

## HPLC &amp; UHPLC

# Vanquish Charged Aerosol Detectors

## LC that takes your productivity to new heights

### Vanquish platform benefits

- Precision and reproducibility to meet every application demand
- High detector sensitivity and low baseline noise
- Reduced maintenance, easier setup with Thermo Scientific™ Viper™ Fingertight Fittings
- Seamless integrated solutions for comprehensive analyte detection

### Keywords

Vanquish Horizon, Vanquish Flex, Vanquish Core, Vanquish Duo, HPLC, UHPLC, Vanquish Charged Aerosol Detector F, Vanquish Charged Aerosol Detector H, Inverse Gradient

### Discover what you're missing

Thermo Scientific™ Vanquish™ Charged Aerosol Detectors change the way you view every sample and open new opportunities for discovery and routine analysis. They deliver the flexibility and performance required for analytical R&D and the simplicity and reproducibility needed for manufacturing QA/QC.

- Estimate relative amounts even without standards by utilizing consistent detector response for all non-volatile compounds independent of chemical structure
- Excellent application flexibility is achieved with adjustable evaporation temperature for improved analyte response
- The FocusJet concentric nebulizer ensures compatibility with analytical HPLC, UHPLC and microflow LC without any hardware changes
- The Vanquish Charged Aerosol Detector H offers versatility for research and method development while the Vanquish Charged Aerosol Detector F provides a robust feature set for everyday analysis
- Regardless of configuration, Vanquish Charged Aerosol Detectors provide a highly integrated solution with optimized fluidic connections and single-point intelligent control through Thermo Scientific™ Chromeleon™ Chromatography Data System (CDS) software



## Specifications

	Vanquish Charged Aerosol Detector H	Vanquish Charged Aerosol Detector F
Operating mode	Charged aerosol detection	
Nebulization	FocusJet concentric flow design	
Mobile phase flow rate	0.01–2.0 mL/min	0.2–2.0 mL/min
Evaporation temperature	Settable range: Ambient +5 to +100 °C	Select: 35, 50, 70 °C
Maximum data collection	200 Hz	100 Hz
Dynamic range	Up to 4 orders of magnitude	
Filter time constant	4th order low-pass Bessel digital with time constant based user selections: 0.1, 0.2, 0.5, 1.0, 2.0, 3.6, 5.0, 10.0 s	
Inert gas supply	Nitrogen (recommended) or compressed air Inlet Pressure: 482–551 kPa (4.8–5.5 bar, 70–80 psi)	
Gas consumption	Typically ≤4 L/min	
Internal gas pressure	Electronically controlled pressure regulation system	
GLP features	Predictive performance functions: gas filter change interval, service monitoring period, system parameters logged in the Thermo Scientific™ Chromeleon™ Chromatography Data System (CDS) audit trail	
PC connections	USB 2.0; 3-port-HUB to connect further Vanquish modules	
Analog signal output	0–1 V DC with full scale output range: 1 pA to 500 pA in 1-2-5 sequence (installable option)	
Safety features	Power-up diagnostics, inlet gas over-pressure relief, detection of high evaporation temperature, pump flow shutdown, fluid leak detection and safe leak handling	
Wetted parts	Stainless steel (type 316), Nitronic® 60 stainless steel, PEEK™, Simriz®, fused silica	
Biocompatible	No	
Normal-Phase compatible	Yes, without hardware modifications	
Power requirements	100/240 VAC, 50/60 Hz, max. 150 W/255 VA	
Environmental conditions	Operation: 5–35 °C; 20–80% RH (non condensing), max. 2000 m above sea-level, Storage: -20–45 °C max. 60% RH (non condensing)	
Dimensions (h × w × d)	192 × 420 × 620 mm (7.6 × 16.5 × 24.4 in.)	
Weight	17.5 kg (38.6 lbs.)	

## Ordering information

Description	Part number
Vanquish Charged Aerosol Detector H	VH-D20-A
Vanquish Charged Aerosol Detector F	VF-D20-A
<b>Accessories</b>	
Corona Nitrogen 1010 Generator Installation kit included (compressed air inlet source required: 760 kPa, 110 psi).	6295.0200
Corona Air Compressor 230 V Oil-free air compressor for pairing with 6295.0200 above. Installation kit included.	6295.0300
Corona Air Compressor 110 V Oil-free air compressor for pairing with 6295.0200 above. Installation kit included.	6295.0350

 Learn more at [thermofisher.com/CAD](https://www.thermofisher.com/CAD)

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