



Green Hydrogen at Work

# ProGen





# Fuel Cell Power

## Moving Mobility into the Future

Plug's suite of ProGen fuel cell engines are flexible power building blocks designed for independent companies to use in heavy duty motive applications. ProGen engines provide robust and cost-effective solutions with industry-leading performance, reliability and time-to-market for OEMs looking to adopt sustainable fuel cell power.

## Tested. Proven. Rugged. Reliable.

Plug is driving the electrification of mobility today, with over 52,000 deployed fuel cells and more than 750 million run-hours in mobility applications. GenFuel hydrogen customers have performed more than 33 million hydrogen fills of electric vehicles, dispensing more than 24 tons of hydrogen daily.

## Powerful Benefits

### **Complete Fuel Cell System**

Plug's ProGen fuel cell system includes everything you need for your heavyduty motive application, including the fuel cell stack and all required subsystems for humidification, air delivery, fuel regulation and cooling. ProGen engines balance the need for rapid acceleration with operational efficiency and flexibility, while generating no greenhouse gas emissions.

### **Flexible Architecture and Scalable Power**

ProGen engines are designed with simplicity in mind. Their design allows for packaging flexibility including both complete, integrated systems and those with distributed air and cooling sub-systems. ProGen's heavy duty scalable power ranges from 15kW to 125kW.



### Integrated Safety System

ProGen's safety system is based on more than 847 million operating hours of experience. Its sophisticated array of sensors complement a proven hydrogen detection and ventilation scheme.

### Rugged Reliability

ProGen provides superior power even in the most rugged conditions, operating in a wide range of climates including sub-freezing temperatures. System reliability is backed up by Plug's experience operating more than 52,000 fuel cell systems in the field.

### Zero-Emission

Plug's ProGen engines enable users to meet transportation emission reduction targets. Using hydrogen as a fuel, only heat and water are generated as by-products.

ProGen		Technical Deliverables		
Performance	Rated Net Power (kW)	15	30	125
	Output Voltage Range (V)	280 to 430	280 to 430	500 to 750
FC Module <sup>1</sup>	Dimensions (L x W x H)	985 x 674 x 567	1341 x 833 x 415	1430 x 700 x 400
	Weight (kg)	248	257	363
Environmental	Ambient Temp (C°)	-20 to +40°C	-20 to +40°C	-20 to 55°C
Fuel / Coolant	Fuel	Hydrogen per ISO 14687-2:2012		
	Inlet Pressure (barg)	16.5 ± 1.4 barg	16.5 ± 1.4 barg	20.7 ± 0.7 barg
	Coolant	Deionized water OR 50/50 ethylene glycol / deionized water		
Codes / Standards	Designed to	UN ECE-R10, UN ECE-R100, EC-79 Regulation, ISO 23273		

<sup>1</sup> Includes fuel cell stack, humidifier, coolant pump, anode recirculation, air compressor, and all other necessary balance of plant.

Cooling module included in 15kW and available for 30kW and 125kW

All ProGen modules comply with IP Rating IP54 (key internal components IP67)

Specifications are subject to change at any time



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