

NM-Plus H₂ Generator

Description

NEW PRODUCT !

The **NM-Plus** employ the newest PEM membrane technology available for electrolytic production of pure hydrogen, including exclusive no-maintenance PSA auto-drying technology and cascading capabilities. Only pure water, distilled or deionized, is required to provide trouble free long-term operation.

The small contained volume (<40ml) makes the NM-Plus safe for operation in spaces where hydrogen cylinders are restricted. An auto shut off procedure places the unit in standby in the event of an internal error, and selectable alarms inform the user whenever operating conditions vary from the set point.

Functioning principle:

The internal long life pump forces the distilled water to flow from the internal water tank to the PEM electrolysis cell. The humid hydrogen goes through the membrane and is first dried by the gas liquid separator and then by PSA (Pressure Swing absorption). Then the hydrogen pressure level is measured and regulated at a constant set pressure (11 bar) by a feedback of current to the cell. Dried hydrogen is going then through a no-maintenance high performance purification module, based on PSA principle. The final pressure is regulated by a proportional valve.

An automatic refill kit is available for longer autonomy of the instrument.



- ☒ **LCD Touch screen interface**
- ☒ **Smart water circulation on NM-1000**
- ☒ **Earthquake / shock sensor**
- ☒ **No Maintenance**
- ☒ **No Caustic solution**
- ☒ **Exclusive cold dryer technology**
- ☒ **Purity 99.9999%**

Applications

The **NM-Plus** is ideale for operation with gas analyzers, as fuel gas for flame tools, for all kind of carrier gas application, like GC and GC-MS (Mass Spectrometry), or as a source of pure hydrogen in plasma chambers and other isolated environments.

Using H₂ as carrier gas will give you:

- better resolution
- higher peaks
- faster analysis time

**Best H₂ Generator for
carrier gas application**

Other hydrogen application are for:

- carrier gas for GC-FID / GC-NPD / GC-TCD
- fuel gas for GC-FID / GC_FPD / THC / sulphur analysers
- reaction gas GC-ELCD / GC-HALL
- hydrogenization process



Specifications

Hydrogen purity :	99.9999%
Electrolysis cell :	Solid Polymer Membrane type (PEM)
Auto drying system :	No maintenance system (exclusive design)
Delivery pressure :	20 – 155 psig / 1.4 – 11 barg (11,8 internal)
Fitting :	1/8" for the H2 outlet
Safety :	Auto shut-off / low internal volume of H2 (< 40 ml)
User interface :	Set points, system status, user parameter / touch screen / LCD graphic display
Remote command :	RS232/485 as option
Cascading :	Up to 10 units (if the option is installed)
Water :	Deionized or distilled < 10 uS conductivity
Dimensions :	23x49x36 cm (W x H X D)
Weight:	25 Kg
Shipping dimensions :	40x58x57 cm (W x H X D)
Shipping weight:	35 Kg
Power requirements :	230V/50-60Hz - 110V/60Hz – 100V/60Hz

Options – Accessories – Spare parts

NM-Plus article numbers : 6800 50 AAA . B

AAA = flow rate	B = Voltage
010 = 100 Nml/min	1 = Voltage 230V/50-60Hz
016 = 160 Nml/min	2 = Voltage 110V/60Hz
025 = 250 Nml/min	3 = Voltage 100V/60Hz
030 = 300 Nml/min	
050 = 500 Nml/min	
060 = 600 Nml/min	
100 = 1000 Nml/min	

Example : 6900 50 010.1 = NM-Plus 100Nml/min, voltage 230V/50-60Hz

Options:

6800 52 001	I/O board (including cascading capabilities & RS232/485)
6800 52 002	PC Software (require I/O Board)
6900 52 003.1	Autorefill kit (including Pump, external water compressor, fluidic & electrical connections)

Consumables:

6700 21 762	Deionizer LE bag (incl. 2 standard bags)
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