



GenCell EVOX[®]

MISSION-CRITICAL HYDROGEN-FUELED EV CHARGING AND GRID ENHANCEMENT



GenCell EVOX[®]

With the steady, steep rise in EVs entering our roads, **the electricity infrastructure can't keep up.** Grid expansion is complex and slower than that of EVs expansion - causing the main barrier to expanding charging infrastructure and reinforcing EV drivers' **range anxiety.**

GenCell's EVOX[®] is a disruptive technology that fills this gap. The EVOX leverages fuel cells to complement energy storage, creating the ultimate EV charging solution that produces power on-site with the added benefit of long-duration backup power for the entire facility in case of power outage.

Fueled by zero-emission hydrogen, EVOX ensures charging stations keep running 24/7, providing reliable, fast charging to multiple vehicles.



[Take a Tour](#)



Hydrogen2Power™

ON-SITE POWER GENERATION + ENERGY STORAGE



Green, grid-optional EV charging



Resilient site-wide backup power



DC fast charging of electrified equipment on-demand



OUR BENEFITS

Fills power gap where grid power is insufficient



Delivers immediate, dispatchable, containerized three-phase power



Zero-emission to comply with strictest environmental regulations and standards



Rapid deployment cuts lead time; modular & scalable with low maintenance



On-site hydrogen-fueled power generation technology with integrated DERMS software

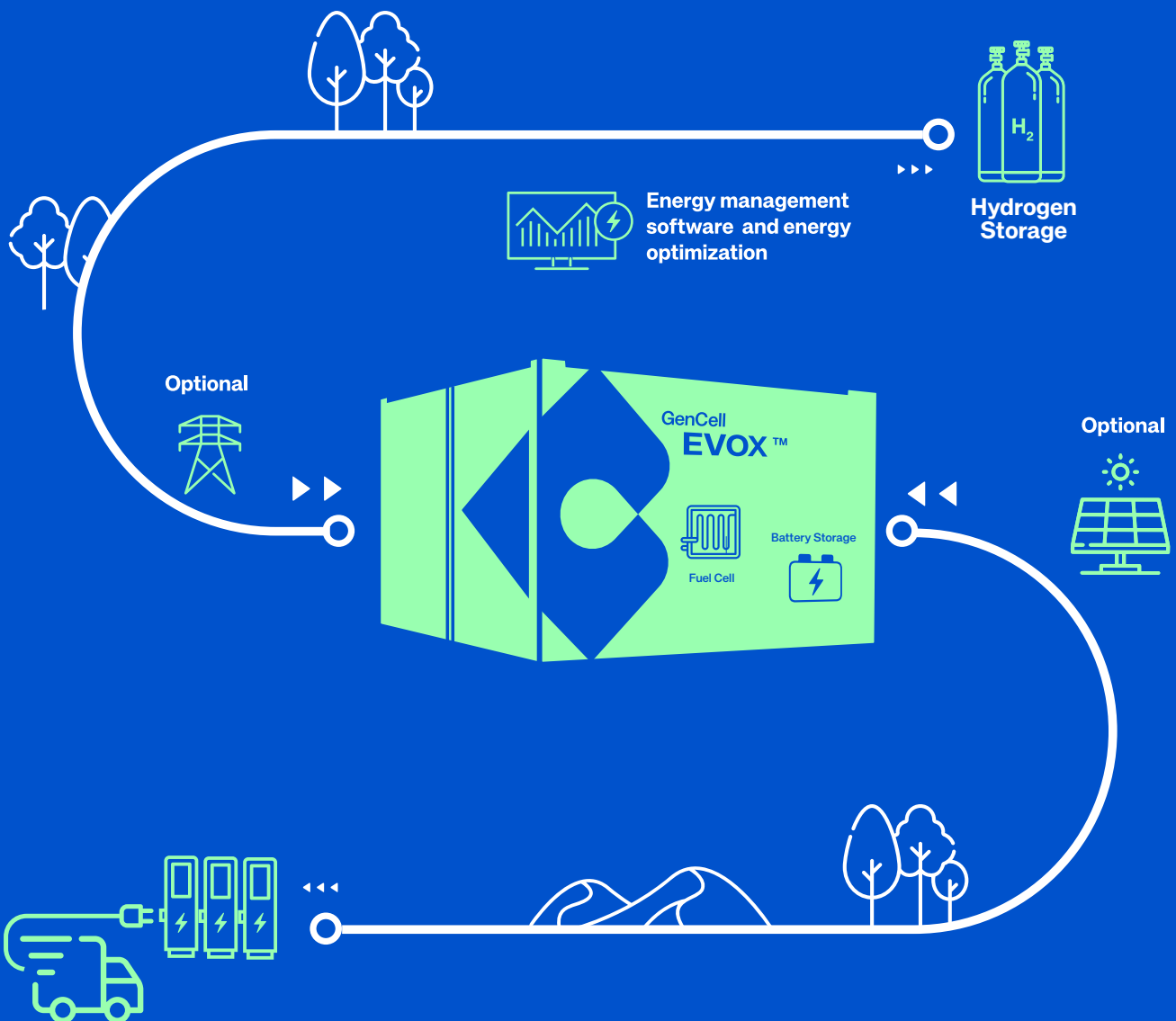


Designed to support Level 2 and Level 3 (DC Fast Chargers)



HOW DOES IT WORK?

The GenCell EVOX solution is scalable - which allows flexible combinations and configurations. Incorporating a 372kWh energy storage device with various hydrogen storage options, each EVOX unit delivers up to 1,680 kWh per day. The solution can service multiple DC fast chargers (50 - 350kW), typically enabling each vehicle to reach a charge of 80% energy capacity within 12 - 30 minutes - anywhere, anytime, independent of the grid.



GenCell 

SMART ENERGY MANAGEMENT SOFTWARE

— Optimizes Power Resources

- ↳ Integrates fuel cell operations with other power sources
- ↳ Prioritizes energy resources in accordance with real-time costs
- ↳ Executes energy usage tracking for EV charging payment apps
- ↳ Energy calculator tracks and charges diverse billable power sources
- ↳ Ensures reliable backup power management

GEMS™ Edge

— The core component of GEMS, is delivered as an embedded element of every GenCell solution for connectivity, computing and optimal system control and monitoring at the devices' edge.

- ↳ Monitoring and Data Collection
- ↳ System Utilization Tracking
- ↳ Management Software Integration
- ↳ Web-Based Remote Monitoring and Control
- ↳ Hydrogen-Level Calculations



EVOX IN THE FIELD:



Thanks to EVOX at the CMC (there is) a space to charge heavy-duty vehicles and do it in a way that doesn't require the high cost of utility upgrades. The project can accelerate the transition and bring zero-emission vehicles to the Sacramento community.

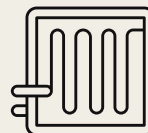
Orville Thomas
CEO
California Mobility Center (CMC)



CBS News Sacramento:
New Mobile Fueling Unit
Helping Power the Future for
Consumers Going Green



Hydrogen



Fuel Cell



Energy Storage

1.6 MWh/Day

372kWh

TECHNICAL SPECIFICATIONS

Input Parameters	
AC Frequency	60Hz
AC Voltage	480V 3P4W, 181A or 208V 3P4W, 250A
Power Factor	0.95
Output Parameters	
Rated Output Power	375kW
Output Voltage	277/480VAC 3-phase
Battery System Parameters	
Rated Output Real Power	372kW
Rated Output Reactive Power	372kVAR
Rated Output Apparent Power	372kVA
Energy	372.5kWh
Chemistry	Lithium Iron Phosphate
Nominal DC voltage	1331.2V
DC Voltage Range	1164.8-1497.6V
Rated Charging/Discharging Current	280A
Power Factor Range	-1.0 to +1.0
Cooling Mode	Liquid Cooling

Environment Parameters	
Operating Temperature	-20C to 45C (4F to 113F)
Storage Temperature	-20C to 55C (4F to 131F)
Humidity	10% to 95%RH, non condensing
Altitude	≤1000m (3280ft)
Noise Level	<64dB
Emissions	Heat, water, vapor
Fuel Cell Parameters	
Rated Output Power	110kW
Fuel Type	Hydrogen Gas 99.97% or higher Grade D
Specific Fuel Consumption	68g/kWh (at full-rated power)
Coolant	Deionized water or special coolant mixture by GenCell Conductivity (us/cm) ≤2
Energy Production	1,680kWh Daily Capacity*
Fuel Storage	External
Mechanical Parameters	
Dimensions (L X W x H ft)	19.9 x 8.0 x 9.5 ft (20'HC ISO Shipping Container)
Weight (lbs)	28,000 lbs
Safety Parameters	
Fire Suppression System	Fire Detector, Smoke Detector & Fire Extinguisher (in BESS)
Batteries and Container	UL9540 and UN3536 certified
Hydrogen	Hydrogen leak detection and shutoff system

*when operating at optimal point of 70kW

ABOUT GENCELL



GenCell Inc., a wholly owned U.S.-based subsidiary of GenCell Energy, leverages GenCell's legacy Hydrogen2Power™ technologies, proprietary DERMS software and field experience to further develop the hydrogen-fueled, containerized GenCell EVOX® grid-optional and backup solution to power EV fleets and diverse electrified equipment to overcome the growing power gap.

GenCell Energy (TASE: GNCL), founded in 2011 to adapt revolutionary space fuel cell technologies to serve critical power applications on Earth, is dedicated to transforming the energy landscape by providing reliable, sustainable and climate-resilient power solutions that address the growing global demand for energy security and independence.

With rapidly deployable solutions and the introduction of advanced software such as GenCell GEMS™, GenCell Inc. is well-positioned to drive growth and expand GenCell's presence in key markets across North America and beyond.

↳ CONTACT US

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