

HYDRO65 R

Non-Maintenance Ultra-High-Purity Hydrogen generators to aliment an FID and GC



DESCRIPTION:

LEMAN Instruments designed the HYDRO65R product line of Non-Maintenance Ultra-High-Purity Hydrogen generators to aliment an FID and GC close to the consumer in an elegant 19-inch casing with a full-color display and touchpad.

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 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 100, 160 & 300 Nml/min H₂ outflows are available.

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.

Due to the software being focused on safety, automatic regulation, and reliable communications, the HYDRO65R High Purity Hydrogen Generator modules are easy to install, reliable, safe, and pleasant to operate.

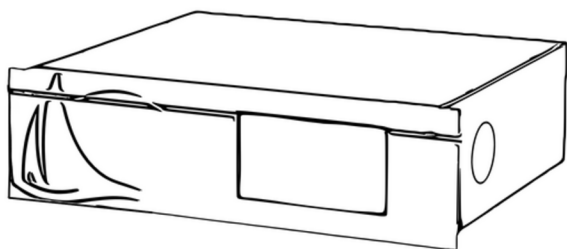


APPLICATION TYPES:

- Combustion and carrier gas for FID and GC

FEATURES:

- Reduces in operation costs. Return on investment within 15 months.
- Improves resolution and detection limit versus Helium-only usage. Provides high-pressure stability.
- H₂ is available 24/7 at constant purity. No contamination.
- There is no maintenance on the dryer and purification module.
- Independent sources of Hydrogen can be easily moved around the laboratory.
- Remote control
- Very safe operation, internal leak-test, automatic shut-down, over-pressure valve, current and voltage limits.
- No handling and storage of cumbersome gas cylinders. There is no cylinder rental fee.



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MODELS	HYDRO65 R-100 HYDRO65 R-160 HYDRO65 R-300
LMP Outflow @1013 HPA / 20°C	HYDRO65 R-100: 0.100 LMP HYDRO65 R-160: 0.160 LMP HYDRO65 R-300: 0.300 LMP
H2 purity	>99.99995%
Outlet Pressure	From 0.5 to 7 bar (7 to 102 psig)
Dew point	-70°C

Dimensions cm / in	L: 35cm / l: 41.5cm / H: 12cm (3U) L: 13.7in / l: 16.1in / H: 4.7in (3U)
Net weight (kg/lbs)	13kg / 28lbs

Water quality	<ul style="list-style-type: none">• High-purity deionized water (DI water)• TOC free.
Water source	By external 2L tank or central distribution network (option)
Water consumption	5L water generates about 6000L Hydrogen
Safety	Overpressure valve; internal leak test; automatic shut down; maximum current limit, water quality, over temperature
Manual control	Through a 7" TFT-LCD color display with a touch screen 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 to 260 VAC, 47 to 63 Hz
Power consumption (max at full flow)	HYDRO65R-100 & 160: maximum 80W HYDRO65R-300: maximum 150W
Ambient temperature	+5 to +35°C, non condensing

