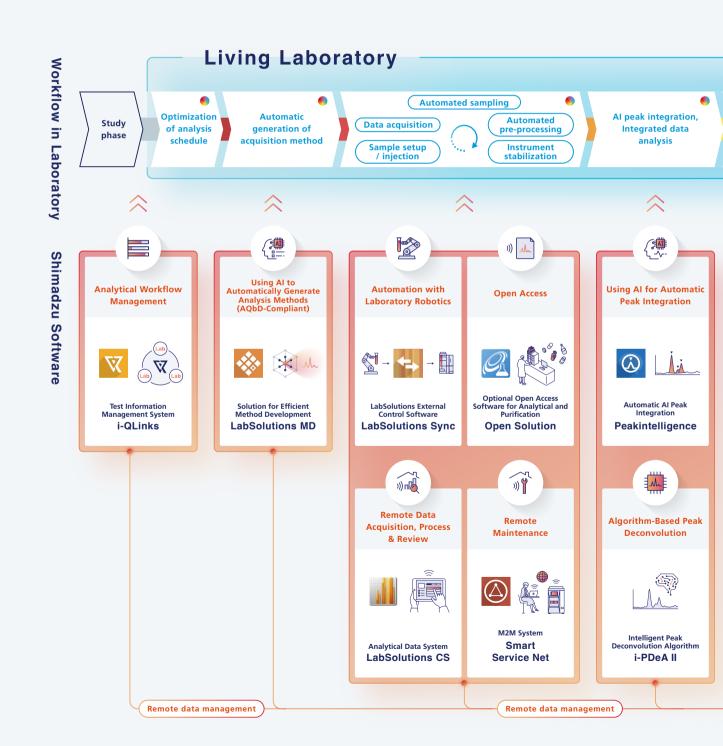


Shimadzu Software Comprehensive Catalog

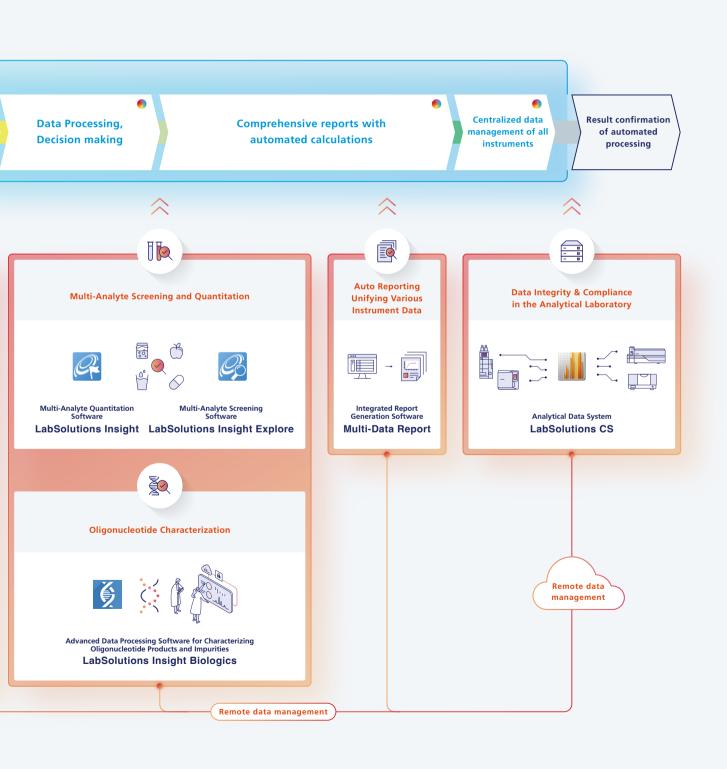
# LabSolutions





### Helps Eliminate Laboratory Dependence on Specific Personnel, Utilize Human Resources More Effectively, and Improve Laboratory Workflow

By utilizing cutting-edge analytical and measuring instruments, robotics, AI, and IoT technologies to eliminate dependence on specific personnel in the laboratory, researchers can engage in more advanced tasks, enhance productivity of analytical processes, and achieve a true transformation of the laboratory.





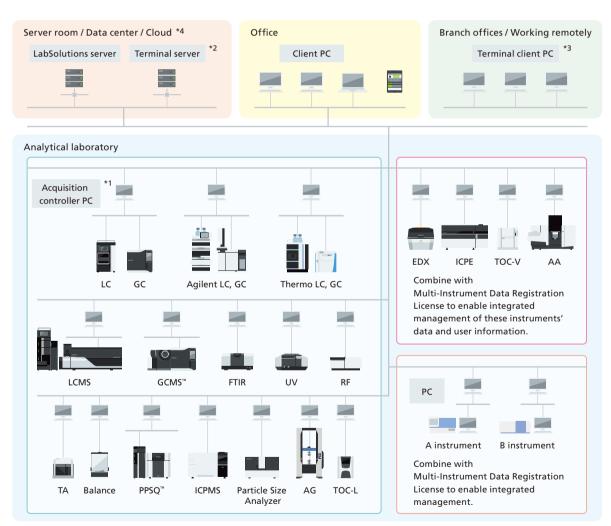
## LabSolutions CS



### **Provides Flexible Support for Diversifying Laboratory Operations**

LabSolutions CS is a network system that uses a database on a server to enable centralized management of various analytical data. In addition to functionality for managing analytical data in a database, the software offers support for efficient compliance with various regulations and guidelines, such as CSV, PIC/S GMP, U.S. FDA 21 CFR Part 11, and data integrity requirements. Functionality for user and project-based management ensures each set of data can be securely managed for respective projects or users, even when using shared instruments in academic laboratories or public facilities. It can be used to remotely control HPLC, GC, LC-MS,

and GC-MS units from any client computer or analyze data from multiple types of instruments. It can also directly control Agilent Technologies and Thermo Fisher Scientific brand (hereinafter "Agilent" and "Thermo," respectively) HPLC and GC units and load data from non-Shimadzu instruments. In addition to servers installed within the same facility, it supports various cloud services (laaS). By linking to a LIMS, ELN, or other host system, it supports various remote solutions for achieving efficient operation by accommodating increasingly diverse laboratory needs.

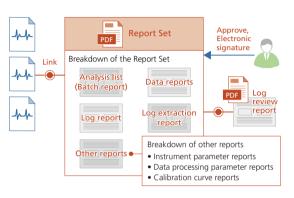


- \*1 The acquisition controller PC controls analytical instruments. For LC, GC, LCMS, and GCMS, data acquisition and analysis operations are performed on a client PC.
- \*2 A terminal server is a server for using terminal services. Users can view data reports and perform electronic signature operations through terminal services. It is also ideal for remote connections because of the low network load. Only LC, GC, LC-MS, and GC-MS support data acquisition and postrun operations through terminal services.
- \*3 If a terminal service is used, then LabSolutions software does not need to be installed on client PCs or tablets.
- \*4 Servers can be built on various clouds (laaS). AWS (Amazon Web Services), Azure (Microsoft Azure), GCP (Google Cloud Platform)

### Report Set Functionality Improves Data Reliability and Increases Operating Efficiency

Report set is unique LabSolutions functionality that prepares a PDF file (report set) that combines analytical information, results, and conditions from a series of analyses (batch analyses) with a log of all operations, from beginning to end, performed during corresponding analytical operations. Creating the report set links the results from a series of analyses to prevent alterations or falsification and allows the information, operation log, and analytical results related to the analyses to be reviewed as a single report. By pre-specifying log events that need to be reviewed, the report set functionality can automatically extract all corresponding log events for more efficiently complying with increasingly strict regulatory requirements. The functionality also supports saving a record of checking analytical results or log events and using electronic signatures to achieve paperless operations and improve efficiency.





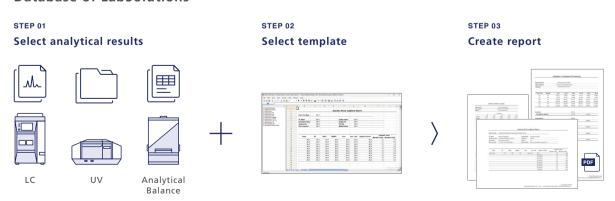
## Creates Reports Automatically Based on Analytical Results from a Variety of Instruments

Using Multi-Data Report functionality, reports can be created in a spreadsheet format to suit a wide variety of objectives. Reports that include quantitative calculations and graphs can be created by simply selecting analytical results and a previously prepared template. This eliminates the need to manually transcribe data from various laboratory notes,

spreadsheet software, or other sources, which can help reduce human errors and prevent data alterations or falsification.

Thus, reports that combine analytical results from a variety of instruments can be created in three easy steps to achieve more efficient report creation.

### **Database of LabSolutions**

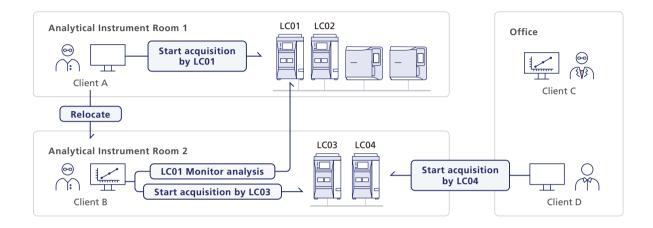


## Enables Control and Data Analysis Operations from Computers Other Than the Analysis Computer

For standalone systems, the computer connected to instruments is used exclusively by the user performing the data acquisition with other users unable to view or further analyze data. LabSolutions CS ensures free access to instruments and data, regardless of the laboratory, office, or other location, while also maintaining security. For example, analysis condition settings can be checked before starting acquisitions and acquisitions can be started

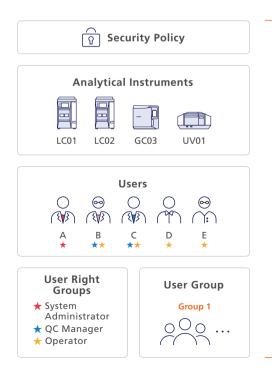
from a client computer in the analytical instrument room. After acquisitions are started, the operating status can be checked, instruments controlled, and data analyzed from a client computer in the office. That can increase the efficiency of analytical work, such as monitoring the acquisition progress, controlling instruments, and preparing reports.

Note: Data acquisition and data analysis operations are only supported for LC, GC, LCMS, and GCMS systems.



### Managing Related Information for Each Project

Instruments, users, security policies, data, and data analysis settings can be specified and managed for specific processes or systems referred to as "projects." That can be used to ensure that appropriate personnel can only access appropriate information and help ensure data searching and management operations are accomplished securely.



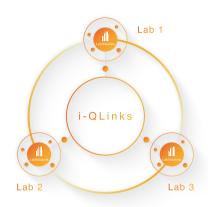




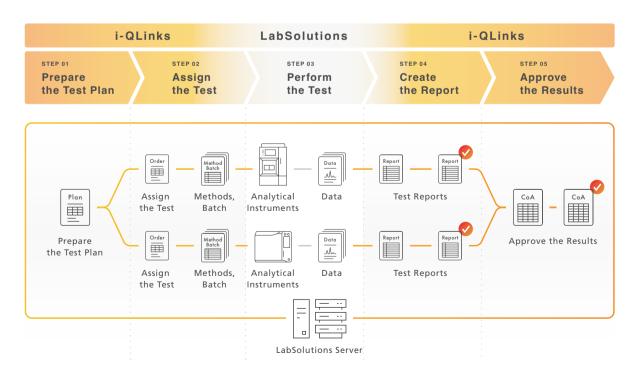
## LabSolutions i-QLinks



This simplified LIMS is designed specifically for analytical testing operations in an analytical laboratory. LabSolutions i-QLinks is a web-based system that enables integrated management of respective analytical laboratory testing operations, such as creating test plans or test orders, loading test results from HPLC units or other analytical instruments, automatically creating test reports from loaded test results, and managing the progress of tests. LabSolutions i-QLinks can be used via a browser interface, without having to install any software on the personal computers of individual users. Working in seamless coordination with LabSolutions CS software, it can create analysis sequences based on test information in i-QLinks, automatically forward data acquired by analytical instruments, and create test reports. That enables all test information, ranging from test parameters and analysis sequences to raw test data, to be managed centrally in one location for compliance with data integrity requirements. Such features ensure the reliability of quality testing operations and can dramatically increase work efficiency.







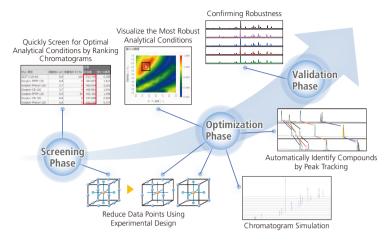


## **LabSolutions MD**



### Develop Analysis Methods with Higher Reliability More Efficiently

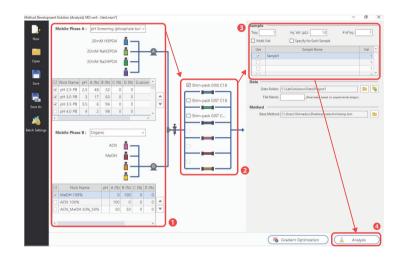
LabSolutions MD is software based on "Analytical Quality by Design" (AQbD), which is a technique for evaluating and verifying analysis methods by clearly indicating their development background and basis. By streamlining analysis method development steps, ranging from data collection with a design of experiment approach to design space-based visualization, it enables optimal analysis method development without requiring expertise.



### **Easy Creation of Analysis Schedules**

The process of creating an analysis schedule for screening can be completed quickly by following steps 10 to 40 below. The mobile phases and columns can be selected with a single click and the schedule, including column equilibration, is generated automatically. This not only improves operational efficiency, but also reduces human errors.

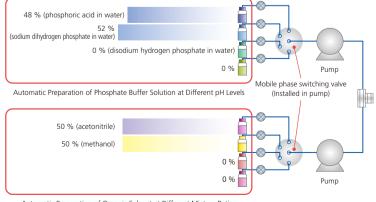
- 1 Select mobile phases 2 Select columns 3 Input sample information
- 4 Create analysis schedule



## Automation of Mobile Phases Preparation with **Mobile Phase Blending Function**

The mobile phase blending function can improve the efficiency of mobile phase preparation by automatically preparing mobile phases based on factors such as the user-specified pH level or the mixture ratio of organic mobile phase, with only a few types of mobile phases prepared in advance. This not only greatly reduces the burden of manual preparation but also prevents human errors in mobile phase preparation.



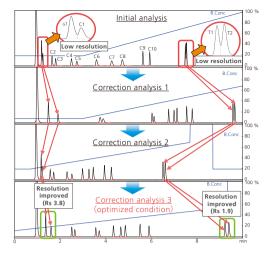


### **AI Algorithm Automatically Optimizes Gradient Conditions**

LabSolutions MD has a unique Al algorithm for automatic optimization of gradient conditions. By setting resolution criteria, it automatically searches for the gradient conditions that meet the criteria.

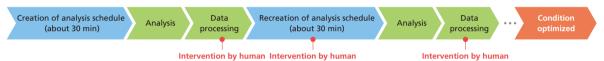
In a normal method development workflow, human intervention is required for creating analysis schedules and performing data analysis. In contrast, LabSolutions MD automatically generates and registers improved gradient conditions based on the data obtained, enabling exploration and optimization of gradient conditions without human intervention.



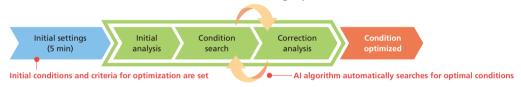


Automatic Gradient Optimization by AI (Catechin and Theaflavin)

#### ■ Normal Workflow for Gradient Setting Optimization

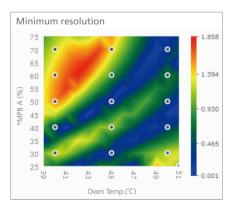


### ■ LabSolutions MD Workflow for Gradient Setting Optimization



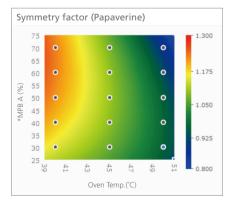
### Visualize the Most Appropriate Analytical Conditions by Design Space

After the pH level of the aqueous mobile phase and column are selected in the screening phase, analytical conditions are further optimized by considering the mixture ratio of the organic mobile phase (30, 40, 50, 60, 70 %), oven temperature (35, 40, 45 °C), and final concentration of gradient program (75, 80, 85 %). The effect of these parameters on separation is shown in the design space with the mixture ratio of organic mobile phase on the vertical axis and oven temperature on the horizontal axis. The design space can visualize not only resolution but also symmetry factor, theoretical plate, and other responses.



Design Space of Minimum Resolution (Gradient Final Concentration: 75 %)

\* MPB A : acetonitrile The black dots in the figure are points where the analysis was implemented.



Design Space of Symmetry Factor (Papaverine)
(Gradient Final Concentration: 75 %)

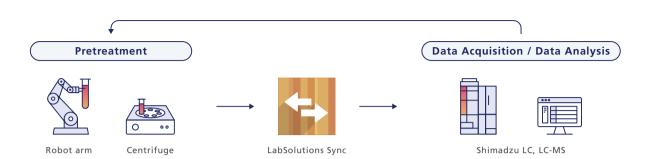
\* MPB A : acetonitrile
The black dots in the figure are points where the analysis was implemented.





## **LabSolutions Sync**





LabSolutions Sync is optional software that supports automating entire systems by seamlessly integrating the operation of non-Shimadzu software, such as for pretreatment or synthesizer units, with Shimadzu LabSolutions software for LC and LC-MS units. Increasing automation throughout entire analytical laboratory workflows can reduce labor and costs. Entire workflows from compound synthesis to LC or LC-MS analysis can be automated by using LabSolutions Sync to automatically load

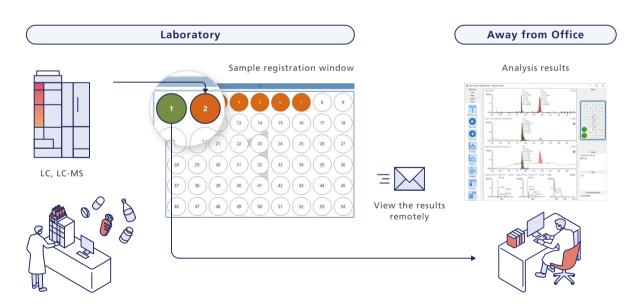
and analyze analytical files created by non-Shimadzu software used to control pretreatment and synthesizer units. Data analysis results and reports output after data acquisition is finished can also be loaded by non-Shimadzu software. LabSolutions Sync can be used for detailed linked system operations, such as automatically shutting down Shimadzu LC or LC-MS units or sending instrument status notifications to non-Shimadzu software.



### **Open Access**

## **Open Solution**

Product -



The software supports LC or LC-MS analysis or preparative separation under an open access environment. This enables sample registration via simple software windows. Once Data Browser has been set up on the server PC, all members of a research team can view the data without installing software on their PC. By using Data Browser, Open Solution enables simple operations, allowing for the display of lists of chromatograms and MS spectra, facilitating data verification and report creation.

It also includes functionality for scaling up from analytical to preparative flow rates. In addition to automatically generating preparative parameter settings based on analytical results, it can recognize impurity peaks and indicate whether to start preparative separation in three color-coded stages. Checking preparative separation results in Data Browser makes it easy to determine the fractions where specific chromatogram peaks are included.



## **Smart Service Net**

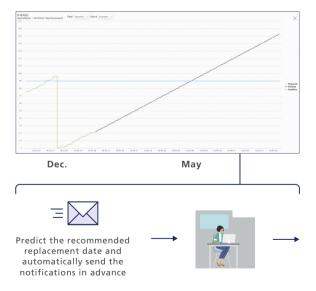




Smart Service Net is a system for quickly and efficiently managing laboratory instruments by using IoT technology to gather information about the operating status of HPLC systems in analytical laboratories in a cloud server.

It can be used to remotely monitor/verify the operating status of instruments throughout the entire laboratory or the status of

active errors. Laboratory status information can be checked at any time, either from a computer or smart device from a remote location, without having to install any specialized software. If an error occurs, Smart Service Net automatically sends a notification to the registered email address, which is also helpful for working remotely.



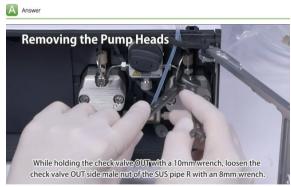
It also provides powerful support for ensuring laboratory instruments are operated reliably. Based on the instrument operating status information, Smart Service Net predicts and manages how many times consumables have been used and when they should be replaced. When the predicted replacement date approaches, it automatically sends an email notification together with a video showing how to replace the item. That helps prevent sudden instrument problems, such as by checking instrument system check reports remotely. In the unlikely event

## Easily check the parts replacement method via a link in the email

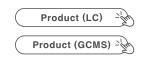
You can watch the video of each step

Consumable Part No.(&Click)

1. Removing the Pump Heads



of a problem, the field engineer can use remote diagnostics to quickly confirm and respond to the situation. That can help minimize the downtime until the system is restored. Furthermore, visualizing the instrument operating status can help determine the optimal instrument layout, replacement time, and so on. The operating hours and number of errors can also be monitored to make improvements to how equipment is operated, which provides support for utilizing equipment more effectively and for asset management.



Peakintelligence is optional peak integration software equipped with AI algorithms developed by Shimadzu. The AI algorithms are based on deep learning of peak integration performed by experienced personnel, so that the AI can assist with chromatogram peak detection to achieve a level of data analysis that is equivalent to experts. When analyzing complex samples containing many target components, peaks are often obscured by a mixture of various large and small peaks from principal components and impurities in the sample, which can require a long time for determining parameter settings and manually integrating peaks. By using AI algorithms trained based on expert peak integration techniques, peak integration can be performed automatically without users having to specify parameter settings. For more complicated analysis that requires manually correcting peak integration results, Peakintelligence requires only about one-fourth the time otherwise required for data analysis.

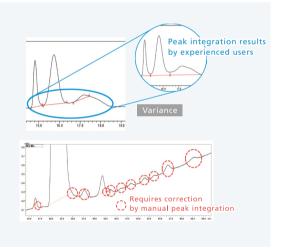


### Peakintelligence for LC

Even for complex chromatograms, Peakintelligence for LC can minimize incorrectly detected peaks and correctly detect even small peaks. By not having to specify parameter settings, reliable quantitative analysis can be achieved without dependence on specific personnel. Al-based peak integration for LC chromatograms is truly unique technology only available from Shimadzu.

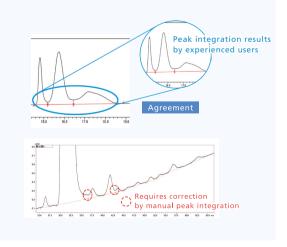


- Configuring and adjusting peak integration parameters is a time-consuming process.
- If settings are not appropriate, results must be corrected by manual peak integration.
- Manual peak integration results can vary depending on the specific personnel.





- Achieves peak integration results on par with those obtained by experienced users without configuring parameters or depending on specific personnel.
- Reducing manual peak integration work reduces the risk of data falsification.



### **Peakintelligence for GCMS**

In mass spectrometry, large amounts of data are routinely acquired from batch analyses with multiple samples and multiple compounds. For metabolite analysis, that can involve measuring hundreds of target compounds, which requires massive amounts of time, particularly for visually checking and manually correcting peak integration results during data analysis processes. In addition, analysis of residual pesticides requires the batch analysis of hundreds of controlled pesticides. Configuring the peak integration parameter

settings is difficult, and correction by manual peak integration takes time. On the other hand, manually revising peak integration results to reduce peak areas might raise suspicions of data falsification.

In combination with a mass spectrometry database, Peakintelligence for GCMS can increase the efficiency of data acquisition and analysis operations, which can reduce the time required for data analysis by about 75 % while also improving the reliability of quantitation results.

### Applications to Metabolite Data



#### **Applications to Residual Pesticides Data**



GCMS Residual Pesticides Database Ver.2.1 / 2.2

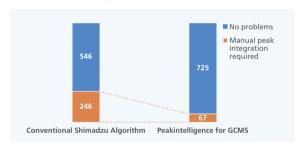


Smart Pesticides Database<sup>™</sup> Ver. 2.1

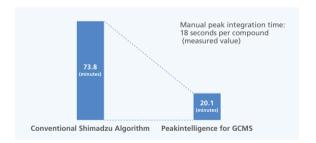


Peakintelligence™ for GCMS

Number of Compounds with Peak Integration Results Requiring Correction \*Results from in-house test data



Time Spent on Manual Peak Integration \*Results from in-house test data



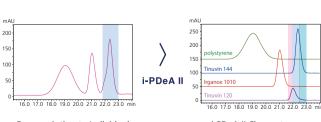
### Algorithm-Based Peak Deconvolution

## i-PDeA II



LabSolutions includes many outstanding model-specific data analysis functions.

For peaks that cannot be completely separated with a column or analyzed by simple peak integration methods, LabSolutions can be used in combination with an LC-PDA unit to qualitatively and quantitatively analyze unseparated peaks or even analyze hidden impurities and trace-level components using Shimadzu's proprietary i-PDeA II algorithm, which is based on the multivariate curve resolution alternating least squares (MCR-ALS) method.



Deconvolution to Individual Peak Components

i-PDeA II Chromatogram



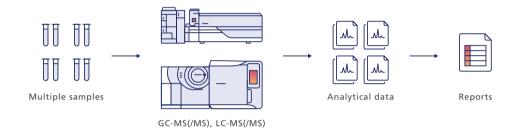
## **LabSolutions Insight**



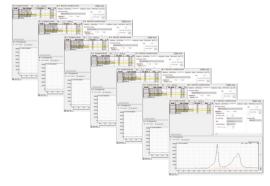
### Faster Quantitative Analysis and Dramatically Higher Productivity

LabSolutions Insight is software for GC-MS(/MS) and LC-MS(/MS) systems that enables simpler and more efficient analysis of data from multiple analytes, which can dramatically increase the efficiency of research or survey work. While mass spectrometers can obtain large quantities of high-quality mass spectrometry data day and night, analyzing that data would be extremely time-consuming. Therefore, in order to increase analytical productivity, it is important to make this data analysis process more efficient.

LabSolutions Insight allows the data from multiple samples to be displayed side-by-side and cautionary data highlighted based on specified threshold values for easy review. This can improve quantitative analysis efficiency and significantly shorten the total time required for data analysis. In addition, an extensive selection of optional products for improving compound identification workflows, using AI for peak detection, and environmental regulatory compliance are available for many industries.

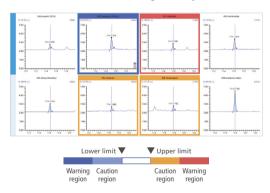


### Conventional Analysis



Each large set of data is opened and checked one at a time. It requires switching between windows to check all data.

### LabSolutions Insight Analysis



Large amounts of data can be checked side-by-side at one time.

Important data can be identified at a glance!

The typical workflow for quantitative analysis, which involves checking and revising identified peaks and checking quantitative analysis results, is extremely time-consuming when it involves data for multiple components from multiple samples. With LabSolutions Insight, multiple sets of analytical data can be laid side-by-side to quickly check for any retention time shifts or intensity differences between

samples. Also, peak integration results can be revised or target/reference ions switched within the same window, so that quantitative analysis can be accomplished quickly and reliably. The window for checking quantitative results can be customized according to objectives, such as by listing the concentration of each compound contained in individual samples or in all samples. That can help increase the efficiency of quantitative analysis

With a variety of functionality that provides powerful support for analyzing data for multiple components from multiple samples, LabSolutions Insight can significantly shorten the time required for quantitative analysis.





## **LabSolutions Insight Explore**

LabSolutions Insight Explore software supports operations ranging from qualitative analysis to quantitative analysis with functionality for precision library searching, structural analysis, and formula prediction based on high-resolution and high-accuracy mass spectrometer data. Though compounds with identical molecular formulas cannot be identified based on their mass chromatogram peaks alone, even when using a high-accuracy mass spectrometer, using both library search and structural analysis functionality enables each compound to be identified more accurately. The compound detection functionality can be used to predict the composition of unknown compounds from precision mass data and search for corresponding molecular and structural formulas. Furthermore, by using optional multiply-charged ion analysis functionality, it can be used to predict the molecular weights of oligonucleotide drugs, antibody drugs, and other nucleotide and protein molecules with high molecular weights. In that way, LabSolutions Insight Explore can easily perform qualitative and structural analysis of unknown compounds and even quantitative analysis.

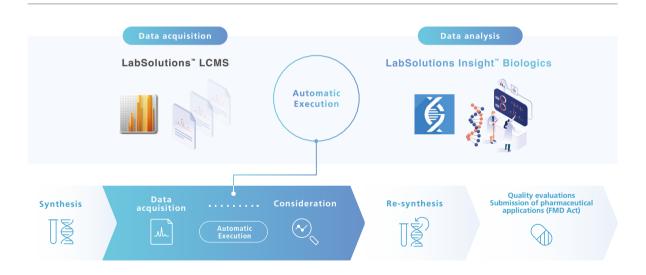




### **Oligonucleotide Characterization**

## **LabSolutions Insight Biologics**





## LabSolutions Insight Biologics Automatically Performs Everything from Measurement to Analysis

This oligonucleotide characterization software is designed for use with single quadrupole (SQ), quadrupole time-of-flight (QTOF), or MALDI-TOF mass spectrometer systems. It allows for easy input of principal component sequences and setting of analysis parameters with simple operations. Based on the input sequences, it comprehensively identifies the principal components and impurities of oligonucleotides and estimates sequences from MS/MS fragment spectra. The sequence input window displays the structural formula of the entered sequence

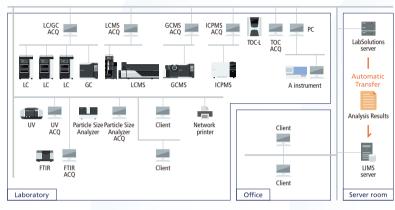
in real-time, enabling visual confirmation of any input errors. The results window shows chromatograms, mass spectra, identification results, and sequence coverage. There are two methods for displaying sequence coverage, allowing users to switch the display according to the items they want to verify. Reports can be generated in five different formats, along with user customization options to meet specific needs. Additionally, any changes to the analysis parameters in the software are automatically recorded in the operation log.

## **LabSolutions NETWORK**

LabSolutions NETWORK can both increase analytical laboratory workflow efficiency and improve data integrity as a solution for a wide variety of departments and industries.

### For Pharmaceutical Industries

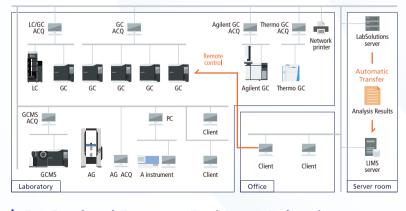
- Compliance with various regulations and guidelines, such as CSV, PIC/S GMP, U.S. FDA 21 CFR Part 11, and Data Integrity requirements.
- Output a single report set that consolidates analytical data from all instruments connected to the network, along with related analytical information and operation logs.
- By specifying all log events that should be reviewed in advance, all log events that need to be reviewed can be automatically extracted to enable efficiently checking for fraud or suspicious content in log data.
- By using LabSolutions MD, method development that is based on "Analytical Quality by Design" (AQbD) recommended by the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) can be achieved.



\* ACQ: Acquisition controller computer for controlling analytical instrument. For LC, GC, LCMS, and GCMS, data acquisition and analysis operations are performed on a client PC.

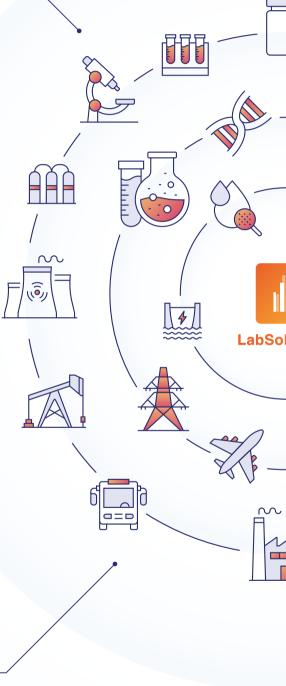
### For Petroleum and Chemical Industries

- Operating efficiency is improved with remote control of GC, GC-MS, and GPC systems and simultaneous operation by multiple users.
- Enhance laboratory management and operations efficiency by integrating control and data management of instruments, including GCs from other companies.
- All data from data acquisition and analysis is saved automatically to prevent data loss due to operating errors.
- Sending/receiving data to/from a host system is unified to achieve smooth data management.
   Automatic forwarding prevents transcription errors.



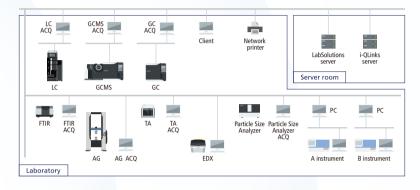
### For Steel and Transport Equipment Industries

- Reliability is improved for testing results, by automatically saving testing machine measurement data and preventing falsification.
- Data from multiple instruments is collectively managed in one place. The required data can be quickly searched from vast amounts of data.
- User information and analytical data from laboratories at other locations can also be collectively managed with a network configured according
  to user laboratories.
- Reports that consolidate data from multiple instruments can be created automatically to increase document creation efficiency.





- Enables comprehensive data management and efficient data searching for not only chromatographs but also for precision universal testing machines, X-ray fluorescence spectrometers, and a wide variety of other analytical and measuring instruments.
- All data acquisition and analysis operations are automatically saved to ensure data traceability.
- Reports that consolidate data from multiple instruments can be created automatically to reduce transcription errors and to prevent data falsification.
- With LabSolutions i-QLinks, both analytical data and various test results can be checked with a single glance. It can even create test result reports automatically.



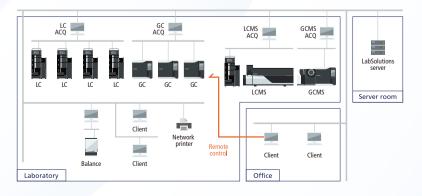
### For Academic Laboratories, Shared Equipment Rooms, and Public Testing/Research Institutions

- Offers the flexibility to configure systems ranging from small-scale networks with only a few instruments to large-scale environments, based on the instruments used by customers. It is also easy to expand the system by easily adding instruments or computers later.
- User access settings can be specified for instruments and data to ensure data is only shared with authorized people and to prevent other users from viewing or leaking data by carrying it out from the site.
- Utilization rates of chromatographs can be maximized by allowing simultaneous data acquisition and analysis on separate computers.
- By introducing terminal services, data acquisition and analysis can be performed from locations outside the laboratory, allowing for a flexible work style.

### For Food Industries

lutions

- Data is managed as projects in a database to ensure it is only shared with authorized people and to support managing data in accordance with GMP standards.
- LabSolutions data from various instruments can be used in combination to automate the
  process steps from data processing to pass/fail determination and report creation, such as for
  residual pesticide analysis or functional component analysis. It can also prevent transcription
  errors and tampering.
- Operating efficiency can be improved by controlling chromatographs remotely or having multiple people perform operations simultaneously.
- Peakintelligence ensures anyone can execute high-quality peak integration and achieve
  efficient and stable quantitative analysis workflows.



## **LabSolutions Lineup**

### Software with a Consistent User Experience for a Common Operating Feel

LabSolutions provides consistent operation for data acquisition, data analysis, report creation, and other functionality. That makes it easy to learn how to perform operations, regardless of the type of instrument, which can help reduce learning costs.

Product -

Product -

### Manage Not Only Data but Also User and System Information Centrally in a Server

LabSolutions CS manages not only data and operation log records but also user account and system security information centrally in a LabSolutions database. That eliminates the need to configure user management and system information for each computer, which reduces the work required for system operation and management. By specifying a system backup schedule, all data can be backed up automatically.



Security policy

Product 2

Product 2

### **LabSolutions UV-Vis**

**UV-VIS Spectrophotometer** 





## Faster and Simpler Spectrophotometer Operation Frees Operators from Manual Tasks

Simple, smart, and seamless software allows anyone to start up the spectrophotometer and quickly start acquiring and analyzing data. All steps from measuring to analyzing and evaluating data are automated. It can also automatically send measurement data to separate software.

### LabSolutions IR

Fourier Transform Infrared Spectrophotometer





### Fast, Easy-to-Use, and More Extensive Applications

Features an extensive library and employs a proprietary search algorithm that enhances hit rates, allowing for more efficient contaminant analysis. Also, an entire series of measurement and data analysis steps can be executed with a single click to automate analytical processes and save labor.

### **LabSolutions TOC**

**Total Organic Carbon Analyzer** 





### Extensive Functionality Offers Powerful Support for Process Management, Quality Control, Water Quality Control, and Other Analytical Processes

The measurement of multiple samples, configured by measurement conditions and vial number, can be registered as a schedule file. If accuracy control samples are inserted into the measurement schedule, automatic re-measurement and other procedures can be performed whenever the results fall outside the configured range. This streamlines routine measurements.

### LabSolutions AG

**Precision Universal Testing Machine** 





### Flexible UI Optimized for Specific Testing Achieves Both Simplicity and Advanced Functionality

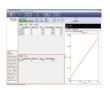
Easy-to-understand illustrations for test control modes, test samples, and data processing parameters, together with operating guidance information, ensure smooth test parameter configuration. In addition to tensile, compression, and bending tests, the system also supports peel testing for easily determining static properties of pharmaceutical products.

<sup>\*</sup> ACQ: Acquisition controller computer for controlling analytical instrument

### **LabSolutions RF**

Spectrofluorophotometer





Product -

Product -

Product -

### All-in-One Spectrofluorophotometer Software Enables Specialized Fluorescence Analysis with Common Operating Methods

The common operating methods can be used for spectral, quantitative, and other measurement modes selected in the main window. Also, automatically corrected spectra can be obtained for easily comparing data from other instruments. It also supports three-dimensional, fluorescence quantum yield, and fluorescence quantum efficiency measurements.

### LabSolutions ICPMS



**Inductively Coupled Plasma Mass Spectrometer** 





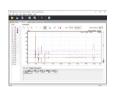
### All the Necessary Information Is Displayed in a Single Window, Allowing Anyone to Analyze Samples Without Hesitation

The profiles from samples being analyzed, analytical results, and instrument status information can be viewed in a single window and the layout can be customized based on the workflow. It also allows instrument status and accessory information about active errors, when to replace parts, and so on, to be checked with a single glance.

### LabSolutions PPSQ

**Protein Sequencer** 





## Analyze Protein N-Terminal Amino Acid Sequences More Easily

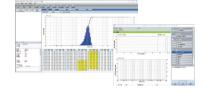
Sequence analysis and identification can be performed more easily through the display of chromatograms, peak integration, and overlaying multiple chromatograms. In addition, amino acid sequences can be automatically estimated and the accuracy level indicated numerically after each analysis cycle.

### LabSolutions SALD



Laser Diffraction Particle Size Analyzer





## Assist Measurement Function Ensures Reliable Measurements

The assist measurement function based on the SOP reduces operator workload and enables reliable measurements without human error. Also, a variety of system configurations can be used to measure particles size distribution over a wide range of particle concentrations from as low as 0.1 ppm to as high as 20 %.

### LabSolutions TA

Thermal Analyzer





### Intuitive Operations Ensure Smooth Performance of All Processes, from Measurement to Data Analysis and Report Output

With the intuitive UI design, all frequently used functionality is immediately found at a glance. The user-friendly interface also makes it easy to operate the system. Correction, data analysis, and report creation processes can be automated using the template functionality.

### **LabSolutions Balance**

Product -

**Analytical Balance** 





# Measurement Date/Time, Operator Name, and Sample Information Are Saved Together with Weight Values. Prevents Transcription Errors and Falsification

Not only are weight values saved, but also metadata such as measurement date/time, operator name, and sample information. A spreadsheet report of both weighting data and analytical data is created automatically. It supports a wide range of tests, from system suitability tests to dissolution tests. Adjustment or calibration results and operation history are also saved.

### List of Software Product Brochures

LabSolutions DB/CS (C191-E018)	Peakintelligence (C146-E418)
LabSolutions i-QLinks (C191-E057)	Peakintelligence for LC (C191-E059)
LabSolutions MD (C190-E278)	Peakintelligence for GCMS (C146-E460)
Effortless Method Development with LabSolutions MD (C190-E308)	LabSolutions Insight (C146-E346)
LabSolutions Sync (C191-E053)	LabSolutions Insight Biologics (C146-E475)
Open Solution (C191-E060)	

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