

PowerCell S1

1-5 kW PEM technology

PowerCell S1 is developed for operation either on pure hydrogen or reformed gas. It can be used as a small generator, as a back-up system for base stations within telecommunications and traffic systems, as well as for stationary power generation for properties (micro CHP).



Fuel flexible, for use with pure hydrogen or reformat gas

PEM technology, fast start up and shut down

Compact and easy to integraten

Physical Data:

Specification for standard stack sizes

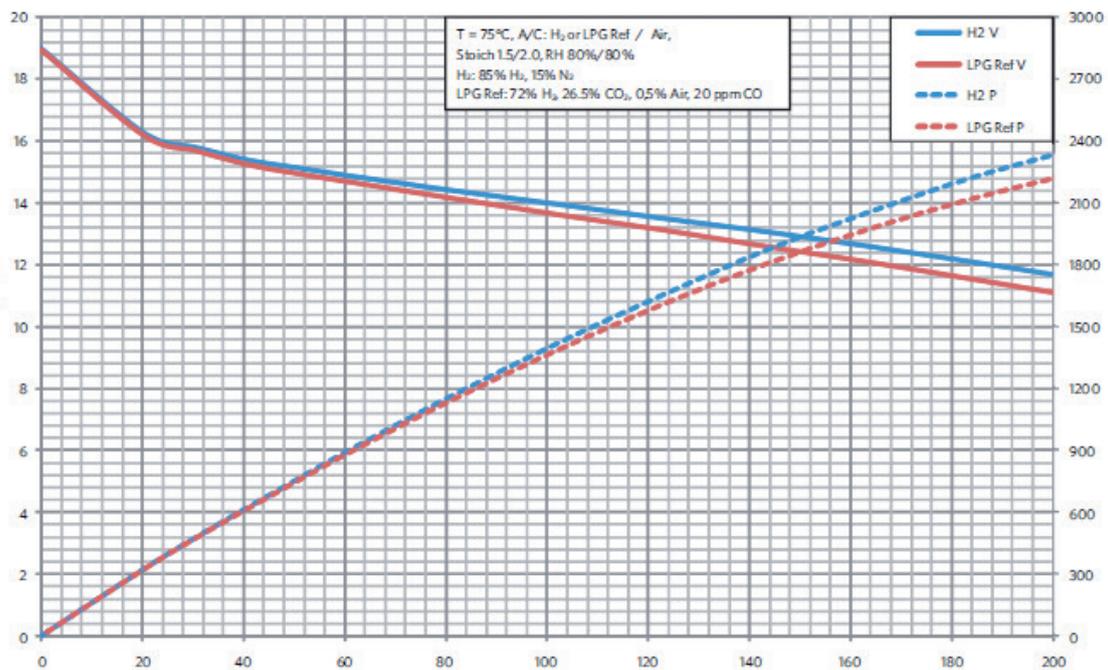
Max power (kW)	1	2.0	3.0	4.0	5.0
Cell Count	10	20	30	40	50
Dimensions (mm)	191x149x240	191x187x240	191x226x240	191x265x240	191x303x240
Weight (kg)	7.9	11.3	14.8	18.2	21.7

*PowerCells S1 stack power and size can be modified for specific needs

All models

Maximum current output	200 A
$\Delta p_{\text{cathode}}$ @ nominal power	Non-condensing at inlet
Δp_{anode} @ nominal power (H ₂ , stoich 1.5, 15% inert)	< 1.2 Bar (g)
Maximum operating temperature	85 °C
Humidity	Non-condensing at inlet
Gas pressure	< 1.5 bar(abs)
Coolant Pressure	Gas pressure + 0.1 Bar
Ambient temperature	2 - 70 °C

Unit Cell Data



Highlighted segments

For years, PowerCell has developed fuel cell stacks and systems. Within PowerCell's prioritised segments, the number of reference cases and projects is increasing. Whether it's in automotive, marine, stationary or material handling, different types of customers and partners are benefitting from PowerCell's fuel cell expertise.



Nikola Motors

Heavy duty vehicals

PowerCell's stacks are developed to meet the needs of the transportation industry. They are robust, scalable and have a world class power density. Since the products are modular and light weight our fuel cell systems are easy to integrate in a range of vehicles such as buses, trucks, and passenger cars.



Maranda

Marine

The world class power density makes PowerCell's systems easy to integrate and the products are designed to withstand harsh conditions at sea. Our products are constructed of industrial components and are thus reliable, have a high uptime and a long lifetime. Our solutions are adopted for marine applications.



Kalmar Cargo

Material Handling

Our fuel cell stacks and systems are delivering world class power density which makes our products compact and robust. This feature enables PowerCell to offer customised solutions in contrast to alternative, standard installations. PowerCell's products offers top performance for special purpose machines. Fuel cell systems generate power at locations where there is no power grid, without the hustle of drawing power cables to the site.