

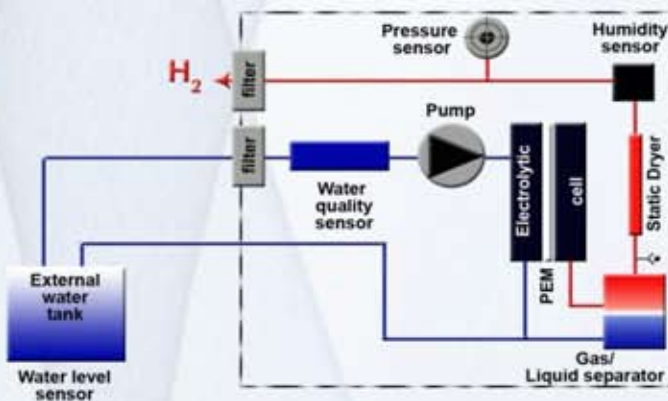
H₂ FID

HYDROGEN GENERATOR

The **H2-FID** Hydrogen Gas Generators employ the latest PEM membrane technology available for electrolytic production of pure hydrogen gas, including a static drying system and cascading capabilities. Only pure water, either distilled or deionized, is required to provide trouble free long-term operation. The small contained volume (<40 ml) makes the **H2-FID** safe for operation in spaces where hydrogen cylinders are restricted or are restricted. An auto shut off procedure places the unit in standby in the event of an internal error, and selectable alarms allow the user to be informed whenever operating conditions vary from the set point. No caustic solution is needed. The log file can easily be downloaded to a PC via the USB interface to make the traceability and diagnostics more efficient. The no maintenance static dryer has replaced the Molecular Sieve one, making the **H2-FID** a **Non Maintenance** Hydrogen generator.



! No Maintenance !



Functioning principle:

The internal long life pump forces the distilled water to flow from the external water tank to the PEM electrolysis cell; mixed with Oxygen, a by-product of electrolysis, the water returns to the tank. On the way to the cell, the water is filtered, deionized through a special cartridge and its conductivity is measured. The humid hydrogen goes through the membrane and is first dried by the gas liquid separator and then by a static Dryer (No maintenance). Then the hydrogen' pressure level is measured and regulated at the set pressure by a feedback of current to the cell.

THE APPLICATIONS

LABORATORY

The H2-FID is ideal for operation with gas analyzers, as fuel gas for flame ionization detectors (FID)

Due to its very small size and its non maintenance drying system, the H2-FID is the preferred source of Hydrogen fuel gas for GC and FID analysers. With its low Hydrocarbon contents (less than 0.1 ppm) the H2-FID will give excellent and stable base lines to any chromatograph on the market.

Applications are Fuel Gas Hydrogen for :

- GC-FID
- GC-FPD
- THC
- Sulfur Analyzers



SPECIFICATIONS

H2-FID-100 Flowrate : 100 ml/min
H2-FID-160 Flowrate : 160 ml/min
H2-FID-250 Flowrate : 250 ml/min

H2-FID-400 Flowrate : 400 ml/min
H2-FID-500 Flowrate : 500 ml/min
H2-FID-700 Flowrate : 700 ml/min
H2-FID-900 Flowrate : 900 ml/min

Hydrogen purity : Hydrocarbon free < 0.1 ppm
 Electrolysis cell: Solid Polymer Membrane type (PEM)
 Drying system: Static dryer (No maintenance)
 Delivery pressure: 20 - 155 psig / 1.4 - 10.5 barg
 Safety: Auto shut-off / low internal volume of H2 gas (< 40 ml)
 User interface: Set points, system status, user parameter / Touch screen / LCD graphic display
 Remote command: USB / download of the logfile possible
 Cascading: up to 10 units (if the option is installed)
 Water: Deionized or distilled < 10 uS conductivity
 Dimensions [cm] : 16x35x25 (WxDxH) (without external water tank)
 Shipping Dim [cm] : 41x51x36 (WxDxH)
 Power requirements: 230V/50Hz - 230V/60Hz - 115V/60Hz - 100V/60Hz

H2 flow rate [Nml/min] (max):	100	160	250	400	500	700	900
Net weight [kg]	11	11	11	13	13	15	17
Shipping weight [kg]	15	15	15	17	17	19	21
Power consumption [Watt]:	100	150	200	240	260	375	460

ARTICLES, OPTIONS AND SPARE PARTS

6710 01 01X H2-FID-100
 6710 01 02X H2-FID-160
 6710 01 03X H2-FID-250
 6710 01 04X H2-FID-400
 6710 01 05X H2-FID-500
 6710 02 07X H2-FID-700
 6710 02 09X H2-FID-900

Where X=0 for 230V/50Hz or 230V/60Hz
 X=2 for 115V/60Hz
 X=4 for 100V/60Hz

*external floor water tank 5L for models 100 to 500
 external floor water tank 10L for models 700 to 900
 + water tubing and 1 deionisation cartridge included*

OPTIONS and ACCESSORIES :

6710 01 110 Cascading interface
 6710 01 111 Remote command software including CD and USB cable
 6710 01 210 Table water tank 5L (7x33x33) in stead of the external floor water tank
 6710 01 100 Additional 5L floor water tank (14x18x40)
 6711 01 102 Additional 10 L floor water tank (18x22x47)
 6710 01 105 Additional 5L floor water tank, fully equipped, 1.5m tubes
 6711 01 107 Additional 10L floor water tank, fully equipped, 1.5m tubes

SPARE PARTS and CONSUMABLES for maintenance :

6711 01 110 Deionisation cartridge (1 pce) for H2
 6711 01 120 H2 Set of filters (for Air, Hydrogen and water line)
 6711 01 131 New H2 cell (standard exchange)
 6711 01 032 New H2 cell



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