



Intelligent LC: Advanced control

Thermo Scientific Chromeleon 7.2 Chromatography Data System

Thermo Scientific™ Chromeleon™ 7 Chromatography Data System (CDS) software is recommended for control of Thermo Scientific LC instruments as it offers unique, smart features that deliver maximum ease of use, reliability, and performance.

We call this **Intelligent LC**.



Thermo Scientific™ Vanquish™ System

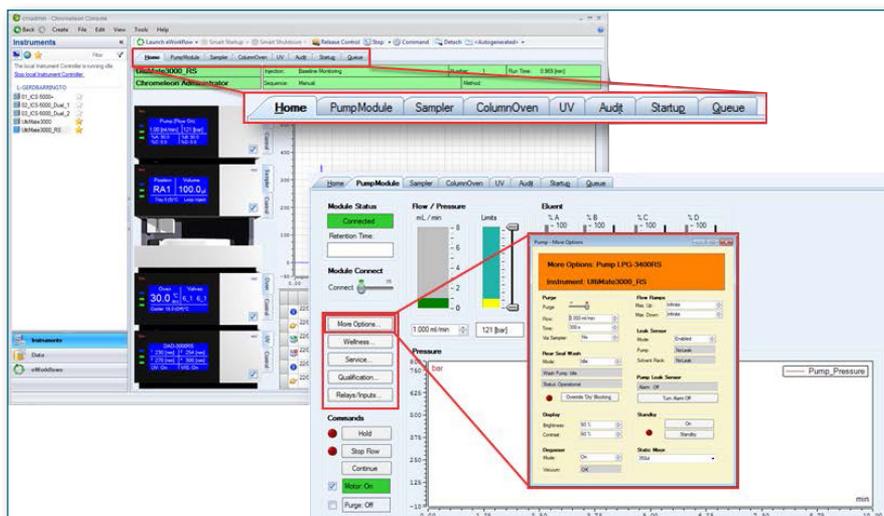


Thermo Scientific™
UltiMate™ 3000 System



Ease of use

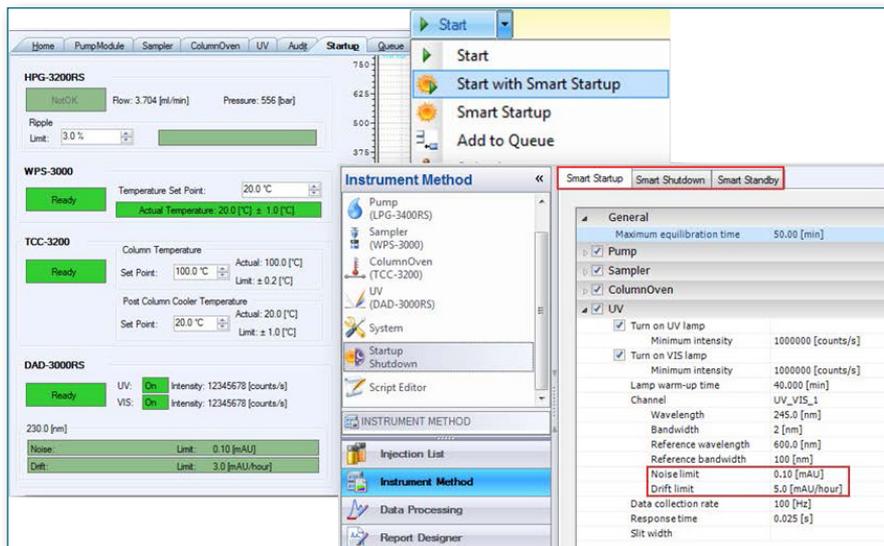
ePanels provide a clear visual of the module status with easy access to productivity controls. They also allow fast switching between different views enabling immediate visualization and direct control of the most important and commonly used parameters, which are conveniently grouped. Advanced commands are easily accessible via clearly labeled buttons making this an ideal system for new and advanced users.



Intuitive graphical control with ePanels

Reliability

Smart Startup initializes and equilibrates your instrument with the correct chromatographic conditions before the first injection begins, for safe, automated and unattended system startup. Smart Standby automatically sets the system into a standby state by lowering the flow and reducing the temperature of the modules or turning off lamps if required. Smart Shutdown safely shuts the system down at the end of the day. It can switch off the lamps, pump, and temperature controlled devices, as well as define a solvent gradient before the flow is switched off helping to prevent common user errors. Smart Startup, Standby, and Shutdown can be easily set in the Queue for automatic execution.

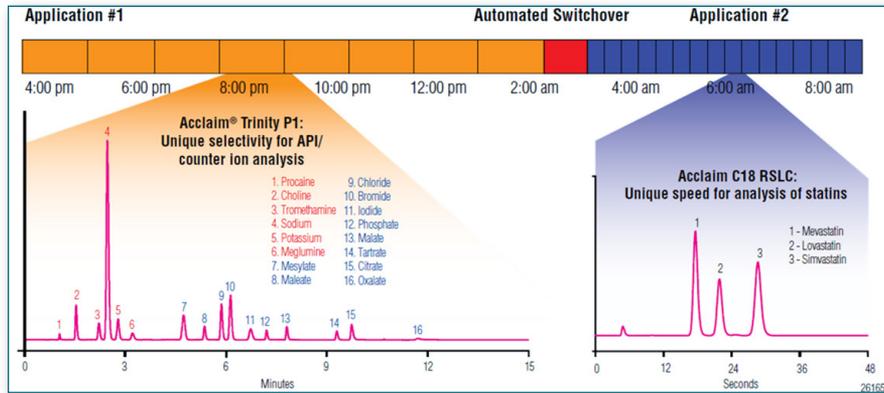


Smart Startup, Standby and Shutdown for safe system operation



Productivity

Smart Startup can be used to facilitate controlled and reliable switching to a different method at the end of the sequence, maximizing instrument utilization and uptime.



Smart Startup: Automated method switching



The Thermo Scientific™ Dionex™ DGP-3600RS combines two biocompatible UHPLC pumps in a single housing—perfect for method switching!

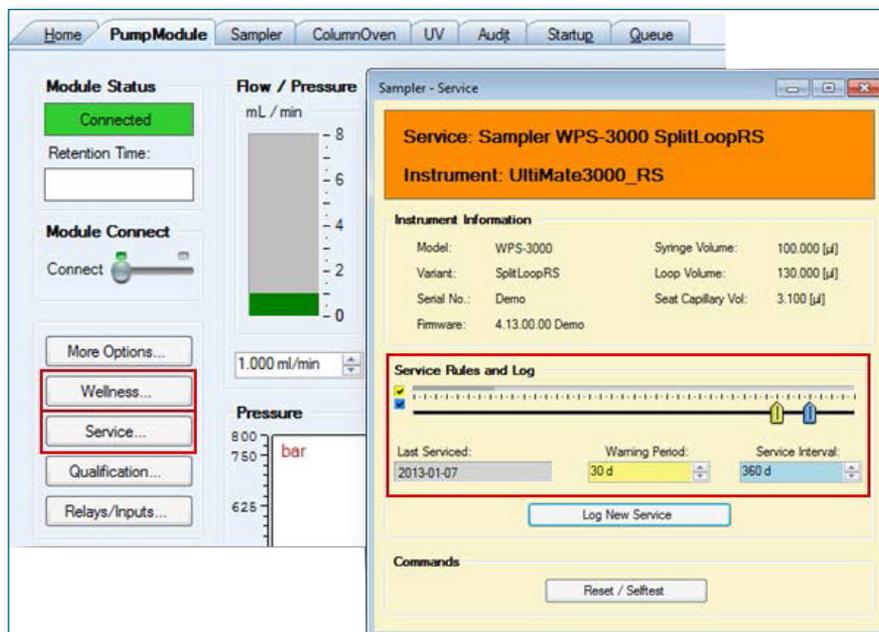
Compliance

Predictive performance

Predictive performance monitors for service and wellness are available through each device's ePanel. Each module has several counters to monitor the system performance. It's possible to set the following:

- Service interval and warning period
- Wear-part limit and warning limit

The wear-part wellness limits are predefined by Thermo Fisher Scientific engineers, and default values regularly updated based on field input. The performance data is stored in the module and not the software, ensuring data is always recorded and maintained even if the module is moved or exchanged, reinforcing compliance.

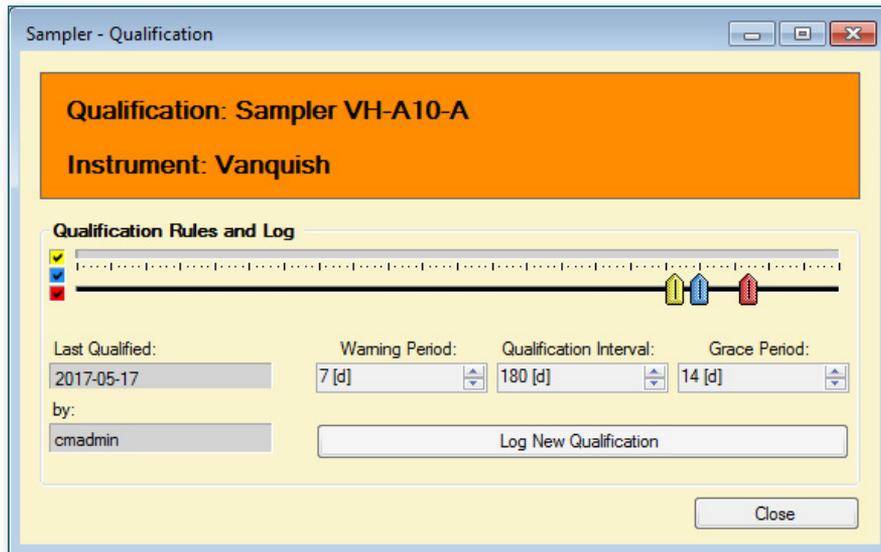


Predictive performance monitors for wear parts and service interval



Qualification status monitoring

Qualification monitors track the qualification status of each module with a definable qualification interval. The system will notify the user of an impending qualification, allowing the user to effectively schedule the workload and improve instrument utilization. You can also prevent users from working with a module or system that is out of qualification, thereby ensuring regulatory compliance.

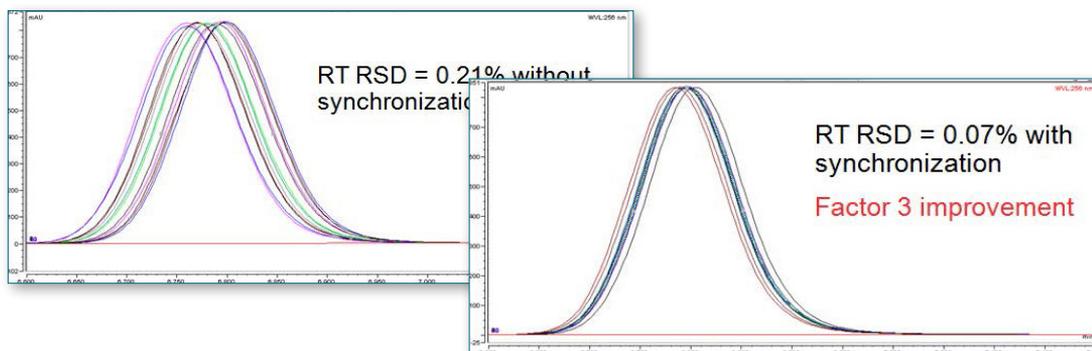


Qualification status monitoring ensures compliance

Performance

Injection synchronization

With low-pressure gradient (LPG) pumps, retention time reproducibility can be compromised when running gradient elutions due to inconsistent injection time during the pump piston cycle causing small but significant variations in the gradient formation. With Chromeleon CDS and Thermo Scientific LPG pumps, the injection is automatically synchronized with the pump cycle to achieve a consistent piston position. This results in higher retention time reproducibility when running gradients, improving system performance.

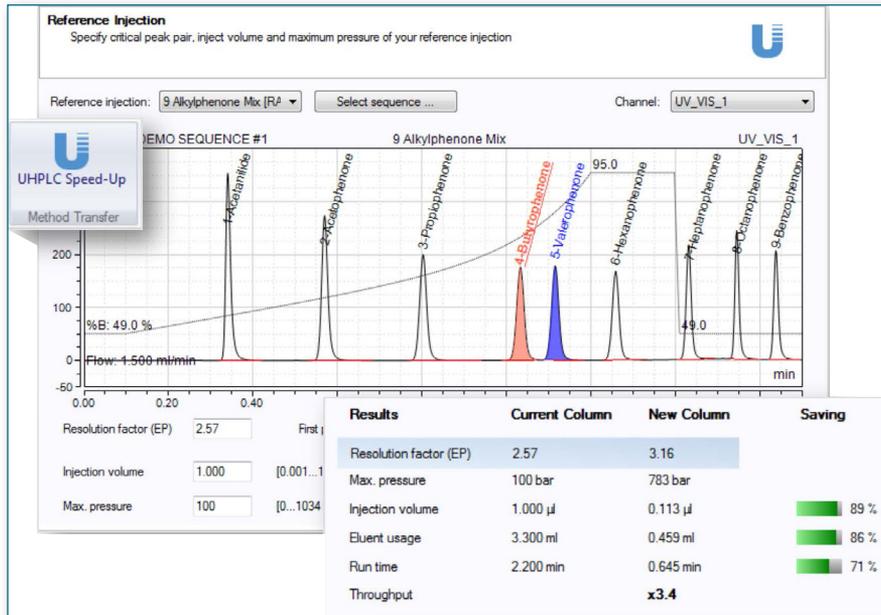


The Vanquish Flex LPG pump ensures excellent flow and gradient precision



UHPLC Method Speed-Up Wizard

The UHPLC speed-up wizard enables method transfer from regular HPLC to UHPLC instruments. It calculates the required settings to adapt parameters, such as flow rate, injection volume, gradient profile, or pressure limits to a new column's characteristics. In addition, the wizard predicts the resultant baseline resolution, warns the user to check system/column pressure limits and calculates the expected savings for eluent, analysis time, and sample required, allowing you to take full advantage of the instrument's UHPLC capabilities.



UHPLC method speed-up wizard simplifies method optimization and transfer.

Find out more at thermofisher.com/chromeleon

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