



PowerCellution Marine System 200

Industrial Ready Marine MegaWatt Solution



HYDROGEN FUEL CELL SOLUTIONS FROM POWERCELL SWEDEN AB

Ready for the marine market – Join the next Big Wave

The maritime industry is facing new challenges, IMO have set a target for the maritime industry to cut emissions by 50% by 2050. Hydrogen and fuel cells in combination with renewable energy can offer a value chain without any emissions with the same performance as today's conventional fuels. Our Marine Fuel Cell System offer is developed with class societies to meet the highest marine safety standards and ready for delivery today. With us as a partner your vessel will be using leading Zero emission technology, fast tracking your integration process, and getting into operation in a timely fashion. Your vessels will have high performance, efficiency, and power output with true zero emission. It's time to move to the sustainable shipping

Zero Emission Shipping

Hydrogen Fuel Cells only emits water, truly supporting decarbonizing vessels without compromising performance.

MegaWatt ready for deployment

We are ready to deliver industrial ready; modular and scalable design with high power output, minimizing your time to market.

Hydrogen on par with today's fuels

Hydrogen and Fuel cells offers a technical mature energy platform, when it comes to safety, design and emissions.

Concept design for 6 Megawatt hydrogen electric full propulsion installation. Based on two blocks of 3 megawatt fuel cell systems, each blocks consists of 16 units of PowerCellution Marine System 200.

Concept Design

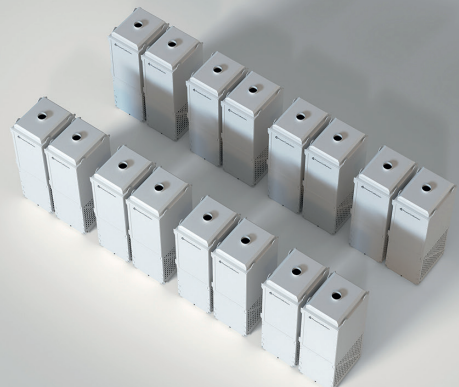


Image explanation from left to right; Electric podsystem, Energy management system, Fuel cell system, Battery storage, Hydrogen storage

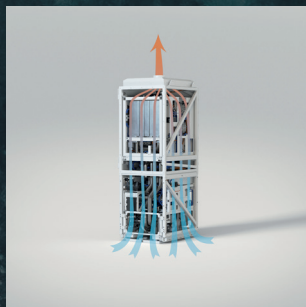
System Data



Max net power	200 Kw
Dimensions	0.7 x 0.9 x 2.0 m
Volume	1260 l
Weight h	700 kg
Gross Output (rated power)	600 V / 380 A
Voltage Output	Normal operation: 500-1000 VDC
Current Output	60-450 A
System heat Output	Up to 200 kW
Coolant outlet temperature	Up to 80 °C
Fuel Quality	Hydrogen ISO 14687:2019, SAEJ2719_201511 and T/CECA-G 0015 201
Fuel Inlet pressure	3-8 bar (g)
Fuel Consumption	13 kg/h at 200 kW
Communication and control	Can Bus
System efficiency (peak, BOL)	60 %

Key Features

Safe and Reliable



Safety is embedded in our company culture. Our safety solution is developed along safety protocol and applicable industrial standards. PowerCellution proven technology is applied in ongoing marine projects being validated by classification societies LR and DNV-GL. We always put safety first.

Easy Maintenance



Marine System 200 is designed in a modular way for easy service. The main submodules, Fuel Cell Module (FCM) and Support System Module (SSM) are installed on rails and can easily be pulled out from the cabinet to ensure access to all system components and to enable replacing the module itself.

Scalable



Several Marine system 200 can be combined for higher electric power output. In this case the units are connected in parallel to a common DC bus through DC/DC converters. The produced power can be utilized either in a DC power system, or further converted to AC for grid integration.

Contact Use

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