



# Nedstack

PEM FUEL CELLS

# PemGen<sup>®</sup>

## MT-FCPI-120



Nedstack fuel cell technology B.V.  
Maritime Power Systems  
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PemGen®

# MT-FCPI-120



The MT-FCPI-120 is a Maritime Fuel Cell Power Installation intended as a zero-emission shipping enabler. It offers a compact and robust LT-PEM power supply option for a large variety of maritime applications, both on inland waterways or in the short-sea domain. The PemGen Fuel Cell Power System portfolio is available on a configure-to-order basis. Get in touch to tune this system to your application.



<b>GENERAL</b>	Fuel Cell Type	Low Temperature Proton Exchange Membrane (LT-PEM)
	Fuel Cell Model	12 x Nedstack FCS13-XXL
<b>ELECTRICAL</b>	Nominal Power	120 kW <sub>e</sub>
	Peak power (BoL)	148 kW <sub>e</sub>
	Voltage range	300-600 / 600-1200 VDC
	Current range	0-200 / 0-400 A
<b>ENCLOSURE</b>	Weight	2500 kg
	Length	2010 mm
	Width	1100 mm
	Height	2090 mm
	IP-rating	IP-54
<b>HYDROGEN FEED</b>	Quality	Grade ≥ 2.5 (CO < 0.2 ppm)
	Supply pressure	0.3 – 4 barg
	Nominal consumption (BoL)	59 kg/MWh <sub>e</sub>
	Max consumption	8 kg/h
<b>COOLANT</b>	Medium	DI water or BASF FC G20
	Outlet temperature	Max 65 °C
	Max. heat output	90 kW
<b>AMBIENT CONDITIONS</b>	Operating Temperature	-5 – 45°C
	Storage Temperature	5 – 60°C (optional -20°C – 60°C)
<b>APPLICATION</b>	Intended use	Main Propulsion Power or APU
	Placement	On open Deck (if containerized) Integration in Vessels
<b>LIFESPAN</b>	Balance of Plant	20 years
	Stack refurbishment	24k - 30k running hours
<b>COMPLIANCY</b>	Standards	Class Approval on Request IEC-60092 IEC-60529 IEC-60533 IEC-62282-3

\* Due to continuous development, some data may change