

HYDRO65 L

Ultra-High-Purity Hydrogen Generators to aliment anything related to the use of ultra-high purity H₂



DESCRIPTION:

LEMAN Instruments designed the HYDRO65L product line of Ultra-High-Purity Hydrogen Generators to aliment anything related to the use of ultra-high purity H₂ close to the consumer in an elegant compact bench table casing with a full-color touchscreen.

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 and purified using 2 different permeation techniques, allowing the dew point to reach the best level. Then, a final special dryer removes all the other elements.

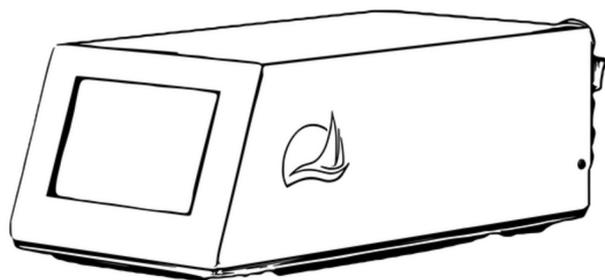
H₂ is available 24/7 with constant purity >99.99995%.

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.

Choose from a range of models with outflows of maximum 100, 160, or 300 Nml/min H₂, each designed to meet specific requirements.

Each instrument is equipped with high-performance communication interfaces RS485, USB, and Ethernet to create a very flexible gas network with local or central control.

With a software that prioritizes safety, automatic regulation, and reliable communications, the HYDRO65L modules are not only easy to install and operate, but also guarantee 100% safety and reliability.



APPLICATION TYPES:

- Combustion gas for FID Analyzers
- Carrier gas for GC and GC/MS-MS
- Reaction gas for ICP-MS
- Protection gas

FEATURES:

- Reduces in operation costs. Return on investment within 6 months.
- No heavy maintenance.
- 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
- Our product guarantees 100% safe operation with its internal leak-test, automatic shut-down, over-pressure valve, and current and voltage limits.
- No handling and storage of cumbersome gas cylinders. There is no cylinder rental fee.
- Extended autonomy with a 2L water tank.



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MODELS	HYDRO65 L-100 HYDRO65 L-160 HYDRO65 L-300
LMP Outflow @1013 HPA / 20°C	HYDRO65 L-100: 0.100 LMP HYDRO65 L-160: 0.160 LMP HYDRO65 L-300: 0.300 LMP
H2 purity	>99,99995% (maximum HC content: 0.1ppm)
Dew point	-70°C
Outlet Pressure	0.5 – 7 bar (7 – 102 psig)

Dimensions cm / in	L: 43cm / I: 23.5cm / H: 16cm L: 17in / I: 9in / H: 6.2in
Net weight (kg/lbs)	13kg / 28lb

Water quality	High purity distilled filtered water. TOC free. Conductivity < 1uS/cm
Water capacity	2L external tank or auto-refill (option)
Water consumption	5L water generates about 6000L Hydrogen
Safety	Over pressure 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	<ul style="list-style-type: none"> • RS485 (Mod-Bus), USB • Through Ethernet 10/100 network • Logbook download by USB
Input & Output fittings	Stainless steel 1/8" OD compression
Power supply	Automatic switching from 90 VAC to 260 VAC, 47 to 63 Hz
Power consumption (max at full flow)	HYDRO65L-100: Maximum 150W HYDRO65L-165: Maximum 150W HYDRO65L-300: Maximum 150W
Ambient temperature	+5 to +35°C, non condensing

