## Thermo Scientific Vanquish – Split Sampler HT

Better separations, more results, easier interaction

Thermo Scientific™ Vanquish™ UHPLC system is designed to offer:

- **Better separations** with the power of the system to unveil more compounds than ever before
- More results with throughput, speed and sample capacity to boost workflow productivity
- Easier interaction to make the system a joy to work with

The Vanquish UHPLC system is designed to be an integrated UHPLC system, where the sampler handles the analytes with more accuracy.



## Sample Injection for Highest Confidence in Peak Identification

and Quantification

The Vanquish UHPLC system combines maximum injection precision with huge sample capacity and high-throughput capabilities. The fully biocompatible fluidics are consequently optimized for the highest ruggedness and uptime, even under the toughest system pressure and eluent conditions.

- Rely on your results thanks to unsurpassed sample dosage precision
- Take advantage of maximum sample integrity by innovative air stream cooling, even in challenging environments
- Enjoy incredibly easy method transfer and unlimited application flexibility by using customizable gradient delay volume
- Forget about tedious sample configuration thanks to an automated barcode reader



PRODUCT SPECIFICATIONS				
Specification	Value			
Operating Principle	Split loop injection			
Pressure Range	5–151 MPa, (50–1517 bar, 700–22,000 psi)			
Injection Volume Range	0.01–25 μL, min. step = 0.01 μL; Optional: 0.01–100 μL			
Injection Volume Accuracy	Typically ±0.5% for 10 μL water			
Injection Volume Precision	<0.25% area RSD for 1 $\mu$ L (caffeine in water) Typically <0.5% area RSD for 0.5 $\mu$ L (caffeine in water)			
Injection Linearity	r>0.9999 (caffeine in water)			
Injection Cycle Time	$<$ 15 s for 5 $\mu L$ depending on settable injection parameters independent from sample position			
Minimum Sample Required	2 μL at 1 μL injection volume			
Carry Over (UV)	<0.004% with Chlorhexidine; <0.0004% with caffeine (typically)			
Needle Wash (external)	1 solvent, dip rinse and continuous rinse			
Sample Compartment Temperature Range	4–40 °C (≥23 K below ambient at <80% RH)			
Sample Temperature Accuracy	-2 °C/+4 °C			
Sample Temperature Stability	±1 °C			
Sample Capacity	Any four of the following (SBS footprint)  • $54 \times 12 \text{ mm OD vials } (\leq 1.5 \text{ mL})$ • $24 \times 15 \text{ mm OD vials } (\leq 4 \text{ mL})$ • Well plates (96 and 384, deep and shallow)  + capacity of 12 22.5 mm OD vials ( $\leq 10 \text{ mL}$ ) in the carousel			
Automation Features	Barcode reading:  • Empty segment detection  • Rack/well plate verification  • Inventory management			
GLP	Predictive Performance functions for scheduling maintenance procedures based on the actual operating and usage conditions of the autosampler. All system parameters logged in the Thermo Scientific™ Dionex™ Chromeleon™ Chromatography Data System Audit Trail.			
PC Connection	USB 2.0; 3-port-HUB to connect further Vanquish modules			
I/O Interfaces	$2 \times 6$ pin Mini-DIN connectors each having functionality: 1 input, 1 relay out			
Safety Features	Leak detection and safe leak handling			
Wetted Parts	Titanium, zirconium oxide (ZrO <sub>2</sub> ), sapphire, aluminum oxide (Al <sub>2</sub> O <sub>3</sub> ), PEEK, PTFE, ECTFE, FE UHMW polyethylene, perfluoro-elastomer, amorphous fluoropolymer (AF)			
Biocompatible	Yes, pH range 2–12, buffer and/or chloride concentration up to 1 mol/L			
Power Requirements	100-240 V AC, 50/60 Hz, max. 520 W/550 VA			
Environmental Conditions	5-35 °C; 20-80% RH (non condensing)			
Dimensions $(h \times w \times d)$	290 mm × 420 mm × 620 mm (11.4 in. × 16.5 in. × 24.4 in.)			
Weight	25 kg (55.1 lbs)			

## **ORDERING INFORMATION**

Description	Part Number	Description	Part Number
Vanquish Split Sampler HT	VH-A10-A	Sample loop, 100 μL	6850.1913
Sample loop, 10 μL	6850.1915	Sample rack, 54 pos, 12 mm OD vials	6850.1023
Sample loop, 25 µL (default)	6850.1911	Sample rack, 96 pos, 6 mm OD vials	6850.1026

To order in the U.S., call 1-800-346-6390, or contact the Thermo Fisher Scientific office nearest you. Outside the U.S., order through your local Thermo Fisher Scientific office or distributor. Refer to the following part numbers.

## www.thermoscientific.com/chromatography

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