

Horizon Launches Economical 3MW Hydrogen Power Solution for AI Datacentres

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/EINPresswire.com/ -- Reinforcing their global leadership in high power fuel cells, [Horizon Fuel Cell](#) has unveiled its latest 3MW fuel cell modules for datacenter backup. Each 3MW module has a footprint of just one 40 ft container, delivering 100% more power than similarly sized PEM fuel cells, and at least 300% more power than most solid oxide fuel cells. The small footprint is achieved by incorporating the company's groundbreaking 400kW fuel cell stacks that are already powering heavy duty vehicles with heretofore unseen efficiency.

The 3MW module is the highest power and power density fuel cell stationary power module ever launched, saving space and reducing costs for datacentre operators. With pure water as the only byproduct, such fuel cell modules provide customers a truly zero emission, scalable power solution.

Horizon also offers a one ton hydrogen storage system in a 40 ft container. Multiple units of the storage container can provide 8-48 hours of backup, requiring modest investment for added backup duration. The optional electrolyzer from Horizon can replenish the onsite storage automatically with cheap off-peak grid power, leading to lower operating costs than diesel generators. Horizon expects this solution to reach Total Cost of Ownership (TCO) parity with diesel generators in volume.

During the last five years, Horizon's MW-scale power solutions have been deployed in chemical complexes where waste hydrogen was available to generate power and reduce merchant purchases of electricity, curbing increasing power bills.



Horizon Packs an Incredible 3MW into a Single Module



Horizon logo file

There is a growing global challenge supplying reliable energy to burgeoning demands from Artificial Intelligence (AI) datacentres, with both primary and backup power solutions being stretched, and more sustainable approaches are being sought by project developers and Hyperscalers alike.

With fuel cell technology hitting critical mass, there is great potential to deploy clean backup power solutions in place of traditional “dirty” incumbent solutions such as diesel generators, which are facing increasing scrutiny from regulators, even when used as backup. Fuel cell backup power solutions avert the need for polluting diesel run-tests, eliminate risks of fuel spillage and the expense of periodic stale fuel replacement. Fuel Cell backup power solutions can also replace both backup generators and UPS, which together represent significant investment for datacentre operators.

About Horizon Fuel Cell Group

Horizon Fuel Cell was founded in 2003, with a focus on fundamental innovation in materials and systems-level technology for fuel cells and electrolyzers. Horizon is a world leader in key technologies across the hydrogen value chain, making hydrogen viable through the provision of best-in-class equipment, and is a global leader in eliminating diesel from heavy duty applications. With installed production capacity exceeding 1.5GW per year, Horizon is well placed to supply large quantities of primary and backup fuel cell power solutions for AI Datacentres.

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