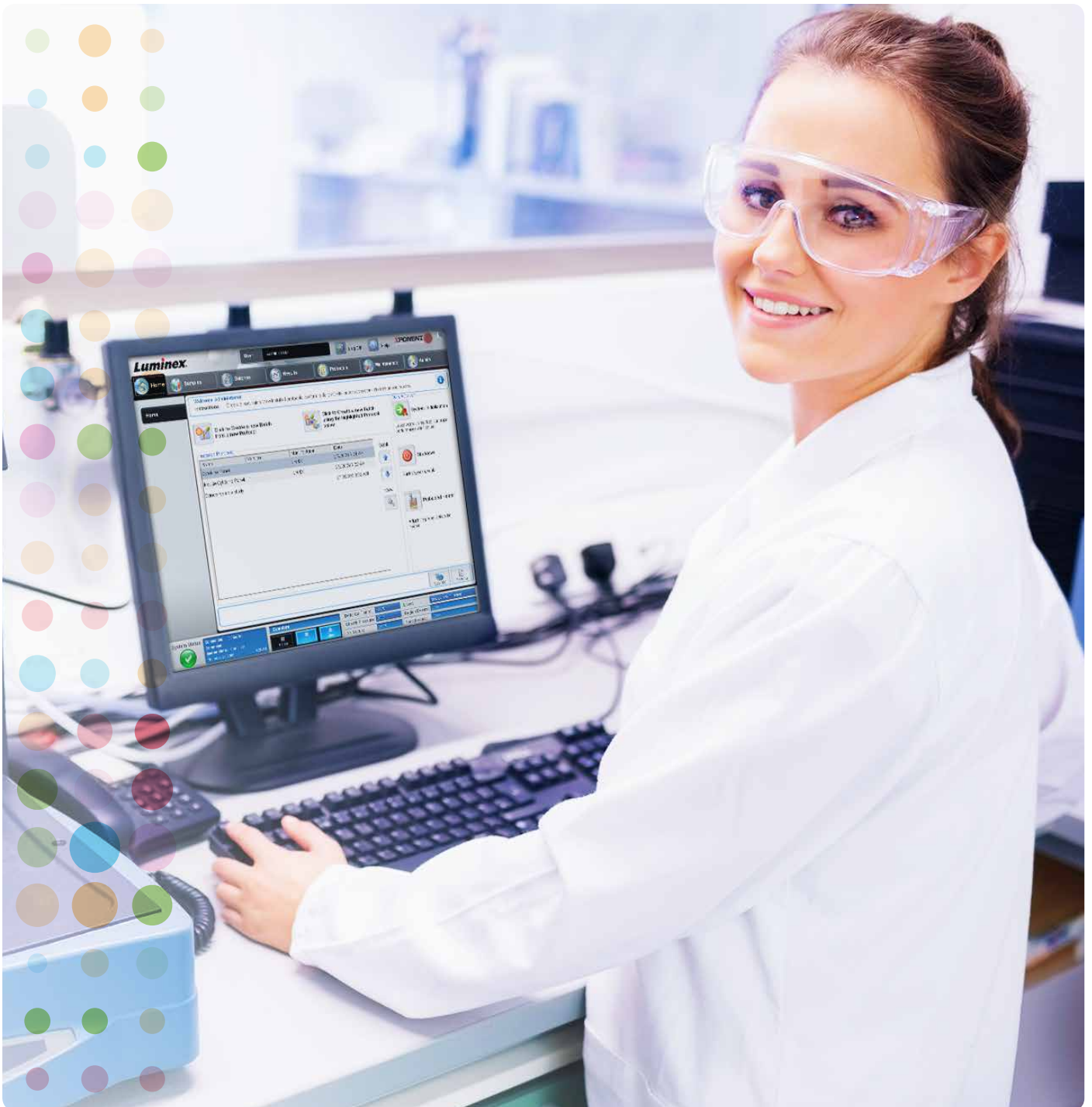


**Luminex**

# xPONENT<sup>®</sup>

Software Solutions



# xPONENT<sup>®</sup> Software Solutions

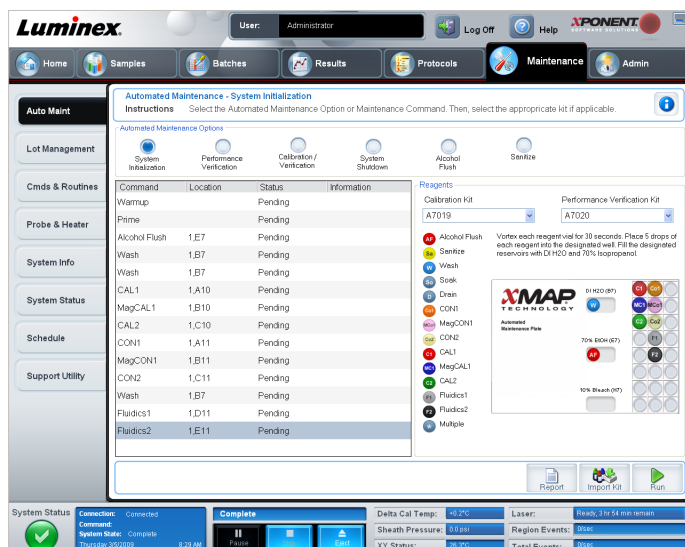
## Data Acquisition and Analysis for Luminex<sup>®</sup> Instrumentation

xPONENT<sup>®</sup> is a modular, flexible, software package for control of the Luminex MAGPIX<sup>®</sup>, Luminex<sup>®</sup> 100/200<sup>™</sup>, and FLEXMAP 3D<sup>®</sup>. Designed for ease of use, the software allows either a novice or advanced user to set up and run an assay in a minimal amount of time.

The software's graphical user interface follows the typical assay workflow but can be customized to meet the needs of a specific laboratory. Navigation wizards and automated routine operations such as startup, shutdown, calibration, and performance verification, further enhance system usability and result in increased walk-away time.

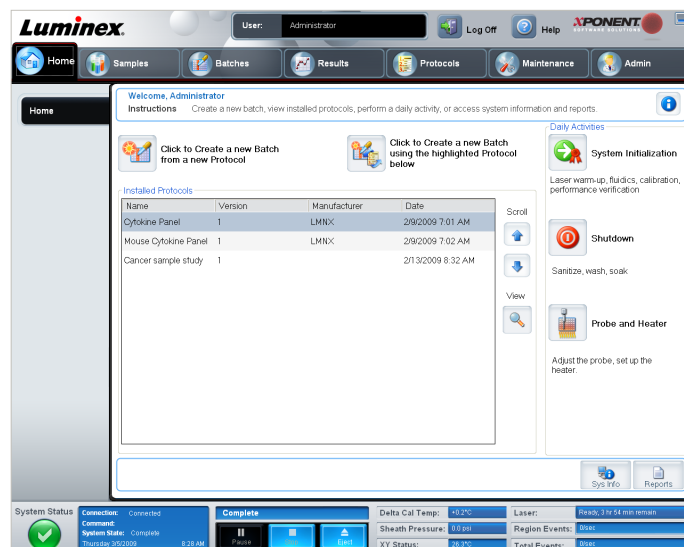
xPONENT<sup>®</sup> offers industry standard curve fitting models for quantitative analysis, allelic ratios for genotyping, and qualitative algorithms for serology assays, in addition to data visualization tools. The software can also be configured to automatically launch third-party data analysis programs for advanced statistical data analysis.

- Intuitive graphical user interface for simplified workflow
- Optimized sample flow for higher multiplex requirements
- Automated startup, shutdown, and routine maintenance operations
- Enhanced data analysis and report generation capabilities
- 21 CFR part 11 ready
- Automation and laboratory information system (LIS) connectivity



| Command       | Location | Status  | Information |
|---------------|----------|---------|-------------|
| Wakeup        |          | Pending |             |
| Prime         |          | Pending |             |
| Alcohol Flush | 1.E7     | Pending |             |
| Wash          | 1.B7     | Pending |             |
| Wash          | 1.B7     | Pending |             |
| CAL1          | 1.A10    | Pending |             |
| MagCAL1       | 1.B10    | Pending |             |
| CAL2          | 1.C10    | Pending |             |
| CON1          | 1.A11    | Pending |             |
| MagCON1       | 1.B11    | Pending |             |
| CON2          | 1.C11    | Pending |             |
| Wash          | 1.B7     | Pending |             |
| Fluidics1     | 1.D11    | Pending |             |
| Fluidics2     | 1.E11    | Pending |             |

Automation of routine operations reduces system hands-on time.



| Name                 | Version | Manufacturer | Date              |
|----------------------|---------|--------------|-------------------|
| Cytokine Panel       | 1       | LMNX         | 2/9/2009 7:01 AM  |
| Mouse Cytokine Panel | 1       | LMNX         | 2/9/2009 7:02 AM  |
| Cancer sample study  | 1       |              | 2/13/2009 8:32 AM |

Easy-to-follow navigation tabs and simplified workflow.

# xPONENT<sup>®</sup> Software also offers:

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## Intuitive Navigation Structure

The software graphical user interface layout follows the typical assay workflow. Navigation wizards have been added throughout the software to guide the user.

## Automated Daily Operations

Allows for use of Calibration and Performance Verification kits to automate routine system maintenance as well as Startup, Shutdown, Calibration, and Performance verification operations.

## Normalization Bead Support for Internal Standard

For all analysis types, users can select one bead for the intra-well normalization bead.

## Notification, Alert Options, and Remote Monitoring

Users can log on remotely to monitor the system status. The software can also be configured to send out email notifications when an assay has been completed or if the system has encountered a problem.

## Allelic Ratios and Allele Call Graphing Function

Allele call analysis with bar and line charts are available for the analysis of allelic ratio data.

## Low Bead Count Detection

The software can be configured to alert the user if a user-defined number of successive wells do not reach the minimum bead count.

## On-the-Fly Regression Analysis Capability

Enables the user to quickly and easily reanalyze batch data with alternate curve fit algorithms.

## Auto-launch of Post Acquisition Analysis Programs

The user can select from a user-defined set of analysis programs when setting up a protocol and the software will automatically launch the program once the data acquisition has been completed.

# xPONENT<sup>®</sup> Features:

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|  |  |
|--|--|
| ✓ Intuitive graphical user interface for simplified workflow | ✓ On-the-fly regression analysis change capability           |
| ✓ Calibration and performance verification kits              | ✓ Range threshold analysis capability                        |
| ✓ Controls for 21 CFR Part 11 compliance                     | ✓ Remote web monitoring                                      |
| ✓ Automation capability                                      | ✓ Enhanced import/export functions to simplify data exchange |
| ✓ Auto-launch of post acquisition analysis programs          | ✓ Real-time analysis   |
| ✓ Allelic ratio analysis and new graphing capabilities       | ✓ XML Data output  |
| ✓ Enhanced data archiving                                    | ✓ Integrated data analysis package                           |
| ✓ Batch and protocol settings reports                        | ✓ Multi-batch functionality                                  |
| ✓ Intra-well normalization analysis                          | ✓ Multi-plate within a batch analysis capability             |
| ✓ Key function alerts (email, dialog box, sound)             | ✓ Easy to use data acquisition module                        |
| ✓ Low bead count detection and alerts                        |  |

# Software Configurations

xPONENT® software is available with three levels of accessibility:



## Basic

The basic xPONENT software package allows the user to acquire samples, perform analysis, run system maintenance routines, and remote web monitoring. This package includes the ability to calculate allelic ratios to analyze and/or normalize genotyping data.



## Secure\*

The secure xPONENT package includes all the basic functionality, and also allows for an administrator to set up user access levels.



## 21 CFR Part 11\*

For laboratories working under the FDA's 21 CFR part 11 regulations, xPONENT offers multilevel user management, full audit trail, electronic records, and electronic signatures.

\* Additional costs may apply

**In addition to the access levels listed above, there are two additional licensed modules that add specific functions:**

### LIS Connectivity

The LIS connectivity module allows communication with an external LIS database by enabling the export of result data and the import of patient sample information in ASTM format. Connection to your LIS system may require the use of middleware. For more information on LIS and middleware solutions, please contact Luminex Technical Support.

### Automation Connectivity

The automation module, along with a device driver, enables communication between the reader and a front end automation platform. Luminex device drivers are offered by many automation providers. For more information on available drivers please contact Luminex Technical Support.

For more information, contact Luminex Technical Support at 1.877.785.2323 or [support@luminexcorp.com](mailto:support@luminexcorp.com).

**Luminex**  
complexity simplified.

To learn more, please visit: [www.luminexcorp.com/xPONENT](http://www.luminexcorp.com/xPONENT)

For Research Use Only. Not for Use in Diagnostic Procedures. Validation of the LIS compatibility must be performed by the end user. FLEXMAP 3D, Luminex 100, and Luminex 200 are class 1(I) laser products

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