



Powering your process. Protecting your business.

Liquid Methanol Fueled Fuel Cell Power System



The First Element Advantage

Off grid, prime power or backup installations

Cost savings over diesel generators & batteries; easy installation, low maintenance, clean & quiet

Flexible enclosure options, 2 & 4 door cabinets
Fast-Deploy cabinet option, no pad required

Available with air or liquid-cooled fuel cells to cost effectively match your service application

Systems available for harsh environments

Applications

Telecommunications, railroads, utilities and critical business IT operations

Ground, roof top and indoor rack mount installations

Optional AC power UPS system with an integrated solid state transfer switch

Distributed electric vehicle charging

Total Cost of Ownership analysis is easily available for your application, call to see how much you can save

Specifications for Integrated Fuel Cell & Methanol Reformer					
Standard Models, kW	2.5 / 3	5	7.5	10	15
Physical					
2-Door Cabinet Dimensions (W x D x H)	92 x 97 x 219 cm				
	Integral 35 gallon tank included				
4-Door Cabinet Dimensions (W x D x H)	190.5 x 97 x 117 cm		190.5 x 97 x 145 cm		216 cm, Height
Fuel Storage Tank, 4-door cabinet	Standard base tank sizes: 220 / 500 / 1000 liter				
Operation, Backup or Off-Grid					
Power Output	DC	DC/DC converter, +/- 48-56 V, load following, remote-real time controllable output			
	AC	50 / 60 Hz, single or 3-phase power, with integrated solid state transfer switch and UPS			
Fuel	Mixture of Methanol & Pure Water. Mix ratio: 62-63% methanol by weight				
Environment					
Ambient Temperature, (deg. F)	Liquid-cooled rated power maintained from: -30° to 41° (High temp kit available) Air-cooled fuel cell rated power maintained from: -10° to 46°				
Air Quality	For operation in areas with air pollution, special filters are available				
Controls & Remote Commuincations	Dry contact and full system alarms, FULL remote command & monitoring via internet				
Emissions					
Water (from liquid-cooled fuel cell only)	Approximately 0.35 liter / kWh, condenser kit available				
Noise	All models are less than 62 dB at a distance of 3 feet from any direction				
CO, CO ₂ , NOx, SOx (Reformer ONLY)	CO: <20 ppm, no particulates, no SOx.				

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