

NextCell

Advanced Electrolyte Planar Cell



fuelcellmaterials.com
PERFORMANCE AND QUALITY DELIVERED

Enhanced Performance
Repeatable Results
Large Quantities Available

The NextCell is an advanced electrolyte supported planar cell developed by the experts at **fuelcellmaterials**. Its performance exceeds standard YSZ electrolyte supported cells and can deliver results comparable to those of an anode supported cell.

The NextCell's performance can be attributed to the use of our patented Hionic™ electrolyte support, which is more than four times stronger than conventional fully stabilized electrolytes and yet has excellent conductivity.

With the combination of high strength and high conductivity you can finally have the performance you want with the sealing and handling capabilities you need.

The NextCell follows industry standards, making it an excellent reference cell for seal or test capability development. It is compatible with most test fixtures, making it easy to incorporate into your own testing, or it can be used with test kits available through **fuelcellmaterials**.

If you are developing your own anode or cathode materials, reduce your variables by purchasing single electrode cells. Available as anode only or cathode only, these NextCell based cells provide you with a consistent platform so you can focus on your materials alone.

We keep a wide variety of NextCell sizes in stock so you can expect an easy ordering process and quick delivery.



Need something a little different?

Work with us! Here, you have a team of material scientists with years of expertise in the SOFC field ready to manufacture or assist you in developing cells custom tailored to meet your individual needs.

Providing proven and repeatable results to help simplify the complexities of research.

Multi-layered anode with nominal thickness of 50 μm

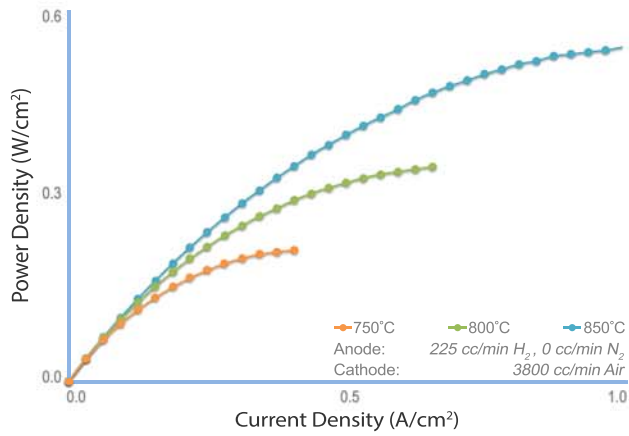
Multi-layered cathode with nominal thickness of 50 μm

NiO/GDC - NiO/YSZ anode for superior performance

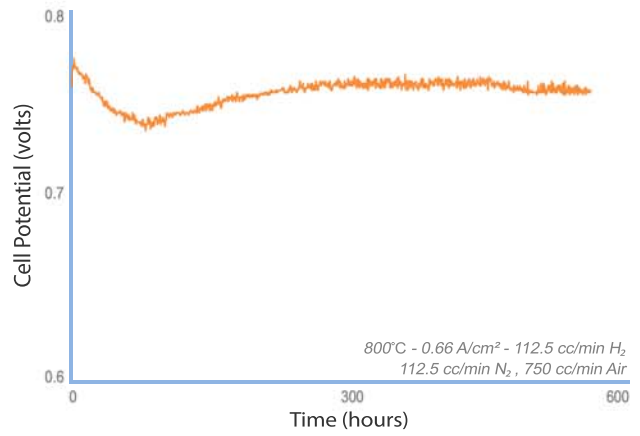
LSM-GDC compatible inner cathode layer

Scandia based Hionic™ substrate with nominal thickness of 150 μm

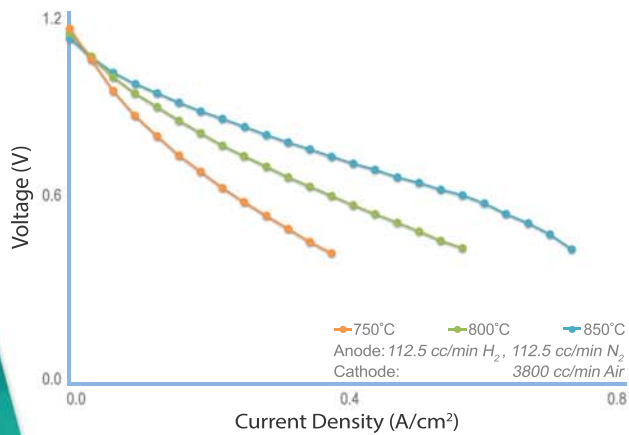
Hydrogen Power Curves



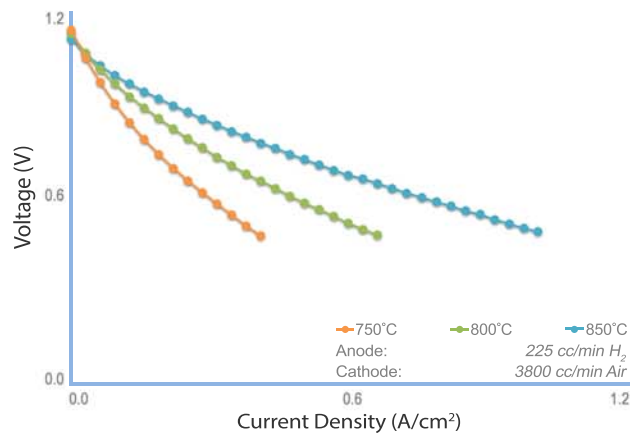
Long Term Stability Test



Polarization Curve - Half Fuel Flow



Polarization Curve - High Fuel Flow



The values reported on this data sheet are to be considered typical and do not imply essential representation of the product specification. The information contained herein is believed to be accurate and reliable but is presented without guarantee or implied warranty of merchantability or fitness. Further, nothing presented herein should be interpreted as an authorization or inducement to infringe any relevant patent. Under no circumstances shall this company be liable for direct, incidental, consequential or other damages regardless of legal theory, arising out of the use or handling of the product or products referred to herein. The sole remedy of the buyer for any claims shall be limited to the buyer's purchase price. Technical advice is accepted at the buyer's risk and is not a warranty.



fuelcellmaterials.com

404 ENTERPRISE DRIVE P: 614-635-2025
LEWIS CENTER, OH 43035 F: 614-842-6607

sales@fuelcellmaterials.com