



# ON-DEMAND HYDROGEN GENERATION AT A BUDGET-FRIENDLY PRICE



**ON-DEMAND  
HYDROGEN  
GENERATION**



**IMPROVED  
SAFETY**



**WIDE CHEMICAL  
SPACE FOR  
SYNTHESIS**

**UTILIZING OUR PATENTED, AWARD WINNING TECHNOLOGY, HYDROGENATION CAN BE PERFORMED SAFELY IN A STANDARD LABORATORY FUME HOOD**

## NO CYLINDERS - NO PROBLEM

- 1-50 bar pressure
- 3.0/99.9% hydrogen purity
- Hydrogen gas flow rate up to 1 NL/min

## IMPROVED SAFETY

The H-Genie® Lite is the streamlined version of the R&D100 award winner H-Genie® compact hydrogen generator. Generating 3.0 purity hydrogen gas from water at up to 50 bar (725 psi) and flow rates up to 1 NL/min, it is the simplest and safest solutions for replacing hydrogen cylinders in your laboratory.

## FEATURES

- Hydrogen generation from deionized water - no cylinders needed
- High pressure to expand your chemistry capabilities
- Compatible with any reactors and balloons
- Simple setup and use: Click & go
- Run multiple reactors with one H-Genie® Lite
- Compact footprint to save space
- Internal hydrogen detector for improved safety

## TECHNICAL PARAMETERS

Hydrogen production rate	1 NL/min
Output pressure range	1-50 bar
Gas purity	≥ 99.99% (3.0 @RT)
Water purity	Deionized water with recommended purity of < 1 µS/cm
Water consumption rate	< 200 ml/hr
Water reservoir capacity	Internal: 3L
Recommended environment	Ventilated laboratory fume hood
Power requirements	Mains: 100V to 240V AC, 47-63Hz
Power consumption	Max. 1500 VA
Dimensions (H x W x D)	385 mm × 365 mm × 476 mm
Weight	33.7 kg
Outlet parameter	Swagelok tube fitting 1/8" stainless steel

## HYDROGENATION PLATFORM FOR SCALING UP CONTINUOUS FLOW REACTIONS

**The combination of the H-Genie® Lite with the Phoenix Flow Reactor™ offers unparalleled hydrogenation synthesis, scale-up, or catalyst testing capabilities.**

Designed to be used safely in any discovery, development, process, petrochemical or catalyst screening lab, this hydrogenation platform combines in situ high pressure hydrogen generation from water with high temperature reactor capability and a precise gas data monitoring system. Chemists and chemical engineers can now run hydrogen-based experiments with homogeneous or heterogeneous catalysts up to 450°C and 50 bar, without the need for hydrogen cylinders or hydrogen infrastructure.



For more information, please visit  
[www.thalesnano.com](http://www.thalesnano.com)  
 LinkedIn: /company/thalesnano-inc-  
 Twitter: /thales\_nano  
 Instagram: /thalesnano\_inc/  
 Facebook: /ThalesNano/

**ThalesNano Inc.**  
 Záhony utca 7. | H-1031 Budapest | Hungary  
**Phone:** +36 1 880 8500  
**Fax:** +36 1 880 8501  
**Email:** sales@thalesnano.com  
[www.thalesnano.com](http://www.thalesnano.com)

**US Office**  
 50 S. Penn St. Suite B-2  
 Hatboro PA. 19040  
 USA  
**Phone:** 215-534-3365  
**E-mail:** USAsales@thalesnano.com

