

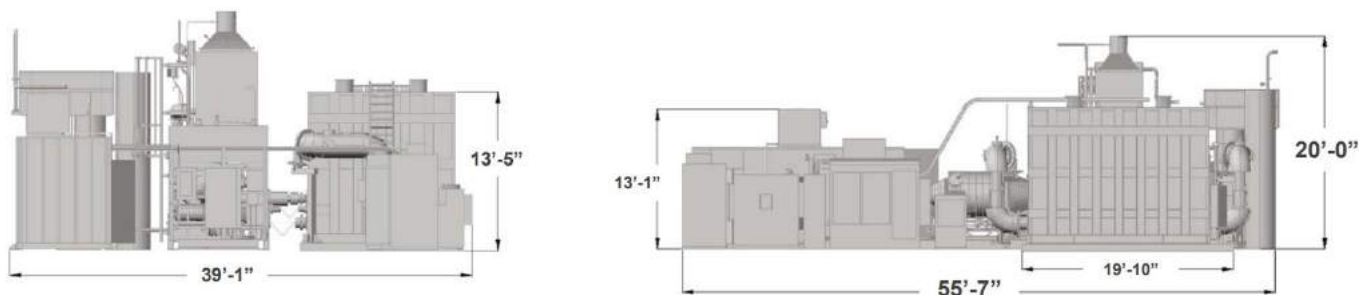
# 1500

Carbonate Fuel Cell Power Plant



# Background

Designed for a range of on-site power applications, FuelCell Energy's 1500 plant generates 1.4 MW of reliable, efficient, and ultra-clean power. On-site power can maximize a site's production uptime by avoiding costly outages. The plant's electrochemical process results in electricity, heat, and water, with the ability to recycle CO<sub>2</sub> into a valuable product. Operating from a compact footprint, the 1500 is ideal for sites with limited space and can combine with more modules to meet higher power demands. The system operates at high temperatures and can use its own heat to increase overall efficiency. The quiet and combustion-free process emits water, not pollutants, supporting a customer's net zero goals.



Specifications subject to change without notice.

## System Data

Power @ Plant Rating \_\_\_\_\_ 1400 kW  
 Standard Output AC Voltage \_\_\_\_\_ 480 V  
 Standard Frequency \_\_\_\_\_ 60Hz  
 Optional Output AC Voltages \_\_\_\_\_ By Request  
 Optional Output Frequency \_\_\_\_\_ 50 Hz  
 Sound Level \_\_\_\_\_ 72 dB(A) at 10 Feet

## Fuel Consumption

Natural Gas (at 930 Btu/ft<sup>3</sup>) \_\_\_\_\_ 181 scfm  
 Heat Rate, LHV \_\_\_\_\_ 7,260 Btu/kWh

## Water

Consumption Average \_\_\_\_\_ 4.5 gpm  
 Discharge Average \_\_\_\_\_ 2.25 gpm  
 Discharge Peak During WTS Backflush \_\_\_\_\_ 15 gpm

## Heat

Exhaust Temperature \_\_\_\_\_ 700 +/- 50 °F  
 Exhaust Flow \_\_\_\_\_ 18,300 lb/h  
 Allowable Backpressure \_\_\_\_\_ 5 iwc  
 Energy for Recovery to 250 °F \_\_\_\_\_ 2,216,000 Btu/h  
 Energy for Recovery to 120 °F \_\_\_\_\_ 3,730,000 Btu/h

## Efficiency

Initial Operation LHV \_\_\_\_\_ Approximately 47 +/- 2%

## Emissions

NO<sub>x</sub> \_\_\_\_\_ 0.01 lb/MWh  
 SO<sub>x</sub> \_\_\_\_\_ 0.0001 lb/MWh  
 PM10 \_\_\_\_\_ 0.00002 lb/MWh  
 CO<sub>2</sub> \_\_\_\_\_ 980 lb/MWh  
 CO<sub>2</sub> (with waste heat recovery) \_\_\_\_\_ 520 - 680 lb/MWh

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