



PureCell® Model 400

PURECELL SYSTEM BENEFITS

Energy Security

Proven PAFC fuel cell technology that is setting durability records

Energy Productivity

Increased efficiency and continuous on-site generation reduces energy costs

Energy Responsibility

Ultra-low emissions equals sustainability

PURECELL SYSTEM COMPETITIVE ADVANTAGES

Long Life

Industry leading 10-year cell stack life assures high availability and low service cost

Modular & Scalable

Solutions for multi-megawatt applications to meet growing energy demand

Experience

Most knowledgeable and experienced team in the industry

High Efficiency

Up to 90% total CHP Efficiency

Grid-Independence

Proven performance delivering power when the utility grid fails

Load Following

Capable of dispatching power to match building needs

Small Footprint

Highest power density among clean generation technologies

Flexible Siting

Indoor, outdoor, rooftop, multi-unit

RATED POWER OUTPUT: 460KW, 480VAC, 50/60HZ

| Characteristic | Units | Operating Mode | |
|---|---------------------------|----------------|--------------|
| | | Power 460kW | Eco 440kW |
| Electric Power Output ¹ | kW/kVA | 460/532 | 440/518 |
| Electrical Efficiency | %, LHV | 43% | 45% |
| Peak Overall Efficiency | %, LHV | 90% | 90% |
| Gas Consumption ¹ | MMBtu/h, HHV (kW) | 4.09 (1,200) | 3.77 (1,104) |
| Gas Consumption ^{1,2} | SCFH (Nm ³ /h) | 3,995 (107) | 3,674 (98.4) |
| High Grade Heat Output @ up to 250°F ¹ | MMBtu/h (kW) | 0.72 (212) | 0.55 (162) |
| Low Grade Heat Output @ up to 140°F ¹ | MMBtu/h (kW) | 1.03 (301) | 1.00 (292) |

FUEL

Supply..... Natural Gas
Inlet Pressure 10 to 14 in. water (2.5 - 3.5 mbar)

EMISSIONS^{3,4}

NOx 0.02 lbs/MWh (0.009 kg/MWh)
CO 0.01 lbs/MWh (0.005 kg/MWh)
VOC 0.01 lbs/MWh (0.005 kg/MWh)
SO₂..... Negligible
Particulate Matter..... Negligible
CO₂¹ (electric only) 998 lbs/MWh (454 kg/MWh)
(with High-Grade heat recovery) 815 lbs/MWh⁵ (371 kg/MWh)
(with full heat recovery) 485 lbs/MWh⁵ (220 kg/MWh)

OTHER

Ambient Operating Temp -20°F to 104°F (-29°C to 40°C)
Relative Humidity 0 to 100%
Sound Level <65 dBA @ 33 ft. (10m)
Water Consumption None (up to 86°F (30°C) Ambient Temp.)
Water Discharge None (Normal Operating Conditions)

CODES AND STANDARDS

ANSI/CSA FC1-2014: Stationary Fuel Cell Power Systems
UL1741-2010: Inverters for Use With Distributed Energy Resources

NOTES

1. Average performance during 1st year of operation.
2. Based on natural gas higher heating value of 1025 Btu/SCF (40.4 MJ/Nm³)
3. Emissions based on 440 kW operation.
4. Fuel cells are exempt from air permitting in many U.S. states.
5. Includes CO₂ emissions savings due to reduced on-site boiler gas consumption



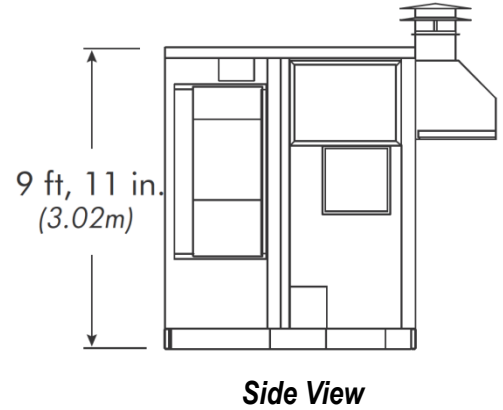
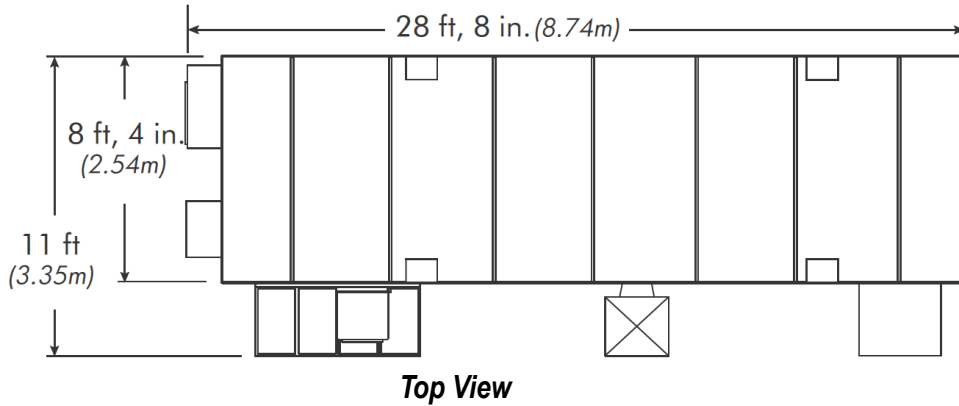
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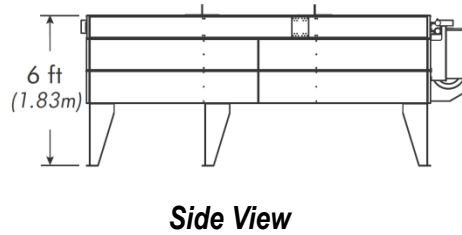
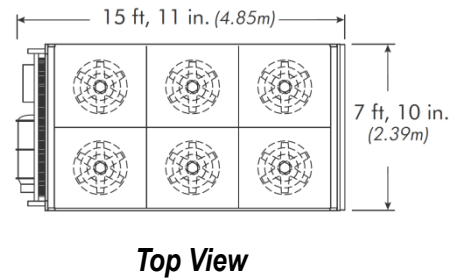
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SYSTEM DIMENSIONS

Power Module



Cooling Module



PHYSICAL SPECIFICATIONS

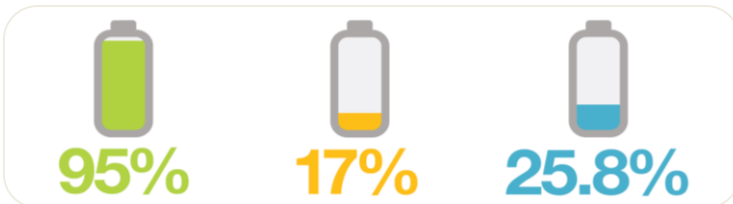
| | Power Module | Cooling Module |
|--------|-----------------------|--------------------|
| Length | 28' 11" (8.74m) | 15' 11" (4.85m) |
| Width | 8' 4" (2.54m) | 7' 10" (2.39m) |
| Height | 9' 11" (3.02m) | 6' 0" (1.83m) |
| Weight | 57,000 lb (27,216 kg) | 3,190lb (1,447 kg) |

PURECELL ADVANTAGE

OFFSET 3x MORE CO₂



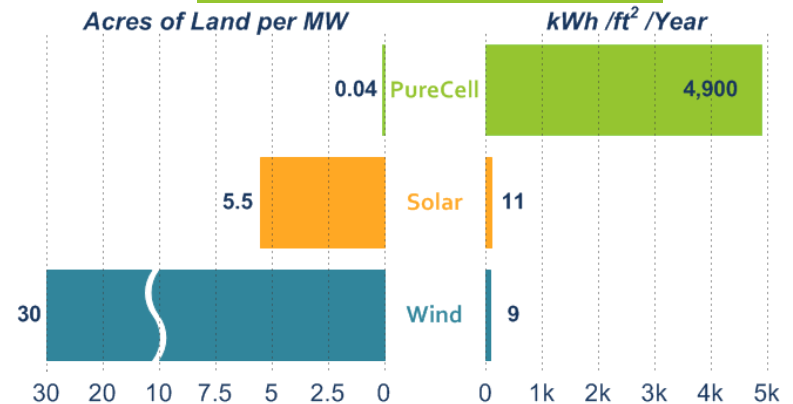
CAPACITY FACTOR



CO₂ OFFSET



USE LESS LAND



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