

## PolyFuel Claims New Fuel Cell Membrane Offers 'More Power Than Ever'

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PolyFuel, a developer of fuel cell membranes, claims to have created a new ultra-thin membrane capable of producing more power than any fuel cell membrane currently available.

The company says that the hydrocarbon membrane can produce 200 milliwatts of peak power per square cm of material when used in a direct methanol fuel cell; a feat PolyFuel claims is "unprecedented".

The new membrane works by allowing more water to diffuse through it than previous membranes, allowing for a simplified fuel cell design.

A process referred to as "molecular-level recycling" allows water produced as a by-product in the fuel cell to flow back from the cathode to the anode - a feature that PolyFuel says eliminates the need for pump systems.

The company hopes that the membrane could have a part to play in the emerging commercial market for portable fuel cells, designed to power laptops, mobile phones and other handheld devices.