



Vanquish Charged Aerosol Detectors

The collective power of chromatography

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 set-up 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™ CDS (chromatography data system) software.

Product specification

	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 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	
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 x w x d)	192 x 420 x 620 mm (7.6 x 16.5 x 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
Accessories	
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

Find out more at thermofisher.com/CAD

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