

HYDRO65 LS2

High-Flow, Low-Maintenance Ultra-High-Purity Hydrogen Generators to aliment GCs for research on fuel cells

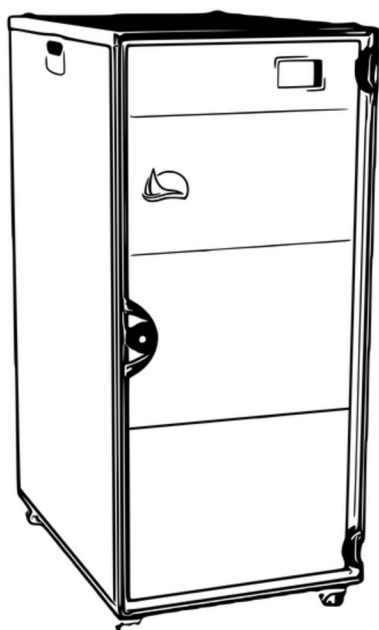


DESCRIPTION:

LEMAN Instruments designed the HYDRO65 LS2 product line of High-Flow, Low-Maintenance Ultra-High-Purity Hydrogen Generators to aliment GCs for research on fuel cells and to fit almost any type of application that needs H₂ production 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 an exclusive system. H₂ is available 24/7 with constant purity >99.99995%. 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.

Models with outflows of 1 & 2 L/min H₂ are available. Each instrument is equipped with high-performance communication interfaces, such as USB, RS485, and Ethernet, to create a very flexible gas network with local or central control.

Due to the software's focus on safety, automatic regulation, and intuitive and reliable communications, the HYDRO65 LS2 High Flow, Ultra High Purity Hydrogen Generators are easy to install, reliable, and pleasant to operate.



APPLICATION TYPES:

- Carrier gas for Gas Chromatographs
- Fuel Cell Research, Protection gas
- CVD / Gems manufacturing

FEATURES:

- Reduces in operation costs. Return on investment within 1.5 years.
- No Maintenance. Easy supervision and diagnosis by module.
- Improves resolution and detection limit versus Helium-only usage.
- 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.
- Extended autonomy with external 5L water tanks or connection to deionized water distribution network (opt)..



HYDRO65 LS2

High-Flow, Low-Maintenance Ultra-High-Purity Hydrogen Generators to aliment GCs for research on fuel cells



Leman Instruments

MODELS	HYDRO65 LS2-5 HYDRO65 LS2-10 HYDRO65 LS2-15
LMP Outflow @1013 HPA / 20°C	HYDRO65 LS2-5: 5 LMP HYDRO65 LS2-10: 10 LMP HYDRO65 LS2-15: 15 LMP
H2 purity	>99.99995% (HC<0.1 ppm), CH4<0.05 ppm
Outlet Pressure	From 0.5 to 7 bar (7 to 102 psig)
Dew point	-70°C

Dimensions cm / in	L:80cm /1:55cm/H:120cm (Variable) L:31.4in / 1:21.6in /H:47.2in (Variable)
Net weight (kg/lbs)	80kg – 100kg / 176lbs – 264lbs

Water quality	<ul style="list-style-type: none"> High-purity deionized water (DI water) TOC free Conductivity < 1µS/cm
Water source	Direct line deionized water consumption
Water consumption	12L water generates about 12 m ³ 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 touchscreen, located on the front panel. Display of major parameters, functioning status, and alarms. Intuitive navigation to functions by menus and sub-menus.
Remote control, Communications	<ul style="list-style-type: none"> RS485 (Mod-Bus), USB Through Ethernet 10/100 network
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)	HYDRO65LS2-5: maximum 2500W HYDRO65LS2-10: maximum 5000W HYDRO65LS2-15: maximum 8000W
Ambient temperature	+5 to +35°C, non condensing

