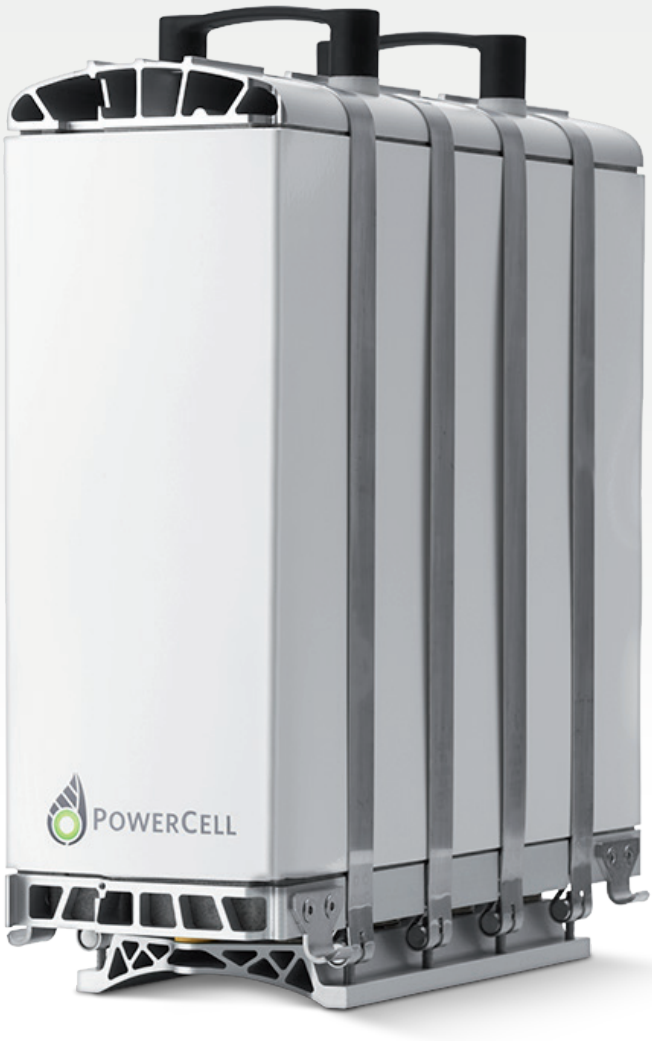
PowerCell S3

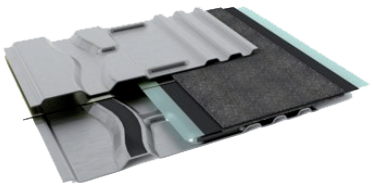
30-125 kW PEM technology

Prototype

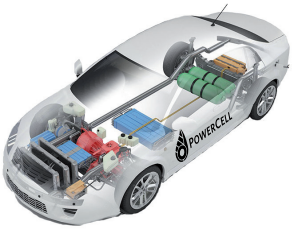


The nex generation PowerCell S3 runs on hydrogen gas and is compact with world-class energy density (kW/litre). The prototype developed according to the automotive industry's extensive requirements is based on industrial components which make the stack suitable for volume production for both mobile and stationary customer requirements, for example as energy storage in photovoltaic parks and for fossil-fuel free propulsion of passenger cars and transport vehicles, or boats. PowerCell S3 is developed in an EU project, Autostack Core, in collaboration with subsuppliers, institutes and the end users VW and BMW.

Robust Design extensivly tested for automotive usage



Metallic bipolar plates gives possiblity for volyme production



High power density
-Easy integration
-Lightweight
-Compact design

POWERCELL

Physical Data:

Specification for standard stack sizes

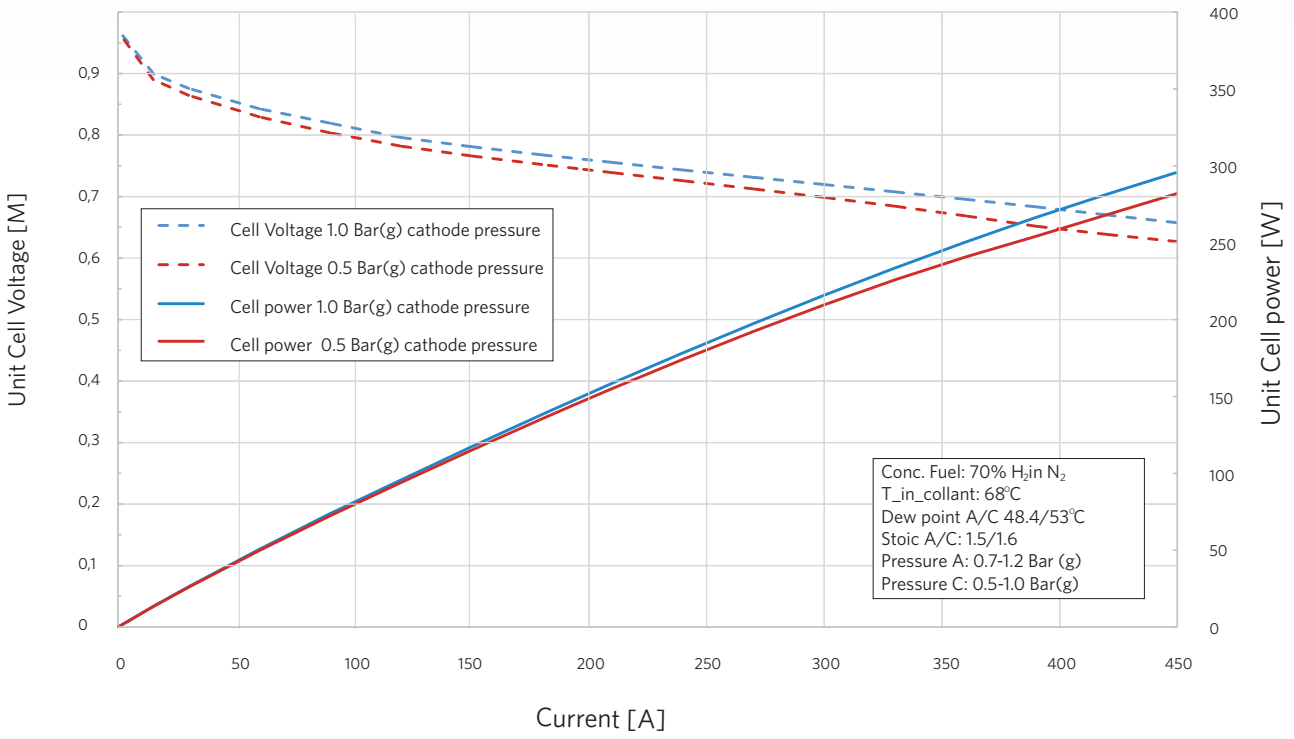
Max power (kW)	49	63	81	98	125
Cell Count	167	215	275	335	455
Dimensions (mm)	420x271x156	420x321x156	420x383x156	420x444x156	420x568x156
Weight (kg)	21	25	29	34	43

**PowerCells S3 stack power and size can be modifed for specific needs*

All models

Max continuous temperature	85 °C
Humidity	Non-condensing at inlet
Fuel Pressure	< 2.2 Bar (g)
Coolant pressure	< 2.5 Bar (g)
Air Pressure	< 2.3 Bar (g)
Ambient temperature	-30 - 70 °C
Fuel composition (dry basis)	70-100 % H2 (0-30% inert dilutants, i.e. He + N2 + Ar)

Unit Cell Data



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