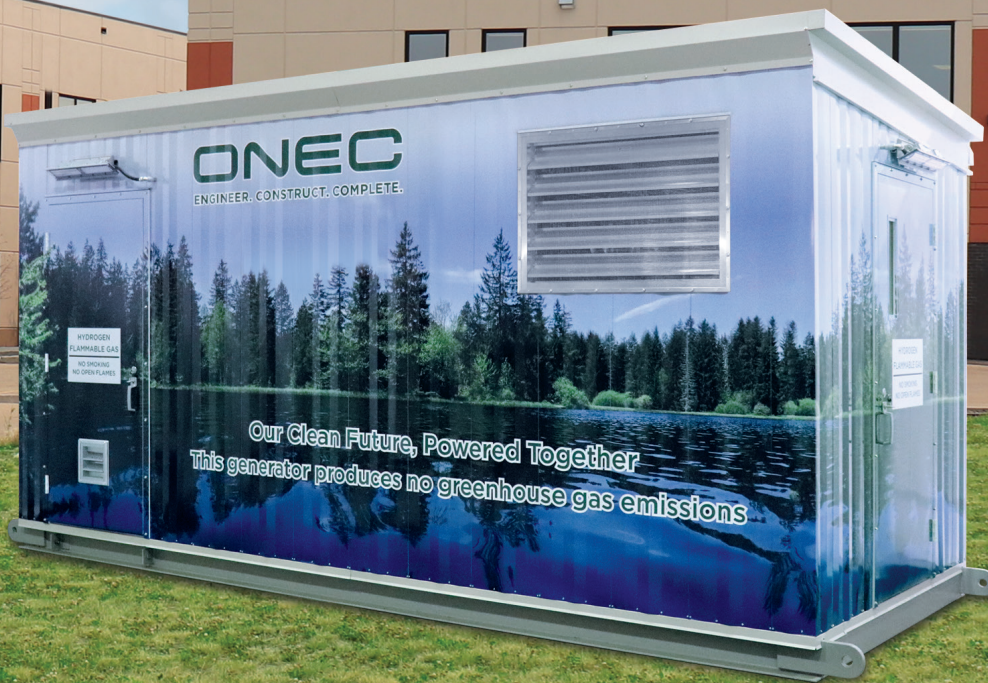


ELECTRICITY WITHOUT THE POLLUTION



Hydrogen Fuel Cell Module Building





Custom sizes and options are available!

ONEC's 5kW (HFC) Hydrogen Fuel Cell Module Building is the latest green solution to meet your emergency or continuous use power needs.

Our innovative, self-contained unit is fully functional and ready to go. The unit operates on industrial grade hydrogen, provided by either bottles or an external supply.

The module delivers clean, reliable power in emergencies acting as an Uninterruptable Power Supply (UPS) while the primary power supply is being restored, or as a continuous power source.



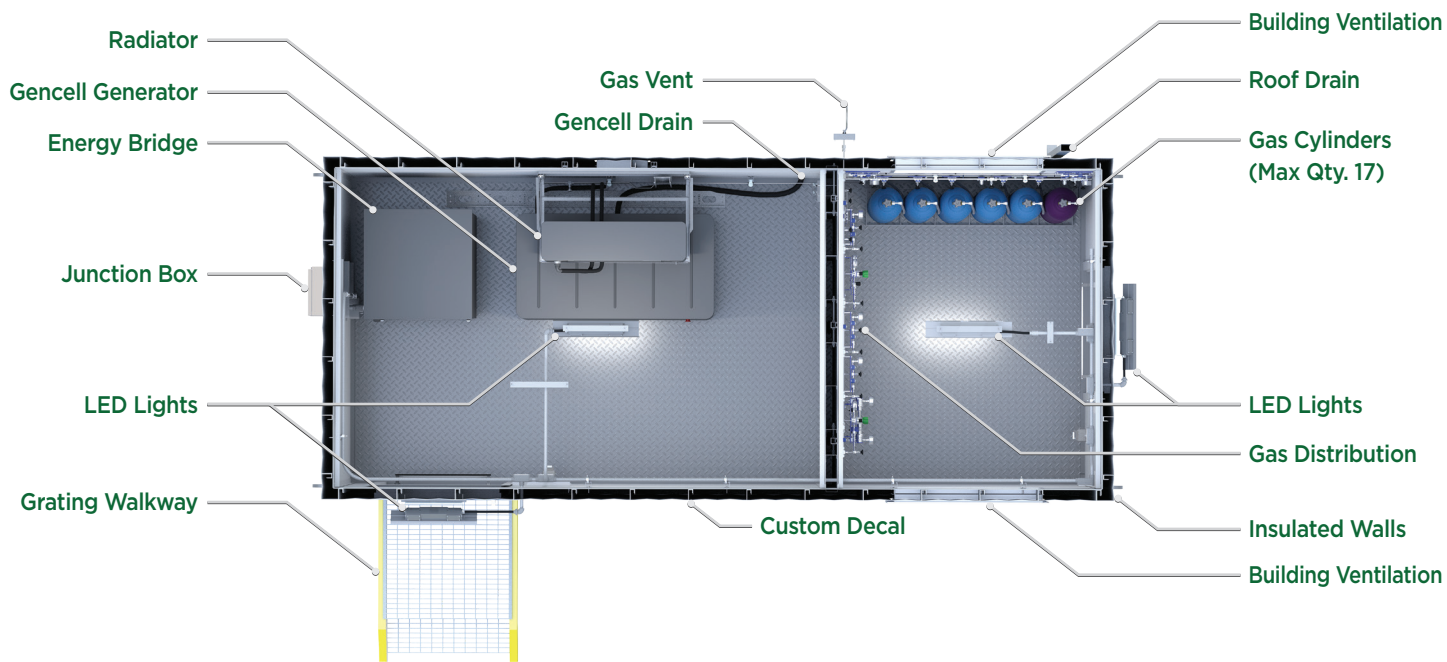
Custom gas distribution panel designs for your specific module.

Housing up to 15 bottles of hydrogen as well as two bottles of nitrogen, our fully self-contained modular HFC unit is compact. At approximately 5.5 metres long, 2.4 metres wide, and 3.0 metres tall, this module can be transported on a standard fifth wheel utility trailer. It's also incredibly quiet at 1m (55 dB). From outside the building it's nearly silent!

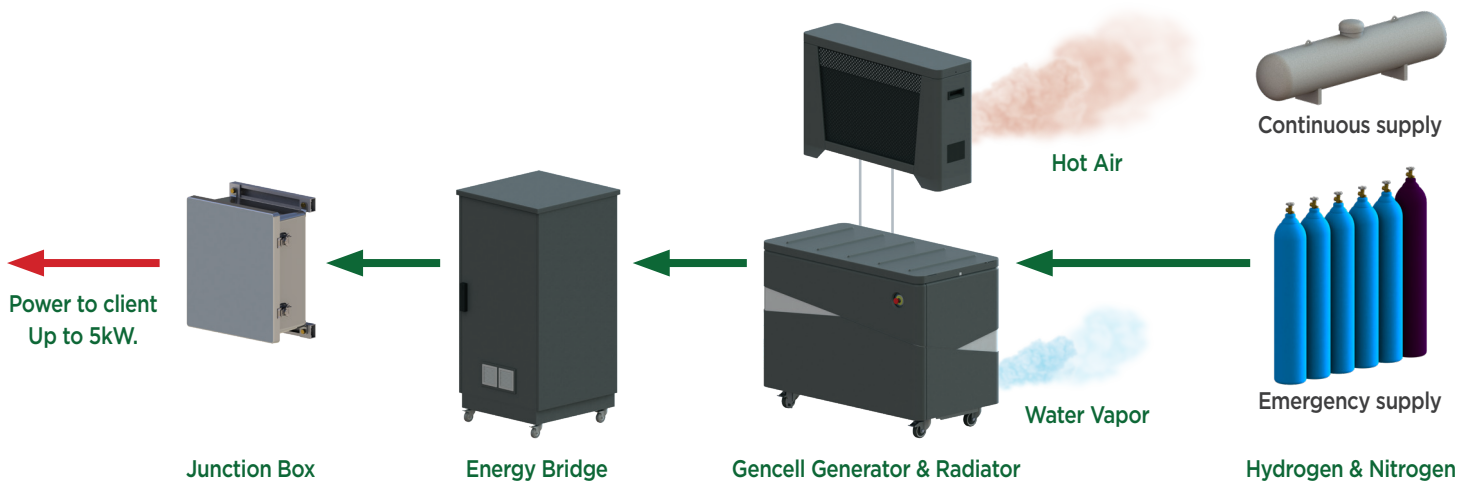
Have your own hydrogen supply source? No problem. This unit is furnished with connections to accept hydrogen from alternative external sources (transportable supply tanks, bullet tanks etc.) for continual, non-emergency use!

Heat produced through the process of generating your power is expelled from the HFC or can be reclaimed for alternative uses.

Internal View of Hydrogen Fuel Cell Module Building



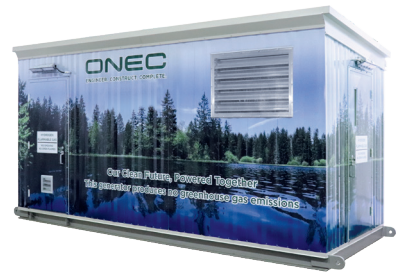
Process Flow of Hydrogen Fuel Cell Module Building



Module Specifications

Rated Power:	5 kW
Output Voltage:	48 VDC
Output Voltage Using Inverter:	120 & 480 VAC
Output Current:	104.2 A
Operating Temperatures:	-20 to 45 °C
Operating Temperatures w/ Heater Upgrade:	-50 to 45 °C
Operating Humidity:	Up to 90 %
Noise @ 1m:	<55 dB
Start Up Time (with Pre-heat Unit):	Instant
Start Up Time (without Pre-heat Unit):	Variable, 50°C required
Fuel:	Hydrogen
Gas for Non-Operating Mode:	Nitrogen
Hydrogen and Nitrogen Supply Pressure:	300 to 500 kPag
Hydrogen and Nitrogen Required Purity:	>= 99.95 %
Hydrogen Consumption:	<=0.07 kg/kWh
Electrolyte (KOH):	30 % w/v
Oxidant:	Ambient Air
Approximate Building Size:	2.4 W x 5.53 L x 3.03H meters
Maximum Hydrogen Bottles:	15
Maximum Nitrogen Bottles:	2
Approximate Operating Time @ 5 kW:	24.5 hours*
Approximate Operating Time @ 1 kW:	122.3 hours*

*Using 15 hydrogen bottles set at 15,000 kPag.



With our unique combination of engineering and construction expertise, you can expect excellence in engineering design, construction services, and ongoing maintenance support.

Contact



3821 - 78 Ave
Edmonton, AB, T6B 3N8



+1 (780) 440-0400



www.onecgroup.com