



Product Backgrounder

Agilent InfinityLab Pro iQ Series Mass Detector

Key Uses

- Advance discovery and development of small to large molecules
- Robust and reliable results from next-gen LCSQs enabling routine and trace analysis.
- System intelligence drives productivity with a full set of features for your workflows.
- Measure sustainability and achieve your goals with transparency.

Key Features

- Robust and easy to maintain
- Ultimate sensitivity - detection to < 25 fg
- Superior performance with analytes with high m/z including biomolecules
- AI-powered SWARM tuning.
- Early maintenance feedback, scheduled tuning, and diagnostics

Overview

The new Agilent InfinityLab Pro iQ Series single quadrupole LC/SQ systems (6160B and 6170A LC/SQ) are made for routine mass confirmation applications requiring the highest analytical sensitivity possible with production-ready robustness. Impurities in your samples will not go undetected with the ultimate sensitivity.

The Pro iQ Series products enable improved mass-based fraction collection workflows. Improvements in the Pro iQ Series, including faster scan speeds and advanced quadrupole technologies enable you to collect the highest quality data, faster, thus streamlining and improving your workflows.

Getting your Pro iQ running is easily with the seamless integration of the InfinityLab Pro iQ with best-in-class Agilent Infinity III LC separation and Agilent OpenLab CDS. Intelligence features help you monitor and visualize the system for optimal performance and management of maintenance.



Agilent Pro iQ Plus Single Quadrupole LC/MS System

Agilent Pro iQ Series Single Quadrupole LC/MS System Key Features Explained

Superior Performance from Technology

The dual staged ion funnel captures more ions for ultra-high sensitivity. The innovative design also allows for good ion sampling at sub-millisecond dwell times without compromising on sensitivity or robustness.

AI-Powered SWARM Autotune

SWARM Autotune is an AI algorithm called Particle Swarm Optimization which varies multiple parameters at a time to obtain the best settings possible. Tuning the instrument in this way captures the cross-interactions between each component, reducing instrument-to-instrument variability, and providing the best overall system settings.

Early Maintenance Feedback (EMF) and Scheduled Tuning

EMF and Scheduled Tuning provide functions to ensure the instrument is in good operation all the time. EMF provides advanced warning to flag when/where the instrument needs maintenance. Scheduled tuning automates the autotune function so that the instrument is immediately ready prior to running samples.

Ideal for Biomolecular Analysis

Performance improvements enable users to generate the highest quality data even from the most challenging molecules including therapeutic oligonucleotides, peptides and monoclonal antibodies.

Key Benefits of Agilent Pro iQ Single Quadrupole LC/MS for Lab Personnel

Built for Your Lab

Obtain superior results with an LC-stackable instrument. Easy-to-use software requires minimal training. The Pro iQ meets the most demanding analytical needs with high performance at extended mass ranges to measure larger molecules including oligonucleotides, therapeutic peptides and monoclonal antibodies.

Instrument Intelligence

Instrument intelligence keeps instruments productive: instrument tuning can be automated to ensure that the instrument is in constant, good, working condition; while real-time early maintenance feedback will help the user anticipate when to expect down time.

Next-Generation Mass-Base Fraction Collection

Maximize application flexibility in a compact footprint to optimize bench space. Experience precise mass-selective fraction triggering for confident purification with the Pro iQ Plus

InfinityLab Assist

Interactive touchscreen displays system health monitoring. Users will get status and relevant data directly from the Pro iQ Series products on the Lab Assist

For more information visit www.agilent.com

This information is subject to change without notice.
© Agilent Technologies, Inc. 2025. Published in the USA, June 2025

