e-Nomad

Clean Mobile Port Power on Demand

The CE and ATEX Certified e-Nomad was designed for local and off-grid operations, offering a cleaner way to provide hotel loads and charge battery powered equipment at the port.

Inside the container, a mix of methanol and water is fed through the e1 Marine Methanol Reformer where it is converted to >99.97% pure hydrogen. This hydrogen goes on to power a fuel cell generating clean grid-free electricity on demand at the port for your use.

e1® Marine

Getting hydrogen to work

e-Nomad | Product Specifications*

	e-Nomad 140	e-Nomad 235
Performance		
Power Output (BoL)	140 kW	235 kW
Frequency	50 Hz	
Voltage	400 VAC (3P+N+PE)	
Electricity Consumption (Including Control & Safety Devices)		
Power Consumption	0 kW. Once the battery pack is fully charged, after the first start, the e-Nomad is energetically autonomous. The reformer, fuel cell, and power electronics are powered through the battery.	
Fuel		
Methanol Fuel Spec	IMPCA	
Methanol Fuel Ratio	Methanol 62.5+/- 0.5 wt% with balance DI water	
Feedstock Consumption at 100% Load	≈ 132 L/h, 2.2 L/min	≈ 234L/h, 3.9 L/min
Hydrogen Output Quality		
Hydrogen Quality	> 99.97%	
Physical Characteristics		
Format	20 ft ISO Container	40 ft ISO Container
Control	Siemens	
Communication	Ethernet	
Ambient Conditions	5° C to 45° C	
Refurbish	≈ 20,000 h	
Built by	M4REFORMER	
Emissions at Rated		
CO2 Emissions	10% - 15% of Exhaust Airflow	
CO Levels	< 10ppm	
NOx	Not Detectable	
SOx	Not Detectable	
Startup Time		
From Ambient Temperature	12 hrs. depending on system power conditions & ambient temp.	
From Hot Standby	< 5 min to H_2 production; < 30 min to rated H_2 production	

**Specifications are indicative only and subject to change*

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