

HYDRO70 LS2

High Flow, Ultra High Purity Hydrogen Generator

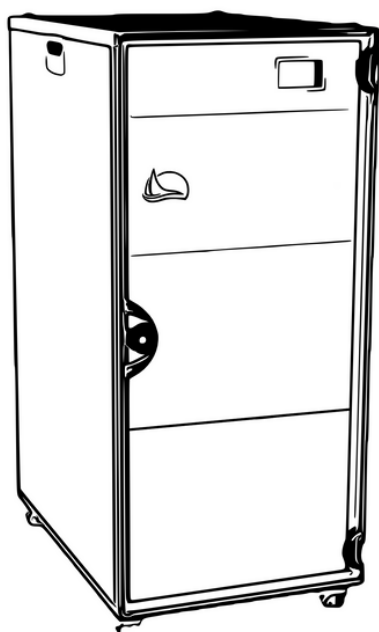


DESCRIPTION:

LEMAN Instruments designed the HYDRO70LS2 product line of High Flow, Ultra High Purity Hydrogen Generator to aliment GCs for research on fuel cells and to fit almost any type of application that needs H₂ production on demand close to the consumer in an elegant casing with full-color display and touch screen.

Based on the field-proven Solid Polymer Electrolyte (PEM) cell technology, pure Hydrogen is produced at low pressure from electricity and high-quality distilled water. After production, H₂ is dried by a passive dryer and then purified and dried by passing through a No Maintenance PSA module. H₂ is available 24/7 with constant purity >99.99999%. Output pressure is regulated electronically and could be set from 0.5 to 7 bar. This process can be started on demand without a caustic solution. The device is composed of several independent modules connected in parallel. In case of failure, each module could be switched off and removed from the device without interrupting the production of other modules.

Models with outflows of 5, 10 & 15 L/min H₂ are available.



APPLICATION TYPES:

- Combustion gas for FID Analysers
- Carrier gas for GC and GC/MS-MS
- Reaction gas for ICP-MS
- Protection gas
- Any high-end purity H₂ requirements

FEATURES:

- Reduces in operation costs. Return on investment within 1 year. Then free H₂.
- Easy supervision and diagnosis by module.
- Low maintenance costs
- Improves resolution and detection limit for analytics.
- Provides high pressure stability.
- H₂ is available 24/7 at constant purity. No contamination.
- Independent source of Hydrogen that does not require complex piping and can be easily moved around the laboratory.
- Remote control
- Very safe operation, internal leak-test, automatic shut-down, over-pressure valve, H₂-cell current, and voltage limits.
- No handling and storage of cumbersome gas cylinders. There is no cylinder rental fee.



HYDRO70 LS2

High Flow, Ultra High Purity Hydrogen Generator



Leman Instruments

MODELS	HYDRO70 LS2-5 HYDRO70 LS2-10 HYDRO70 LS2-15
LMP Outflow @1013 HPA / 20°C	HYDRO70 LS2-5: 5 LMP HYDRO70 LS2-10: 10 LMP HYDRO70 LS2-15: 15 LMP
H2 purity	>99.99999%
Outlet Pressure	From 0.5 to 7 bar (7 to 102 psig)
Dew point	-80°C

Dimensions cm / in	L: 80cm / I: 55cm / H: 120cm (Variable) L: 31.4 in / I: 21.6in / H: 47.2in (Variable)
Net weight (kg/lbs)	80kg-100kg / 176lbs-264lbs

Water quality	• High-purity deionized water (DI water) • TOC free • Conductivity < 1µS/cm
Water source	Direct line Deio water consumption
Water consumption	12L water generates about 12 m3 of Hydrogen
Safety	Overpressure valve; internal leak test; automatic shut down; maximum current limit; water quality
Manual control	Through a 7" TFT-LCD color display with a touchpad located on the front panel. Display of major parameters, pressure, functioning status, and alarms. Intuitive navigation to functions by menus and sub-menus
Remote control, Communications	• RS485 (Mod-Bus), USB • Through Ethernet 10/100 network • Logbook download by USB
Input & Output fittings	Stainless steel 1/4" OD compression
Power supply	Automatic switching from 90 to 260 VAC, 47 to 63 Hz
Power consumption (max at full flow)	HYDRO70LS2-5: maximum 2500W HYDRO70LS2-10: maximum 5000W
Ambient temperature	+5 to +35°C, non condensing

