



PowerCell S1

Scalable (1-5 kW)

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).

PowerCell S1 Highlights

- Available in power range 1 - 5 kW, modular in 0.5 kW steps
- PEM technology, fast start up and shut down
- Fuel flexible, pure hydrogen or reformat gas
- Low pressure drop, simple selection of air supply components
- Compact and easy to integrate
- Liquid cooled, wide operating conditions
- Cell Voltage Monitoring, easy connection or optional electronics included

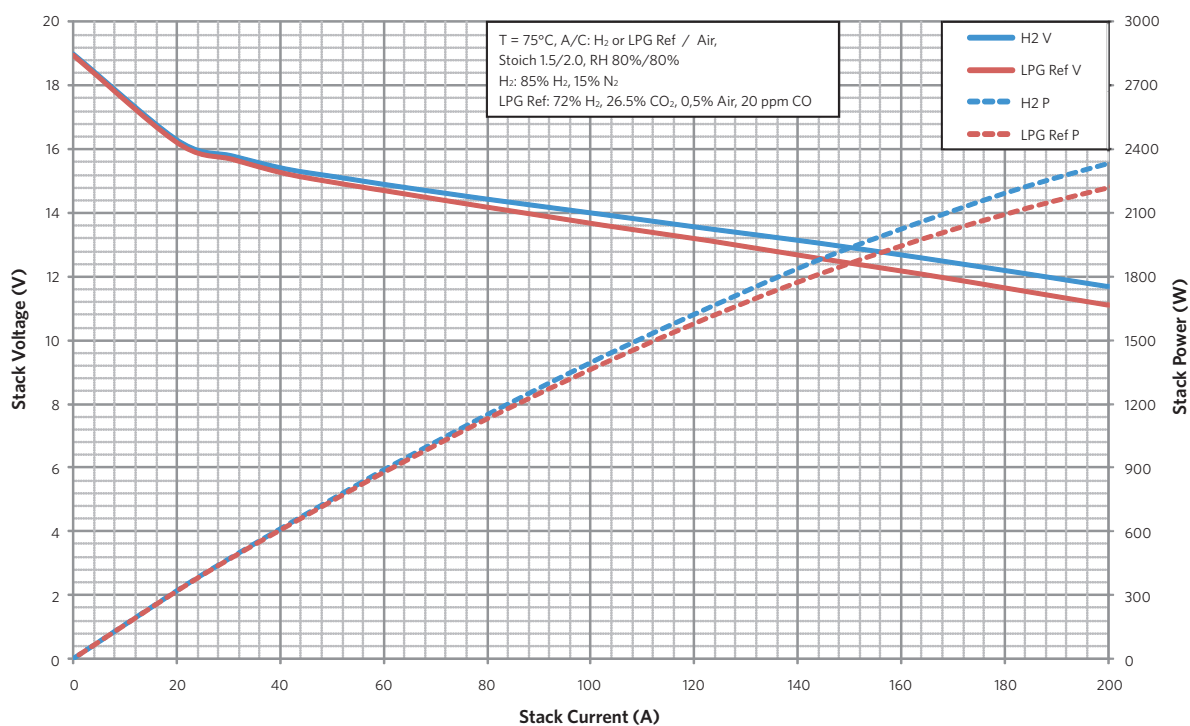


PowerCell S1

Physical data:	S1-10C	S1-20C	S1-30C	S1-40C	S1-50C
Length (mm)	149	187	226	265	303
Height (mm)	191	191	191	191	191
Width (mm)	240	240	240	240	240
Weight (kg)	7.9	11.3	14.8	18.2	21.7
Max. Power (kW)	1.0	2.0	3.0	4.0	5.0
Voltage outp. (V)	5.5-9.5	11-19	16.5-24.5	22.0-38.0	27.5-47.5

Physical Data:	All models
Maximum current output	200 A
$\Delta P_{\text{cathode}}$ @ nominal power	< 200 mBar
ΔP_{anode} @ nominal power (H ₂ , stoich 1.5, 15% inert)	< 30 mBar
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

S1-20 Stack Voltage and Power vs. Current



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