

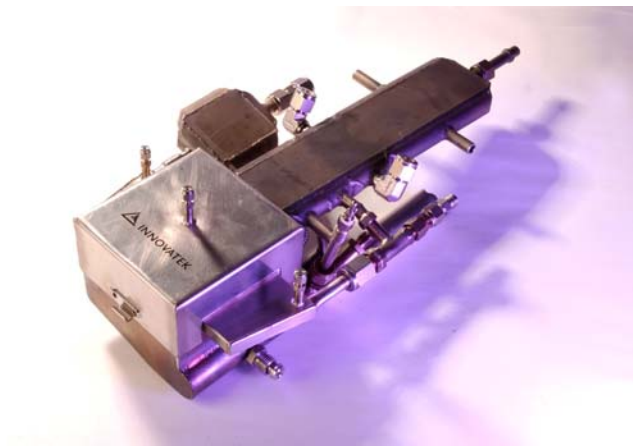
InnovaGen® Fuel Processor

The InnovaGen® fuel processing system uses advanced technology developed by InnovaTek to provide clean hydrogen to fuel cells for stationary, portable, and mobile applications. The system uses renewable fuels, such as alcohols and biodiesel, or carbon-based fuels, such as standard natural gas, gasoline, or diesel, and water to generate hydrogen for clean on-site or portable electrical power production.

Imagine a quiet power source about the size of a suitcase that can generate back-up electricity for any home or business in the most remote location on the planet. Or that can provide auxiliary power to a vehicle using the existing fuels infrastructure at double the efficiency. Coupled with the InnovaGen® fuel processor, fuel cells are poised to become a superior, commercially-viable energy technology.

Proprietary Technology Design

- Reforms multiple fuel types without coke formation for 0.5-5 kW PEM or solid oxide fuel cells.
- Membrane option provides pure H₂ output for PEM fuel cell enabling higher power densities.
- Micro-technology improves system efficiency and reduces size through optimized thermal management, chemical kinetics, and fluid dynamics.
- Flexible reforming options include steam reforming, autothermal reforming, or CPOx.



InnovaGen[®]5 Fuel Processor

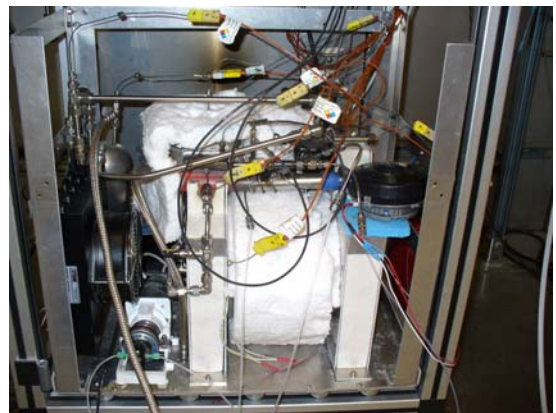
The InnovaGen5, currently available for testing with strategic partners, includes integrated components in a rack mounted framework for easy installation. Components include the InnovaGen[®] reformer, InnovaJet[™] fuel injector, heat exchangers, condenser, optional InnovaPure[™] hydrogen separation membrane, and the required insulation and balance of plant hardware. Total rack mounted system volume is 24 liters. The InnovaGen5 is capable of reforming 6 mls per minute of biodiesel, ultra low sulfur (ULS) diesel, or other liquid fuel and generating 25 liters per minute reformat, enough for a 3 kW SOFC, and 12 liters per minute of pure hydrogen, enough for a 1 kW PEM fuel cell. The system can be readily configured for processing gaseous fuels such as propane and natural gas.

InnovaGen[®]5 Performance (with and without InnovaPure membrane)	
Product Output (without Purification Membrane)	
Reformat (L/min) for SOFC	25
Dry Reformat Composition	
H ₂ (vol %)	70
CO (vol %)	16
CO ₂ (vol %)	14
Product Output (with InnovaPure[™] Membrane)	
Pure, Dry Hydrogen (L/min) for PEM FC	12

System Features

- Integrated micro channel reactor, liquid fuel burner, & heat exchanger technology
- InnovaJet[™] fuel injector/atomizer (patent pending)
- Sulfur-tolerant steam reforming catalyst (patented)
- InnovaPure[™] hydrogen-permeable membrane provides H₂ purification for PEM fuel cells

Rack Mount System Physical Dimensions		
Length	14.5 in	36.8 cm
Width	8 in	20.3 cm
Height	10 in	31.7 cm
Weight	35 lb	18.1 kg
Volume	1450 in ³	24 liter



Price quotes available for InnovaGen[®] Reformers and Systems to qualified parties upon request. Ask about options for fuel desulfurization, fuel cell integration, and system controls.

Contact Us

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