A fundamentally new approach!

Low Cost

- *No noble metal catalysts*
- *No proprietary membranes*
- *No expensive bipolar plates*

Unique Performance Advantages

- *Intrinsic energy storage*
- *Instant start*
- *No auxiliary batteries*
- *Intrinsic operation down to –20 °C*
- *Operation without fuel for several minutes*
- *Storage of regenerative braking energy for propulsion applications*



Ovonic Fuel Cell Company LLC:
Basic, proprietary, state of the art solutions...

Ovonic Fuel Cell Company LLC

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The Ovonic Regenerative Fuel Cell™

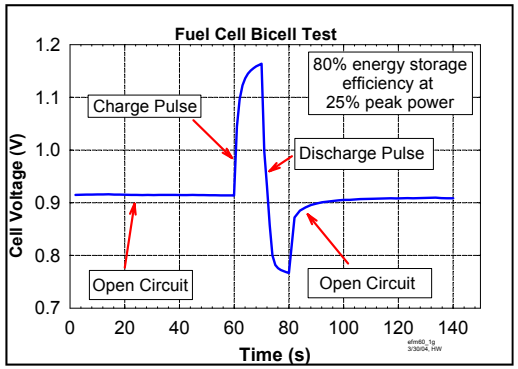
Ovonic Fuel Cell Company LLC



...Paving the way to practical power solutions

A fuel cell like no other…

The Ovonic Regenerative Fuel Cell™ is a fundamentally new approach to fuel cell technology. The result is a novel fuel cell with intrinsic energy storage capability.



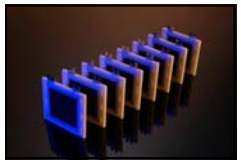
Unique energy storage capability

LOW-COST APPROACH



65 W (left) and 50 W (right) stacks

Ovonic Fuel Cell Company LLC is using a practical approach to developing power solutions by removing the expensive noble metal catalysts from the fuel cell and avoiding the use of proprietary membranes. This practical design approach results in a fuel cell stack that does not require nuts and bolts to compress and hold the stack together.

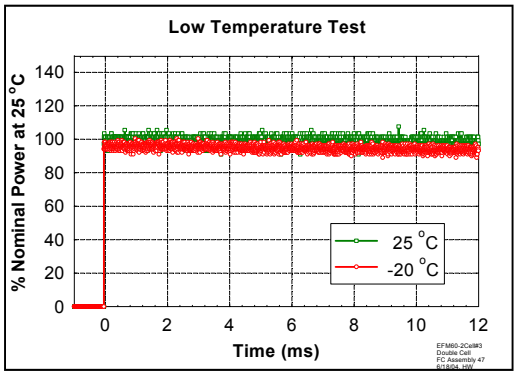


Low cost, modular scalable stacks

Advanced designs are elastic in nature and provide excellent intrinsic resistance to vibration and thermal shock. These advanced designs are well-suited for rugged and harsh conditions.

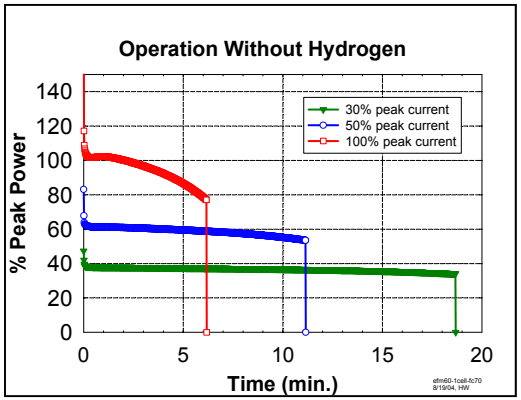
UNIQUE PERFORMANCE ADVANTAGES

The Ovonic Regenerative Fuel Cell™ is not only practical, but it also offers some unique performance advantages. The intrinsic energy storage allows the Ovonic Regenerative Fuel Cell™ to start up instantly without a startup battery, even at –20 °C. This low temperature capability makes the Ovonic Regenerative Fuel Cell™ a good candidate for applications requiring versatility and performance under harsh conditions.



Instant start even at –20 °C

The onboard energy storage allows the Ovonic Regenerative Fuel Cell™ to operate for several minutes without hydrogen. This capability is useful for power backup/UPS applications because auxiliary batteries are not required. In addition, the energy storage capability can store regenerative braking energy for propulsion applications.



Energy storage allows operation without hydrogen

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