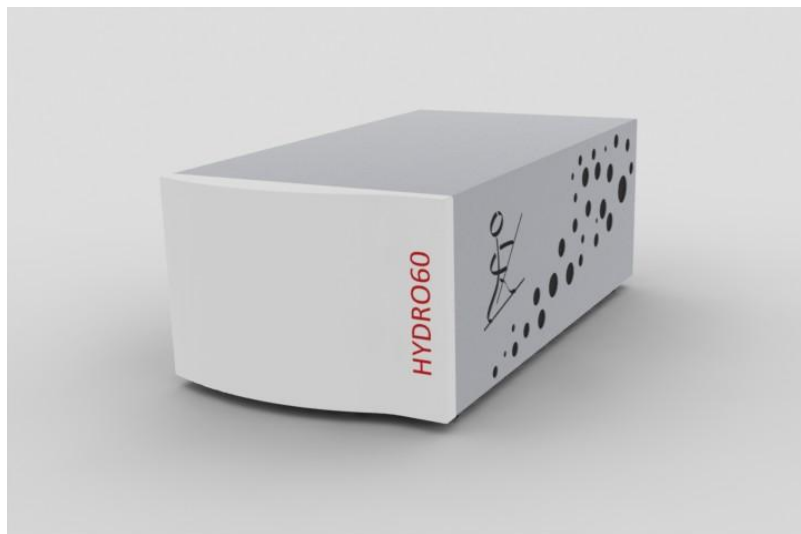


HYDRO60L – ULTRA HIGH PURITY HYDROGEN GENERATOR MODULES



H₂

APPLICATIONS

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

DESCRIPTION

PEUS-Instruments designed the **HYDRO60L** product line of **Ultra High Purity Hydrogen Generator** modules for FID, Carrier Gas for GC and GC/MS, to fit almost any type of application which needs H₂ production close to the consumer in laboratory environment, without trouble of regular maintenance.

Based on the field proven Solid Polymer Electrolyte (PEM) cell technology and Pressure Swing Adsorption (PSA), Ultra pure Hydrogen is produced at low pressure from electricity and high quality distilled water (ZEROWATER). This process can be started on demand and does not require any caustic solution.

The produced Hydrogen is available 24/7 with constant purity of **99.9999%** at output flows of **100 to 600 Ncc/min** (depending on the model). The H₂ output pressure is regulated electronically and can be set from 0.5 to 7 bar.(7 to 102 psig).

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

Due to the softwares being focused on safety, automatic regulation and reliable communications, the **PEUS-Instruments HYDRO60L Ultra High Purity Hydrogen Generator** modules are easy to install, reliable, safe and pleasant to operate.

BENEFITS

- ✓ Reduces in operation costs. Return on investment within 2 years.
- ✓ No Maintenance.
- ✓ Improves resolution and detection limit versus Helium only usage. Provides High pressure stability.
- ✓ H₂ available 24/7 at constant purity. No contamination.
- ✓ Independent source of Hydrogen that does not require any piping and can be easily moved around the laboratory. Remote control from PC, I-phone and I-pad
- ✓ Stackable casing for low footprint gas generator network assembly.
- ✓ Very safe operation, internal leak-test, automatic shut-down, over-pressure valve, current and voltage limits.
- ✓ No handling and storage of cumbersome gas cylinders. No cylinder rental fee.
- ✓ Extended autonomy with 5L water tank.





ULTRA HIGH PURITY HYDROGEN GENERATOR MODULES

SPECIFICATIONS

Models	HYDRO60L-100, HYDRO60L-160, HYDRO60L-250, HYDRO60L-300, HYDRO60L-500, HYDRO60L-600..
H2 Outflow @ 1013/20°C	HYDRO60L-100 = 100 Nml/min ; HYDRO60L-160 = 160 Nml/min HYDRO60L-250 = 250 Nml/min ; HYDRO60L-300 = 300 Nml/min HYDRO60L-500 = 500 Nml/min; HYDRO60L-600 = 600 Nml/min
H2 purity	>99.9999% (HC<0.1ppm)
Dew point	-70°C / -95°F
Outlet Pressure	From 0.5 to 7 bar (7 to 102 psig), adjustable by software.
Water quality	PEUS-Instruments ZEROWATER: High purity distilled+filtered water. TOC free.
Water capacity	5L tank.
Water consumption	5L water generates about 6000L Hydrogen
Safety	Low H2 stored volume; over pressure valve; internal leak test; automatic shut down; maximum current limit, water quality
Manual control	ON-OFF power switch
Remote control, Communications	<ul style="list-style-type: none"> ■ By PEUS-Instruments Gas Network Controller, (communication by RS485), maximum distance to module : 100m ■ Through 2 potential free relay contacts (I/O), ■ RS485 (Mod-Bus), USB. ■ Trough Ethernet 10/100 network (option) ■ Trough WLAN network, with PC, I-Phone, I-Pad (option) ■ Log book download by USB.
H2 outlet fitting	Stainless steel 1/8" OD compression
Power supply	Automatic switching from 90VAC to 260VAC, 47 to 63 Hz
Power consumption (max at full flow)	HYDRO60L-100 to HYDRO60L-300: maximum 150W HYDRO60L-500 and HYDRO60L-600: maximum 250W
Dimensions	W=210mm/8.3ins, H=135mm/5.3ins, D=360mm/14.2ins , stackable
Net weight (Kg/lbs)	HYDRO60L-100 to HYDRO60L-300: 10 Kg / 22 Lbs HYDRO60L-500 to HYDRO60L-600: 12 Kg / 26 Lbs
Certification	CE

ORDERING NUMBERS

Model	Article #
HYDRO60L-100	731201
HYDRO60L-160	731202
HYDRO60L-250	731203
WLAN Interface option	731281
ZERO WATER 3x5L refill	711091

Model	Article #
HYDRO60L-300	731204
HYDRO60L-500	731206
HYDRO60L-600	731207
Ethernet Interface option	731282
ZERO WATER 12x5L refill	711092

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