



HYDROGEN GENERATORS

NM PLUS FID STATION SERIES

The space-saving **PG Plus FID Station Hydrogen Generator** uses the latest proton exchange membrane (PEM) technology to produce pure hydrogen.

Deionized water is automatically loaded from smart internal system tanks with a 7 liter capacity, providing up to 7000 liters of H₂ before refill is required. The horizontal format is designed to sit under and support the weight of your GC, optimizing bench space. At only 17 cm high, the generator will still allow easy access to the injectors of any GC on the market.

SUITABLE FOR

- ✓ Gas Analyzer
- ✓ Carrier Gas for GC and Fast GC
- ✓ Auxiliary gas for FID/FPD
- ✓ Sulphur Analyzer
- ✓ Hydrocarbon Analyzer

CASCADING

The ability to "cascade", or install several hydrogen generators in parallel, provides:

- ✓ Higher flow rates
- ✓ Automatic flow compensation in the event of unplanned downtime
- ✓ Continuous operation for critical applications

IMPROVED SAFETY

The very limited internal volume (less than 50ml) allows safe use of the gas generators where the use of cylinders is risky or prohibited. The application of tested safety technologies stops the unit in the event of leaks or malfunctions.

SAVING

Hydrogen gas generators avoid the need for expensive installation of gas pipelines from the cylinder storerooms to the labs, as well as the

NM Plus FID STATION Series FEATURES

- ✓ **1.8 or 5 l/min Zero Air flow rate**
- ✓ **Unique Full titanium electrolytic cell**
- ✓ PEM Technology (no caustic solution) -
- ✓ PURITY: 99.99996%
- ✓ Pressure up to 11 bar (160 psig)
- ✓ Unique drying system
- ✓ **NO desiccant cartridges required**
- ✓ Optimized powerful water pump for PEM cell
- ✓ Low energy consumption
- ✓ Software upgrade by standard USB
- ✓ Full microprocessor control
- ✓ LCD touch screen interface or push buttons
- ✓ Real time outlet pressure
- ✓ Water level and quality sensors - Autodiagnostics with alarms
- ✓ H₂ leak detector
- ✓ Shock sensor

OPERATING PRINCIPLE

Hydrogen is produced by forcing distilled or deionized water through a sophisticated fuel cell designed and made by VICI AG Swiss. Electrolytic dissociation separates the water into its two main components: hydrogen ready for analytical use, and oxygen that is released into the air. **NO ACID NO ALKALINE SOLUTIONS** are used in the hydrogen generation cycle. The automatic drying system ensures the maximum grade of hydrogen purity.



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Specification PG Plus FID STATION Series

Models	PG-100 PLUS	PG-250 PLUS
Flow ml/min.	100	250
Weight (kg)	39	39
Power consumption Watts	65	115
Technology	Proton exchange membrane (PEM)	
Cell type	Full titanium	
Dryer system	Regenerative Permeation Membrane	
Purity	>99.9996%	
Dew Point a 7 bar	-25° C	
Outlet pressure	7-160 psi / 0.5-11 bar	
H2 Internal volume	< 50 ml at max pressure	
Internal water tank	7.0 lt	
Cascading	up to 32 units	
Display	Operating parameters, system status, alarms and touch screen	
LED indicators	Power on / off, system ready, errors	
Interface	USB mod. A	
Water quality	Deionized or demineralized (<10µS/cm)	
Power	110-120V 60Hz / 220-240V 50Hz	
Load capacity	80 Kg	
Product Dimensions (mm)	690W x 150H x 680D	
Shipping Dimension (mm)	890W x 385H x 800D Weight 45 Kg	
Outlet Connections	1/8" Compression	
Safety	Automatic shut down- pressure drop, overpressure, low water	
Certification	CE, MET, FCC	

The **PG Plus FID STATION Series** is supplied with Zero Air Generator inside at two different flow rate: **Zero Air 1.8 l/min or 5 l/min**

The following options are available:

- I/O board
- Remote control software (RS232 or USB)
- Cascading hardware
- Autorefill
- H2 Sensor

Specification NM Plus FID STATION Series

Models	NM-100 PLUS	NM-300 PLUS	NM-600 PLUS	NM-1000 PLUS
Flow ml/min.	100	300	600	1000
Weight (kg)	41	42	43	44
Power consumption Watts	90	150	300	400
Technology	Proton exchange membrane (PEM)			
Cell type	Full titanium			
Dryer system	No maintenance cold dual dynamic regeneration system			
Purity	>99.99996%			
Dew Point a 7 bar	-73° C			
Outlet pressure	7-160 psi / 0.5-11 bar			
H2 Internal volume	< 50 ml at max pressure			
Internal water tank	7.0 lt			
Cascading	up to 32 units			
Display	Operating parameters, system status, alarms and touch screen			
LED indicators	Power on / off, system ready, errors			
Interface	USB mod. A			
Water quality	Deionized or demineralized (<10µS/cm)			
Power	110-120V 60Hz / 220-240V 50Hz			
Load capacity	80 Kg			
Product Dimensions (mm)	690W x 150H x 680D			
Shipping Dimension (mm)	890W x 385H x 800D Weight 50 Kg			
Operating Temperature	15 to 35° C			
Outlet Connections	1/8" Compression			
Safety	Automatic shut down- pressure drop, overpressure, low water			
Certification	CE, MET, FCC			

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