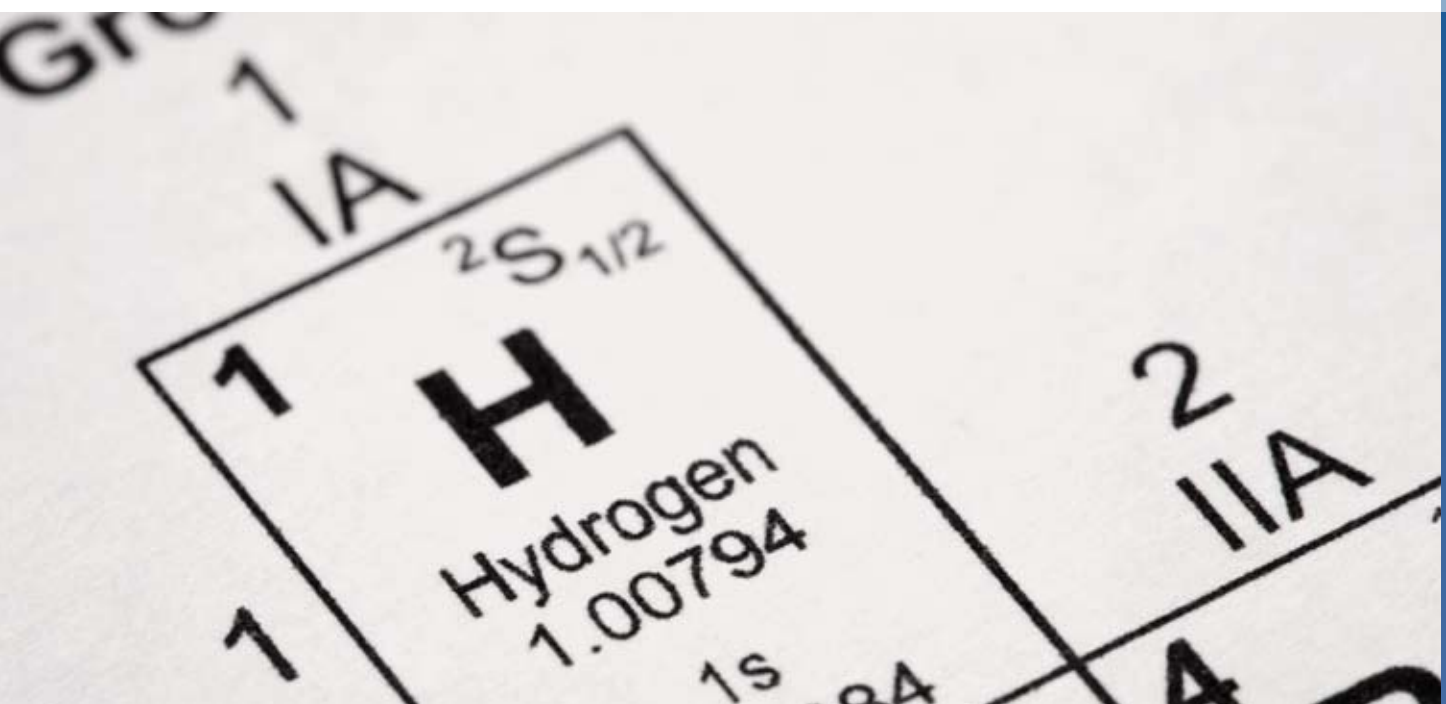




## Hydrogen Generation & Storage

### Product Overview



# Hydrogen generator



The hydrogen generators of the HG Series from Heliocentris enable the production of high-purity hydrogen for laboratory and research use. They are the ideal hydrogen source for refilling metal hydride canisters.

## Maximum hydrogen quality

The hydrogen generators of the HG series are designed for continuous operation. PEM technology, in combination with an innovative gas dehydration system, achieves a hydrogen purity of 6.0 (99.9999 % vol.) – with no maintenance whatsoever.

## Convenient and versatile to use

The operating controls on the unit are user-friendly and intuitive. It can be connected to a PC via the optional RS232 interface.

Due to the optimum technical configuration, the units are suitable both for trouble-free filling of low-pressure metal hydride canisters and for the direct supply of fuel cell systems.

## High operational reliability

No hydrogen is stored in the unit. An intelligent regulator ensures that only the quantity of hydrogen is generated that is currently needed.

An integrated leak monitor stops the generation of hydrogen immediately in case of a leak.

## Flexible expandability

The hydrogen capacity can be expanded by connecting up to 10 modular units. One unit is used to conveniently control the others, based on the master-slave principle.

Technical data	HG15	HG30	HG60
Hydrogen production	15 Std. L	30 Std. L	60 Std. L
Power consumption	160 VA	300 VA	530 VA
Hydrogen purity	6.0 (99,9999 % vol.)		
Hydrogen pressure	0,1...10,7 barÜ		
Size	230 x 355 x 410 mm (W x D x H)		
Weight (unfilled)	17,5 kg	19 kg	22 kg

# Low-pressure metal hydride canisters

Metal hydride canisters from Heliocentris enable safe and easy intermediate storage of larger quantities of hydrogen in an extremely compact form. They are the ideal solution especially for systems with limited installation space.



## Compact storage medium

Low-pressure metal hydride canisters achieve high volumetric energy density with low canister pressure. This enables intermediate storage of larger quantities of hydrogen in a very compact form, which is a convenient way for you to supplement bulky compressed gas cylinders.

## For flexibility and diversity of applications

Due to different storage capacities (60, 250 and 760 Std. L) and the capability of connecting several metal hydride canisters with each other, you can implement systems with widely varying capacities.

## Safe handling

Low-pressure metal hydride canisters from Heliocentris can be filled safely and easily at low pressures of 10 to 17 bar. An integrated quick coupling enables easy and safe connecting and disconnecting with absolutely no leakage of hydrogen.

## Long service life

Metal hydride canisters from Heliocentris can be re-filled as often as you like; hardly any storage capacity is lost, assuming the hydrogen purity\* is sufficient.

Technical data	HS60	HS250	HS760
Storage capacity (at charge pressure of 17 bar)	60 Std. L	250 Std. L	760 Std. L
Output	0,5 slpm	1,7 slpm	6 slpm
Weight	0,8 kg	2,3 kg	6,5 kg
Size	ø 51x200 mm	ø 64x365 mm	ø 89x420 mm
Charge pressure	10 ... 17 bar		

\* Minimum recommended hydrogen purity: 5.0

# Hydrogen supply solutions



## Connection to compressed gas cylinders

If permitted by local conditions, 200 bar compressed gas cylinders can be used for the hydrogen supply. For direct connection, Heliocentris offers connection kits with pressure reducers and connecting hoses according to DIN, CGA or BS standards.



## Metal hydride canisters

If convenience and a compact design are important, the metal hydride canister is the right supply system to use.

It stores larger quantities of hydrogen in a safe and compact form and is also easy to handle. Heliocentris offers connection kits for filling the canisters from a compressed gas canister, in addition to canisters of various sizes.



## Hydrogen generation

Your own hydrogen generation system makes you completely independent. An electrolyzer generates the hydrogen for use in the lab whenever it is needed.

In combination with our metal hydride canisters, the hydrogen can safely be stored temporarily and used for operating portable or mobile systems. Ask us about the possibilities.