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Data Sheet 1500 Fuel Cell System

A 1250 kW fuel cell system for reliable, low-carbon distributed energy generation

FuelCell Energy's 1500 fuel cell system generates 1250 kW of reliable, efficient, and low-carbon power. The fuel flexible system is capable of operating on natural gas, biogas, and natural gas/H_2 blends of up to 40% H_2 with no reduction in power output or efficiency. The system produces heat that can be used to generate hot water, high-pressure steam, or cooling to increase overall efficiency. The 1500's low emissions profile allows for quicker permitting, providing customers with faster time to power.

Key Benefits







Carbon captur ready



Low emissions



Microgrid capable



Usable heat



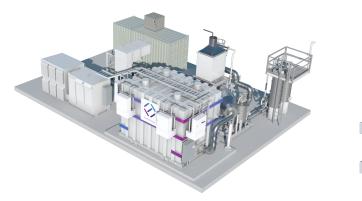
Scalable design

| System Outputs |
|----------------|
|----------------|

| System Outputs | | | |
|--------------------------------------|--|--|--|
| Nameplate Power Output | 1250 kW | | |
| Voltage | 3-phase, 480 V | | |
| Frequency | 60 Hz | | |
| Noise | 72 dBA @ 10 ft | | |
| System Inputs | | | |
| Fuel | Natural Gas, Biogas ¹ , Natural Gas/Hydrogen Blend ² | | |
| Water Consumption/Discharge | 4 gpm/2 gpm | | |
| Efficiency | | | |
| Electrical Efficiency (LHV) | 49% - 44% | | |
| Heat Rate (HHV) | 7,720 - 8,578 Btu/kWh | | |
| Total Efficiency | >80% | | |
| Emissions | | | |
| NO _x Emissions | < 0.01 lb/MWh | | |
| VOC, PM10, SO _x Emissions | Negligible | | |
| CO ₂ Emissions | 890 - 990 lb/MWh | | |
| Environment | | | |
| Location | Outdoor | | |
| Temperature Range | -20°F to 120°F | | |
| Codes & Standards | | | |
| Safety | CSA-FC1, UL1741, NFPA 70 (NEC) | | |
| Grid Interconnection | IEEE 1547, CA Rule 21 | | |
| Emissions | CARB 2007, CARB 2013 (Biogas) | | |

System Dimensions

| Length | 58' 0" |
|--------|--------|
| Width | 42' 0" |
| Height | 20'0" |





¹Biogas must be pre-conditioned to meet FCE's fuel composition requirements. FCE can supply the pre-conditioning system, if desired. Ratings listed based on 60% methane. ²Power output and efficiency are impacted at H₂ concentrations >40%.

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