

HPLC-to-UHPLC method modernization plans

Modernize your routine HPLC methods with trusted UHPLC performance. Our fully integrated portfolio of instruments, software, and consumables works together as a comprehensive solution, supporting straightforward method transfer, compliant performance, and long-term productivity.

Thermo Scientific™ Vanquish™ Flex UHPLC system + current Chromatography Data System (CDS)	Thermo Scientific Vanquish Flex UHPLC system + Thermo Scientific™ Chromeleon™ CDS Enterprise	Thermo Scientific™ Vanquish™ Flex Duo UHPLC system + Chromeleon CDS Enterprise
Includes - Flexible UHPLC platform - Precise gradient delivery & temperature control - Strong solvent loop - Third-party CDS compatibility	- Everything in the Vanquish Flex UHPLC system - Chromeleon CDS Enterprise - Intelligent run control & eWorkflow procedure standardization - Preventive maintenance & diagnostics - Spreadsheet-based reporting engine - Network failure protection	- Everything in the Vanquish Flex UHPLC system + Chromeleon CDS Enterprise - Dual LC channels - Parallel method capability - Expandability through options
Supports - Straightforward, compliant HPLC-to-UHPLC transition - USP <621> column flexibility - Existing CDS workflows - Solvent-saving capabilities	- Easy onboarding with an intuitive user interface - Standardized method execution across analysts - Protected system suitability without modifying validated chromatographic conditions - Reduced reruns through intelligent automation - Strengthened data integrity & audit readiness	- Parallel method execution on a single platform - Increased daily sample throughput - Reduced instrument footprint & operational complexity - Scalable, enterprise-wide workflow standardization
Fit for Routine labs needing to modernize established methods	Routine labs struggling to manage sample costs, volumes, or lean operation models	Multi-site operational labs prioritizing compliance harmonization & workflow standardization

Plan summary and comparison

	Vanquish Flex UHPLC system + current CDS	Vanquish Flex UHPLC system + Chromeleon CDS Enterprise	Vanquish Flex Duo UHPLC system + Chromeleon CDS Enterprise
UHPLC modernization	✓	✓	✓
Workflow automation	—	✓	✓
Dual-channel throughput	—	—	✓

Overview of the Vanquish Flex UHPLC system and Chromeleon CDS Enterprise solutions that support confident, compliant method transitions

Thermo Scientific™ Vanquish™ Flex Quaternary UHPLC systems

Vanquish Flex UHPLC instruments are compatible with third-party CDS programs and support straightforward and compliant method transfers under USP <621>.

Instrument



System Base Vanquish Flex UHPLC system

Includes Thermo Scientific™ Viper™ TQ UHPLC fittings and active pre-heater TQ for leak-free, confident connections.

[View](#)

Thermo Scientific™ Vanquish™ Quaternary Pump F

Unique flow technology drives flow and gradient precision independent of eluent composition.

[View](#)

Thermo Scientific™ Vanquish™ Split Sampler FT

Precise sample dosing supports confidence in peak identification and quantitation.

[View](#)

Thermo Scientific™ Vanquish™ Column Compartment H

Two eluent pre-heating and two column thermostating modes provide reliable matching of the eluent and column temperature.

[View](#)

Detectors



Thermo Scientific™ Vanquish™ Charged Aerosol Detector (CAD) P Series

Near-universal detection. Wide linear and dynamic range. Ideal for compounds that lack chromophores or can't form gas phase ions. Allows for standard-free quantitation.

[View](#)

Thermo Scientific™ Vanquish™ Diode Array Detectors and Multiple Wavelength Detectors

Excellent linearity. Optimized noise performance. Allow detection of highly concentrated main compounds alongside trace-level impurities.

[View](#)

Thermo Scientific™ Vanquish™ Fluorescence Detectors

High precision and sensitivity. Deliver trace-level detection with effective stray light suppression and temperature-controlled flow cells.

[View](#)

“By dramatically reducing analytical time and minimizing solvent use, the Thermo Scientific Vanquish Flex UHPLC sets a new standard for efficiency, sustainability, and safety in the lab.”

Xavier Lelièvre

Head of Quality, Opella Healthcare

Columns and vials



Thermo Scientific™ Accucore™ C18 HPLC Columns

The specially designed solid core supports a broad range of nonpolar analytes across multiple applications.

[View](#)



Thermo Scientific™ Hypersil GOLD™ C18 Selectivity HPLC Columns

Endcapped, ultrapure, silica-based columns generate exceptional peak shape and resolution.

[View](#)



Level 3 Thermo Scientific™ SureSTART™ 2 mL Glass Screw Top Vials

Contain the lowest levels of extractable metals and leachables for consistent, reproducible sensitivity and selectivity.

[View](#)



Level 3 Thermo Scientific™ SureSTART™ 9 mm Screw Caps

Help prevent under- and over-sealing, reduce solvent evaporation, and create fewer autosampler interruptions. Excellent alternative to bonded caps for cleaner spectra.

[View](#)

Add-ons



Thermo Scientific™ Vanquish™ User Interface

Increases productivity with at-instrument control, scripts, and system preparation capabilities.

[View](#)



Thermo Scientific™ Vanquish™ Sample Hub

Allows you to add 12 sample racks or deep well plates or 23 shallow well plates.

[View](#)



Thermo Scientific™ Vanquish™ Solvent Monitor

Helps prevent dry runs and waste spillage.

[View](#)



Strong solvent loop

Helps ensure consistent, reproducible data by eliminating strong solvent effects during method transfer.

[View](#)



Chromeleon CDS Enterprise

Throughout the data lifecycle, **Chromeleon CDS Enterprise** provides regulated labs with a comprehensive solution for maintaining data integrity and meeting 21 CFR Part 11 electronic signature requirements with confidence.

Spreadsheet reporting

Customizable, easy-to-learn tools allow for efficient, compliant chromatography reporting.

Network-failure protection

Caches all files locally, helping ensure continuous operation and prevent data loss.

Needle wash solvent monitoring

A machine-learning diagnostics tool that warns you about insufficient wash volumes.

eWorkflow procedures

Allows for automated method setup, standardized procedures, and improved data integrity.

Vial bottom detection

Virtually full aspiration helps maximize use of low recovery samples.

Inverse gradient set-up wizard

For use only with CAD during gradient runs and standard-free quantitation.

Intelligent run control

Enables instruments to automatically respond by either proceeding with the next injection, re-injecting the current solution, or aborting the sequence.

Custom injection programs

Provides the ability to prevent peak distortions and improve certain system suitability parameters of a validated method without modifying chromatographic conditions.

Preventive maintenance parameters

Safeguards data quality through proactive system maintenance monitoring.

Automatic pump purging via the autosampler

Eliminates air bubbles in eluent lines and accelerates solvent changes with automated pump purging control for fast equilibration and reproducible results.

 Request a quote or connect with a technical specialist at thermofisher.com/hplcquote