ChromGas H2F

Hydrogen Generators for Gas Chromatography



Parker's ChromGas H2F hydrogen gas generators provide an optimal blend of safety, reliability, and performance. They employ proven Proton Exchange Membrane (PEM) cell technology to generate high-purity hydrogen on-demand from deionized water and electricity, maintaining low pressure and minimal stored volume. Advanced desiccant filtration ensures the gas stays dry, improving the performance, sensitivity and reliability of the detector.

ChromGas H2F generators supply fuel gas to all widely used Gas Chromatography (GC) flame detectors in modern laboratory workflows. These generators come in four models with flow rates ranging from 100ml/min to 510ml/min, capable of serving multiple detectors simultaneously and accommodating the unique needs of each Parker customer. Moreover, they can double as a source of collision gas for Inductively Coupled Plasma Mass Spectrometry (ICP-MS) applications.

ChromGas H2F maintains the consistent stackable design and compact size that characterizes the entire ChromGas series, ensuring effortless integration with other ChromGas units and freeing up valuable lab space.

Our cutting-edge control system enhances user-friendliness, offering unparalleled operational safety and dependability. With the optional Remote Monitoring Module, users gain the ability to visually oversee and manage their ChromGas H2F generators from a central computer. Alarm outputs sent to a centralized computer can help to minimize downtime, while remote access to status indicators and real-time operating data have been shown to improve lab efficiency and productivity.



Product Features:

- Eliminate dangerous hydrogen cylinders from the work place
- Simple to install and operate
- Compact, reliable with minimal maintenance
- Produces a continuous supply of 99.9995% pure hydrogen at up to 100 psi (6.9 bar)
- 3 year standard cell warranty
- Optional automatic water fill and remote networking capability
- Stackable with other ChromGas products
- Exceeds NFPA 50A and OSHA 1910.103 regulations
- Meets CSA, UL, CE and UKCA



Product Selection

Model	Flow Rate	Purity*	Water Consumption (24/7, full flow) Delivery Pressur		very Pressure	Optional Auto	
	ml/min	%	L/week	bar g	psi g	Water Fill (AWF)	
H2F-100	100	>99.9995	.75	0.3-6.89	5-100	YES	
H2F-165	165	>99.9995	1.25	0.3-6.89	5-100	YES	
H2F-260	260	>99.9995	2	0.3-6.89	5-100	YES	
H2F-510	510	>99.9995	4	0.3-6.89	5-100	YES	

^{*}With respect to oxygen | Note: For auto water fill option add suffix "AWF"

Technical Data

Ambient Temperature Range	41 - 104°F (5 - 40°C)		
Water Supply Pressure*	<60 psi g (<4.1 bar g)		
Water Quality	Deionized. ASTM II, >1M $\Omega,$ <1 $\mu s,$ filtered to <100 μm		
Supply Voltage Range	100-230V 50/60 Hz		
Port Connections Hydrogen Outlet Water Drain Water Fill*	½" Compression Fitting Quick Release Push in Fitting Quick Release Push in Fitting		

 $^{^{\}star}$ Required optional AWF. Water bottle can be gravity fed by a suitable deionized water source.

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight (Empty)		Weight (Full of Water)	
	mm	in	mm	in	mm	in	kg	lb	kg	lb
H2F-100	435	17.1	342	13.5	457	18	19	41.9	23	50.7
H2F-165	435	17.1	342	13.5	457	18	19	41.9	23	50.7
H2F-260	435	17.1	342	13.5	457	18	19	41.9	23	50.7
H2F-510	435	17.1	342	13.5	457	18	19	41.9	23	50.7

Preventative Maintenance

Preventative Maintenance Kit	Part Number	Kit Contents	
Replacement Desiccant Cartridge (as required*)	MKH2F-D	Desiccant Cartridge, Cartridge Spanner	
6 month kit	MKH2F-6M	Deionizer Cartridge, Water Filter, Environmental Filters (2x), Filter Replacement Tool	
24 month kit	MKH2F-24M	Deionizer Cartridge, Water Filter, Environmental Filters (2x), Filter Replacement Tool, Float, Water Pump, Desiccant Cartridge, Cartridge Spanner, Service Reset Dongle, 1/4" Tygon Tube	

^{*2}H2F-100 & H2F-165 - Continuous operation approx 6 to 7 months | *H2F-260 - Continuous operation approx 4 to 5 months | *H2F-510 - Continuous operation approx 2 to 3 months

Optional Extras

Description	Part Number	Required for		
Remote Monitoring Module	604970903	Remote Monitoring, Remote Alarm, Remote Control		





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