

Agilent 7250 Accurate-Mass Quadrupole Time-of-Flight (Q-TOF) GC/MS System

Quick Start



Notices

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Safety Notices

CAUTION

A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

Welcome to the Agilent 7250 Q-TOF System

Your system includes the **Agilent 7250 Q-TOF**, an **Agilent 8890** or **7890B GC**, and **Agilent MassHunter Workstation Software**.

Also included with your system is a comprehensive collection of manuals, videos, eFamiliarization, user applications, and method development tools. These are located on the:

- Agilent GC and GC/MS User Manuals and Tools DVD set
- Agilent GC/MS Software Information and Manuals memory stick

This book tells you how to install this information on your computer and provides a brief summary of some of the included documents.



To Install Your Hardware Library - See Page 6

Hardware tools and manuals are on the GC and GC/MS Manuals and Tools DVD set

This can be installed by anyone who has authority to copy information onto the receiving computer.



To Install Your Software Library - See Page 8

eFamiliarization and software manuals are on the GC/MS Software Information and Manuals memory stick.

This can be installed by anyone who has authority to copy information onto the receiving computer.

The Agilent 7250 Series Accurate-Mass Q-TOF and 8890 or 7890B GC

The Agilent 7250 Series Accurate-Mass Q-TOF is a stand-alone Quadrupole Time-of-Flight (Q-TOF) mass spectrometer for use with an Agilent 8890 or 7890B Gas Chromatograph.

A full library of reference material for your system is provided on the Agilent GC and GC/MS User Manuals and Tools DVD set. See **"Your Hardware Library"** on page 6 for how to install and access this wealth of information.



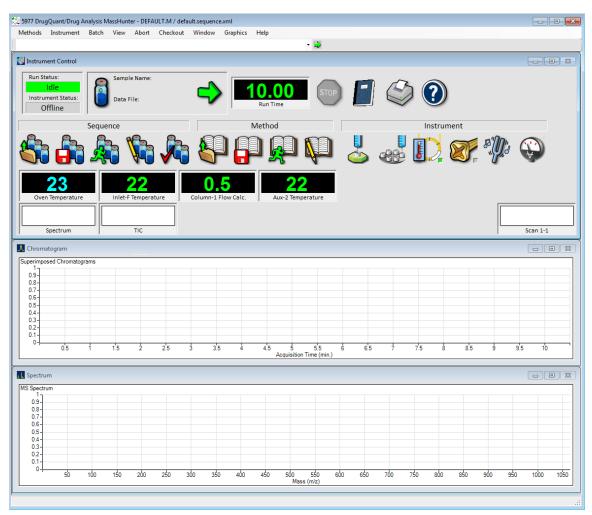


The Agilent MassHunter Workstation

The MassHunter Workstation provides dedicated software modules for quantitation, compound confirmation, target compound screening, degradant and unknown identification, characterization of biomolecules, and protein and metabolite identification.

A full library of reference information for your MassHunter Workstation software is provided on the **Agilent GC/MS Software Information and Manuals** memory stick. See **"Your Software Library"** on page 8 for how to install and access this vast library.

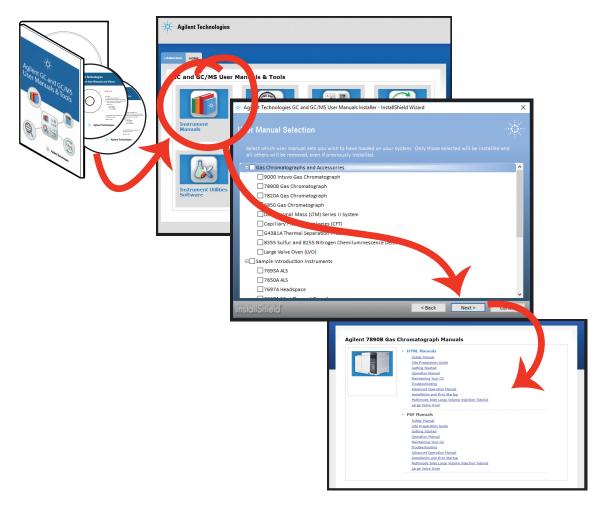




Your Hardware Library

Use the Agilent GC and GC/MS User Manuals and Tools DVD set to install the full library of Learning Products with manuals (in PDF format) and videos (in .wmv format) that explain how to install, operate, maintain, and troubleshoot your system. Also included are valuable user applications, method development tools, and an electronic **Parts Finder** tool which allows you to locate parts quickly by clicking on nested photos rather than thumbing through a paper catalog. (See "Parts Finder Tool" on page 7.)

Insert **Disk 1** into your DVD drive, and follow the system prompts to install these tools on your computer. Once installed, icons will be placed on your desktop for quick access to your material.



Parts Finder Tool

Included with your system is the **Agilent Parts Finder tool**. This interactive software features an intuitive image-based search capability for quick identification of needed parts and supplies for your Agilent instruments.

Using **Parts Finder**, rather than thumbing through a paper catalog, you can click on nested photos to quickly locate parts you need.



The **Parts Finder** tool is installed on your PC when you install MassHunter Workstation. It is also included with the Agilent GC and GC/MS User Manuals and Tools DVD set, and can be installed on any PC from there. (See **"Your Hardware Library"** on page 6.)

To open **Parts Finder**, click the **Parts Finder** desktop icon.



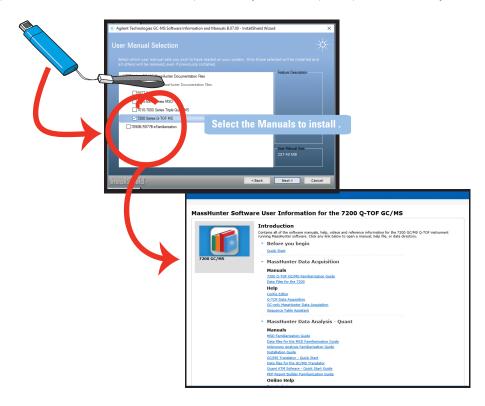
Your Software Library

Use the Agilent GC/MS Software Information and Manuals memory stick (G1701-60176) to install the extensive library of software manuals, tutorials, online Help, videos, and more for your system.

Here you will find manuals, Help, videos, familiarization guides, and more for the:

- MassHunter 5975/5977 Series GC/MSD
- MassHunter 7000/7010 Series Triple Quad GC/MS
- MassHunter 7200 Accurate-Mass Q-TOF GC/MS System
- 8860/8890 GC System
- Intuvo 9000 GC System
- 7890 Series GC System
- MassHunter Data Acquisition and Data Analysis

Insert the memory stick into a USB port, and follow the system prompts to install these manuals on your computer. Once installed, icons will be placed on your desktop for quick access to your manuals.



Online Help

The online Help files contain extensive information and tutorials about instrument control, data acquisition, data analysis, methods, sequencing, tuning, troubleshooting, and how to use system commands and variables. In Help, the following features are available:

- Enter a search term, and click Search to search the Help content.
- Click Set as favorite to save the current topic to your favorites list.
- Click **Favorites** to view the topics you have set as a favorite topic.
- Click **T** Filter to filter the Help content or search results based on your selection.
- Click Print to print the current topic or save it as a PDF.
- Click Expand or Minimize to show or hide the Table of Contents.

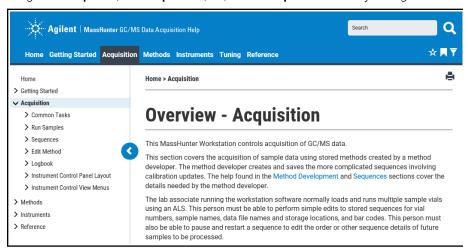
MassHunter Quantitative Analysis Help

Create a new batch

Create a new batch

A Batch is a group of it hashed data files that are rocessed unity to be analysis of its saved as a .bin file.

Access online Help through the Help icon, the Help menu, F1, or the Help button on any dialog box.



Familiarization Guides



There are several familiarization guides included on the GC/MS Software Information and Manuals memory stick, including:

- Getting Started
- Data Acquisition
- Quantitative Data Analysis
- Qualitative Data Analysis
- Unknowns Analysis
- Reporting

These and other manuals provide detailed step-by-step instructions on:

- How to prepare your system for data acquisition
- How to create acquisition methods, qualitative data analysis methods, and quantitative data analysis methods
- How to use the Unknowns Analysis software
- How to use the MassHunter reporting features

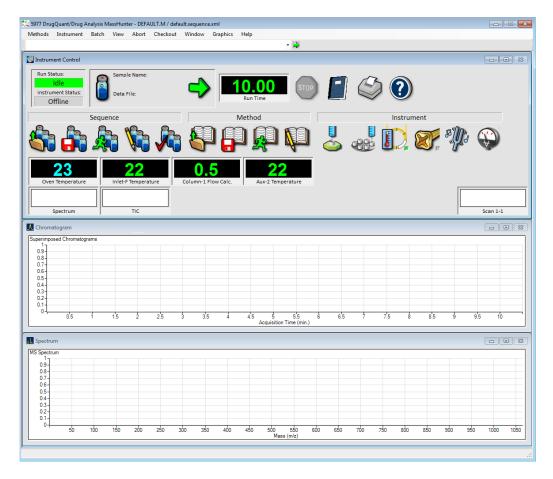
Once installed, you may access **Familiarization Guides** through the desktop icon, online **Help**, or the **Windows Start** menu.

Data Acquisition Software

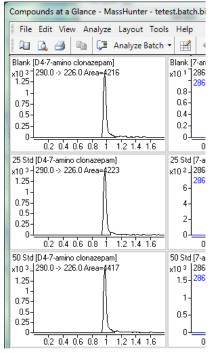
With the MassHunter Data Acquisition software you can:

- Start and stop the instrument
- Download instrument settings in real time
- Load, edit, create, or run a method
- Load, edit, create, check, or run a sequence
- Evaluate the MS parameters
- Autotune the MS parameters

- Monitor the real-time conditions of the instrument parameters
- View the instrument logs
- View and print the real-time plot for chromatograms and instrument spectra
- Select and label the total ion chromatograms (TIC) or extracted ion chromatograms (EIC) that you want to appear in the real-time plot



Quantitative Analysis Software

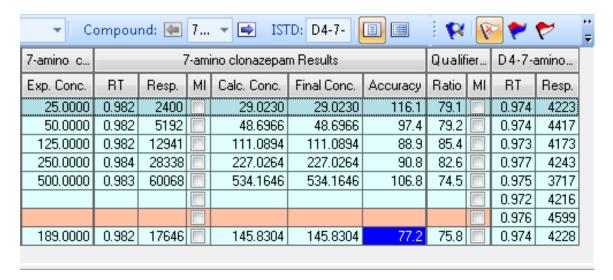


The MassHunter Quantitative Analysis software will quantify very low amounts of sample.

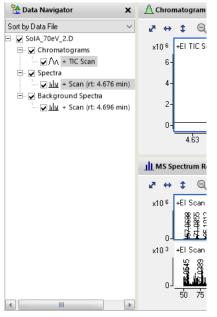
With the MassHunter Quantitative Analysis software you can:

- Import information directly from the acquisition method
- Use the curve-fit assistant to test all fits and statistics on the calibration curve quality
- Use the **Compounds at a Glance** feature to review all the chromatograms in your batch at once, side-by-side
- Quickly scan the batch table and see your quality metrics such as high outliers (in red) or low outliers (in blue)
- Press F1 to access context sensitive online Help

Once installed, you may access **Familiarization Guides** for this software through the desktop icon, online **Help**, or the **Windows Start** menu.



Qualitative Analysis Software



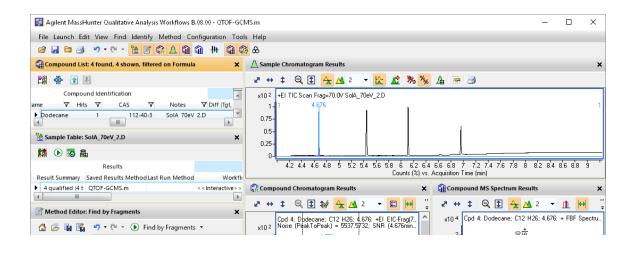
The MassHunter Qualitative Analysis software uses advanced data mining and processing tools, including integrated deconvolution algorithms, to rapidly and accurately find all detectable compounds in your samples and easily confirm targets or identify unknowns.

This software presents large amounts of data for review in one central location. With MassHunter Qualitative Analysis software you can:

- Extract chromatograms
- View and extract peak spectra
- Subtract background noise
- Integrate the chromatogram
- Find compounds and generate formulas
- Press F1 to see context sensitive online Help

You can also set up methods to automatically do the tasks in the above list, as well as others, when you open the data files.

Once installed, you may access **Familiarization Guides** for this software through the desktop icon, online **Help**, or the **Windows Start** menu.



Security Mode

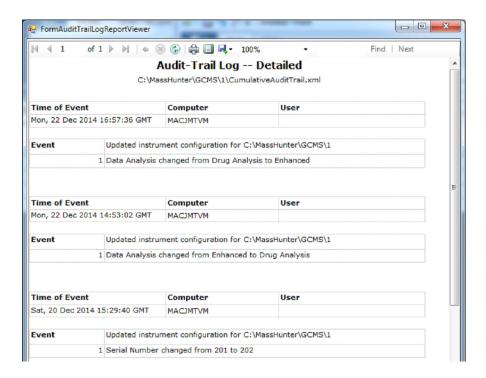
For a 7250 Series Q-TOF, both MassHunter Data Acquisition and MassHunter Quantitative Analysis Software can be installed in the **Standard Workflow**, or the **User Management and Audit Trail** security mode.

- In the **Standard Workflow** mode, all users have the same privileges, and data are saved to a designated drive. Records are not treated as regulated records.
- In the **User Management and Audit Trail** mode, similar to the Standard Workflow mode, records are not treated as regulated records. However, this mode includes four security user groups, each with its own set of privileges, plus a detailed audit trail that tracks all changes to method files, sequence files, data files, and the instrument configuration.

For details on the Security features, see the online **Help**.

For details on setting roles and responsibilities for security groups:

- For MassHunter Data Acquisition, see the Configuration Editor's online Help
- For MassHunter Quantitative Analysis, see the Audit Trail Map's (ATM) configuration window online Help



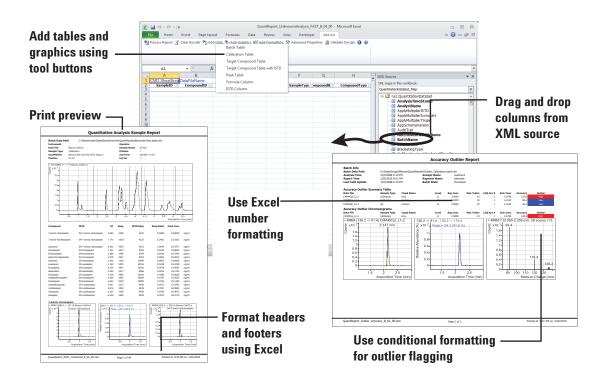
Report Designer Add-in

MassHunter stores all results in XML format, and uses Microsoft Excel and the Report Designer Add-in for reporting. Many application-specific templates and customized reports, including custom calculations for your specific application needs, are available in the familiar Excel environment.

Using these preconfigured templates, you can easily create reports in the Data Acquisition software, the Qualitative Analysis software, and the Quantitative Analysis software.

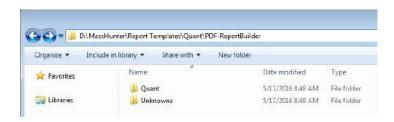
You can also customize many of the application-specific templates, including the custom calculations, with the Report Designer Add-in.

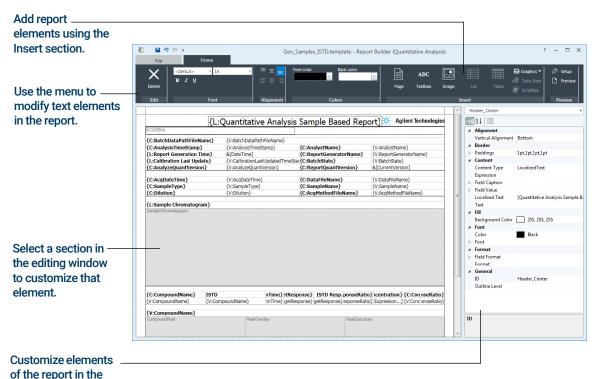
Once installed, you may access **Familiarization Guides** for this software through the desktop icon, online **Help**, or the **Windows Start** menu.



Quantitative Analysis Report Builder

The Quantitative Analysis Report Builder software is installed with MassHunter Quantitative Analysis. The software provides PDF templates for Quantitative Analysis and Unknowns Analysis. Each of these templates can be customized for your specific application in the Report Builder.





Properties pane.

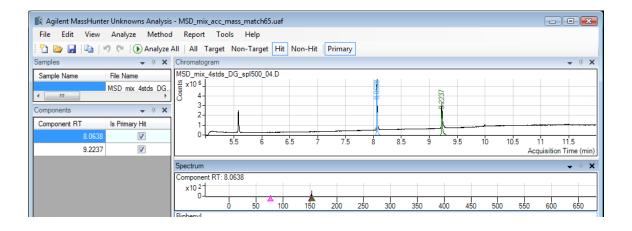
Unknowns Analysis Software

The MassHunter Unknowns Analysis software identifies compounds that may be present in a sample batch beyond those that have been identified in the MassHunter Quantitative Analysis software.

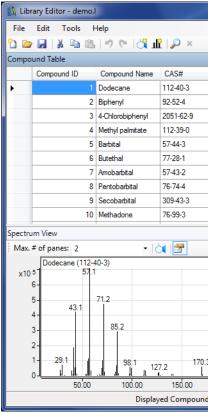
With the MassHunter Unknowns Analysis you can:

- Import data directly from the MassHunter Quantitative Analysis software
- · Use optimized deconvolution and library match algorithms to identify target and non-target hits
- View chromatograms, component lists, spectrums, ion peaks, and molecular structures side-by-side
- Easily review library match and peak shape metrics of unknown components in table and spectrum formats

Once installed, you may access **Familiarization Guides** for this software through the desktop icon, online **Help**, or the **Windows Start** menu.



Library Editor Software



The MassHunter Library Editor software customizes libraries used to identify compounds and components in the MassHunter Qualitative and Quantitative Data Analysis software.

With the MassHunter Library Editor you can:

- Add compounds to a library
- Copy spectral data from your data analysis software to a library
- Add a structure to your custom library
- · Import JCAMP files into a custom library
- Create a reference pattern library

Once installed, you may access **Familiarization Guides** for this software through the desktop icon, online **Help**, or the **Windows Start** menu

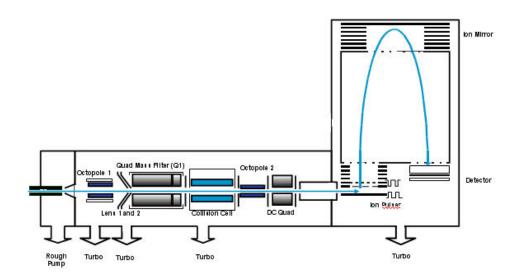
Concepts Guide



To learn how your Agilent Accurate-Mass Q-TOF GC/MS system works in conjunction with the MassHunter software, take a look at the Concepts Guide. This document includes:

- Conceptual models
- Illustrations
- Screen captures
- An overview of how the Accurate-Mass Q-TOF works
- Concepts behind the design of the Agilent MassHunter Data Acquisition software
- The theory behind chemical ionization in GC/MS

Once installed, you may access this guide through the desktop icon, or the **Windows Start** menu.



Operating Manual

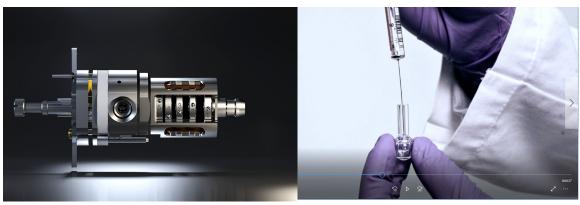


Your Agilent Accurate-Mass Q-TOF GC/MS system is extremely powerful and flexible. Refer to the Operating Manual for extensive information on operating the instrument and performing routine maintenance on it. Included are step-by-step instructions and videos on installing GC columns, operating in electron impact (EI) mode, general maintenance procedures, and more.

Once installed, you may access this guide through the desktop icon, or the **Windows Start** menu.

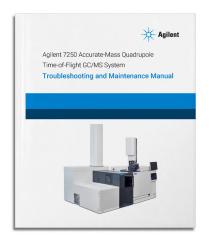


Any topic with the camera icon is linked to a video. Watch these videos to learn more.





Troubleshooting and Maintenance Manual



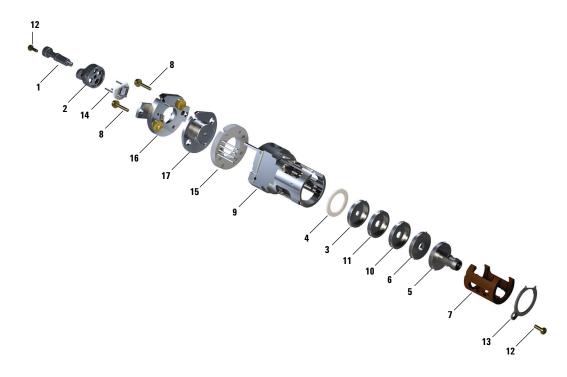
The Agilent Accurate-Mass Q-TOF GC/MS system consists of an Agilent 7250 Series Q-TOF and an 8890 or 7890 Gas Chromatograph (GC).

The Troubleshooting and Maintenance Manual for your system includes step-by-step instructions along with videos, IPBs, and annotated high-resolution photos to help you identify the cause of problems in your system. Also included are detailed procedures for completing common maintenance tasks, information about the components of the GC/MS vacuum and analyzer systems, and a listing of parts.

Once installed, you may access this guide through the desktop icon, or the **Windows Start** menu.



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