

PowerCell S2

Fuel Cell Stack (5-25 kW)

PowerCell has used its heritage from the automotive industry to launch a fuel cell stack that will meet both stationary and mobile requirements in its power range. The PowerCell S2 fuel cell stack is designed for efficient power generation in the range of 5 to 25kW. State-of-the-art PEM technology guarantees superior performance in any application.

PowerCell S2 is optimized to run on reformat gas but performs equally well on pure hydrogen. Use of modern production lines ensures high quality and delivery capacity. Suitable for applications in automotive as REX (Range Extender) and telecom.

PowerCell S2 main advantages:

- Available in power range 5 - 25 kW, modular in 5 kW steps
- PEM technology, fast start up and shut down
- Fuel flexible, for use with pure hydrogen or reformat gas
- Low pressure drop
- Liquid cooled, wide operating conditions
- Rugged design; for use in automotive applications and stationary applications



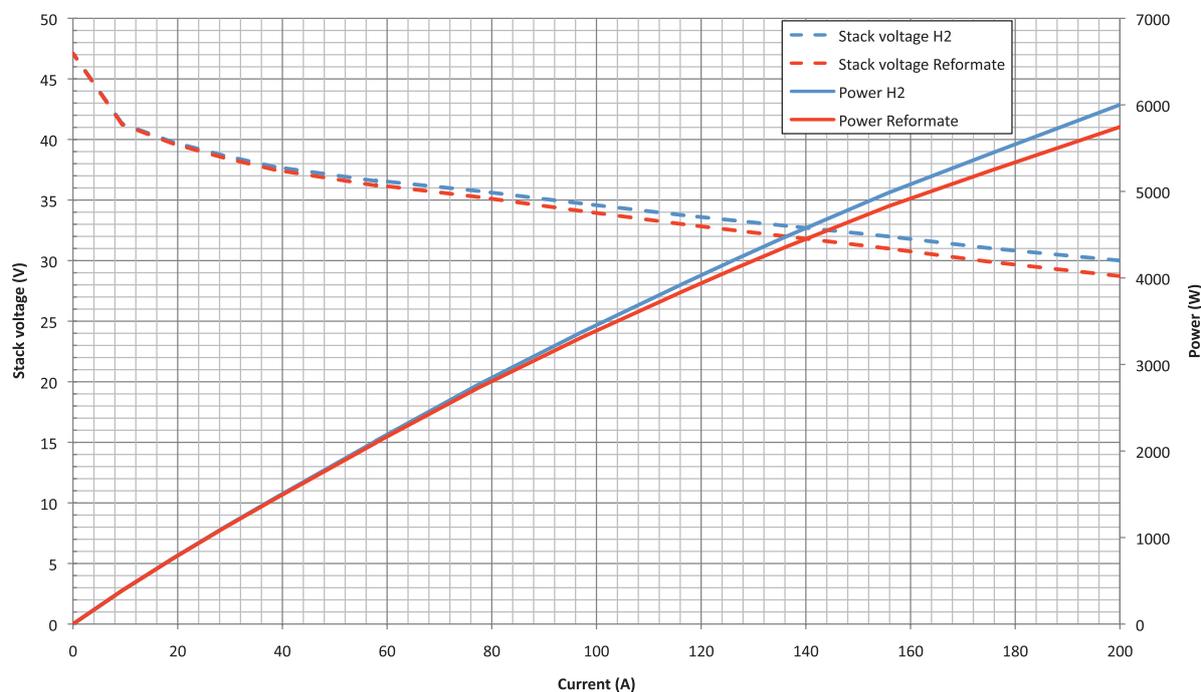
PowerCell S2

Physical Data:	S2-50C	S2-100C	S2-150C	S2-200C	S2-250C
Length (mm)	148	148	148	148	148
Height (mm)	199	266	333	400	468
Width (mm)	480	480	480	480	480
Weight (kg)	13.9	19	24.2	29.3	34.5
Nominal power output (kW)	4.5	9.0	13.5	18.0	22.5
Voltage output (V)	25-50	50-100	75-150	100-200	125-250

Physical Data:	All models
Maximum current output	200 A
$\Delta P_{\text{cathode}}$ @ nominal power	< 100 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	< 2.5 bar(abs)
Coolant Pressure	Gas pressure + 0.1 Bar
Ambient temperature	-30 - 70 °C

Properties in both table and graph may be subject to change during the final qualification of the stack platform. This table is representative of a late prototype stack.

Polarization curves S2-50C



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