

# L/M18 Hydrogen Generator

Hydrogen on demand: When you need it, where you need it!



*Our range of reactors is tailored to the specific needs of each project, with one range for low consumption and another for those requiring larger volumes. Hydrogen generation capacity can go from 150 kW in the lower range to several MW in the upper one, taking advantage of the scalability of our products*

Methanol Reformers' Hydrogen generation technology produces hydrogen from Methanol – on site and on board. The L/M18 hydrogen generator delivers up to 235 kg hydrogen per day to support fuel cells in excess of 100 kW.

Using an easily transported and stored blend of methanol plus water, the L18 product delivers high-purity hydrogen at pressures up to 2 bar. Integration with commercial fuel cell modules is easily achieved via a low-pressure hydrogen buffer tank. Applications include primary and backup power for stationary applications, distributed (grid independent) BEV charging stations, hydrogen fueling stations, and onboard heavy duty vehicles (trains, trucks, off-road machinery). Very low, and even negative, carbon intensities are achieved using renewable methanol.

For more information, please contact with [info@methanolreformer.es](mailto:info@methanolreformer.es)

## STRONG POINTS:

- ⚡ No harmful gas emissions (**No NOx, SOx, PMs**)
- ⚡ **Grid independent**
- ⚡ High purity (>99.97 %) H<sub>2</sub> production
- ⚡ Low CO<sub>2</sub> emissions (-28% vs diesel) and **carbon neutral** with green methanol
- ⚡ **Low CAPEX / OPEX**
- ⚡ **Scalable** for expanded H<sub>2</sub> deployments
- ⚡ **Plug&Play**
- ⚡ **24/7** Run Times; no operator needed
- ⚡ Limited Power Requirements (2kW)
- ⚡ Reduced Noise and Pollution
- ⚡ **Low** level of maintenance
- ⚡ Fast implementation
- ⚡ Able to use **existing fuel deposits**

## CROSS-SECTORIAL APPLICATIONS:

- ⚡ Mining / Construction
- ⚡ Service stations
- ⚡ Ports / Airports
- ⚡ Industrial
- ⚡ Data Centers
- ⚡ Warehouse / Logistics
- ⚡ On-board
- ⚡ Off-grid

**Website:** [www.methanolreformer.com](http://www.methanolreformer.com)

**Email:** [info@methanolreformer.es](mailto:info@methanolreformer.es)

**Global Headquarters:** World Trade Center. Moll de Barcelona s/n Edificio Este Planta 5

**M REFORMER**

## L/M18 Hydrogen Generator - Product Specifications\*

Models		L/M18
Certification		CE & ATEX Certifications
Performance	Hydrogen Generation Outlet Pressure	9,8 kg/hr - 235 kg/day 1,800 sLm 1.7 bar (a)
Electricity Consumption Including control & safety devices	Power Requirement Cold startup Mode Hot stand by H <sub>2</sub> production mode	200-240 VAC ≈ 7 kW ≈ 3,5 kW ≈ 2 kW
Feedstock Consumption	Methanol 62.5+/- 0.5 wt% with balance DI water	132 L/h, 2.2 L/min
Efficiency	Efficiency at Stead State Optimal	> 80%
Hydrogen Quality	H <sub>2</sub>	> 99.97 %
Physical Characteristics	Dimensions (LxWxH) Weight	879 x 2,080 x 1,380 mm 1,500 kg
Control and Communication		Siemens, Ethernet
Exhaust pollutants**	CO NOx SOx	<300ppmW 0 ppmW 0 ppmW
CO <sub>2</sub> emissions		103 kg/h
Refurbish		≈ 20,000 h
Ambient conditions		5 °C to 45 °C
Startup time	From Ambient Temperature	12 hrs. depending on system power conditions & ambient temp.
	From Hot Standby	<5 min to H <sub>2</sub> production; <30 min to rated H <sub>2</sub> production

\*Specifications subject to change

\*\*CO<sub>2</sub> not included

Website: [www.methanolreformer.com](http://www.methanolreformer.com)

Email: [info@methanolreformer.es](mailto:info@methanolreformer.es)

Global Headquarters: World Trade Center. Moll de Barcelona s/n Edificio Este Planta 5

**M REFORMER**