

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 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 M18 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

Advantages:

- Environmentally friendly
- Low capital expenditure (Capex)
- Low operating expenditure (Opex)
- Modularity: scalable from 150 kWh to several MW
- High energy efficiency > 80%
- Reliable and low maintenance
- Vibration resistant
- Long service life (approximately > 20,000 operating hours for the filter membrane and > 40,000 for the catalyst)
- Fast hydrogen availability - takes less than 3 minutes to start hydrogen supply.

Applications (on board / on site):

- Charging Stations for Electric Vehicles (BEV)
- Hydrogen (HRS) (FCEV Charging Stations)
- Power Supply Backup / Data Centers
- Maritime / Ports / Airports
- Industry / Chemical
- Off-road / Construction
- Transport: trains, trucks
- Mining

Website: www.methanolreformer.com

Email: info@methanolreformer.es

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

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M18 Hydrogen Generator Product Specifications*

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Hydrogen Output, Max.	1,800 sLm @ 1.7 bar (9,8 kg/hr - 235 kg/day) at >99,97 Hydrogen Purity
	Meets ISO 14687- 2019
Composition	62.5±0.5 wt% methanol, balance DI water (≥14 MΩ-cm)
Consumption @ Rated Output	2.2 L/min
Physical Size, mm (W x D x H)	879 x 2,080 x 1,380 mm
Weight	1,450 kg
Environmental	-10°C to 45°C, ≤95% RH (non-condensing)
Electrical, "Hot standby" Mode	24 VDC, <100 W
	200 VAC, <2.2 kW
Electrical, "Run" Mode	24 VDC, <200 W
	200 VAC, <300 W
Control and Communication	Woodward/ Bosch LECM; HMI, CAN, Ethernet
Air Flow	11.5 m ³ /min (Minimum)

**Specifications subject to change*

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