

## 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 lowpressure 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

## **STRONG POINTS:**

- 4 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
- 4 Plug&Play
- **CROSS-SECTORIAL APPLICATIONS:**
- 4 Mining / Construction
- Service stations
- Forts / Airports
- 🖌 Industrial

Data center Warehouse / Logistics On-board

4 24/7 Run Times; no operator needed
4 Limited Power Requirements (2kW)

4 Able to use existing fuel deposits

4 Reduced Noise and Pollution

4 Low level of maintenance

4 Fast implementation

, **4** Off-grid



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

Models Certification		L/M18 CE & ATEX Certifications
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
	From Ambient Temperature	12 hrs. depending on systen power conditions & ambien
Startup time		temp.

\*Specifications subject to change \*\* CO<sub>2</sub> not included

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