

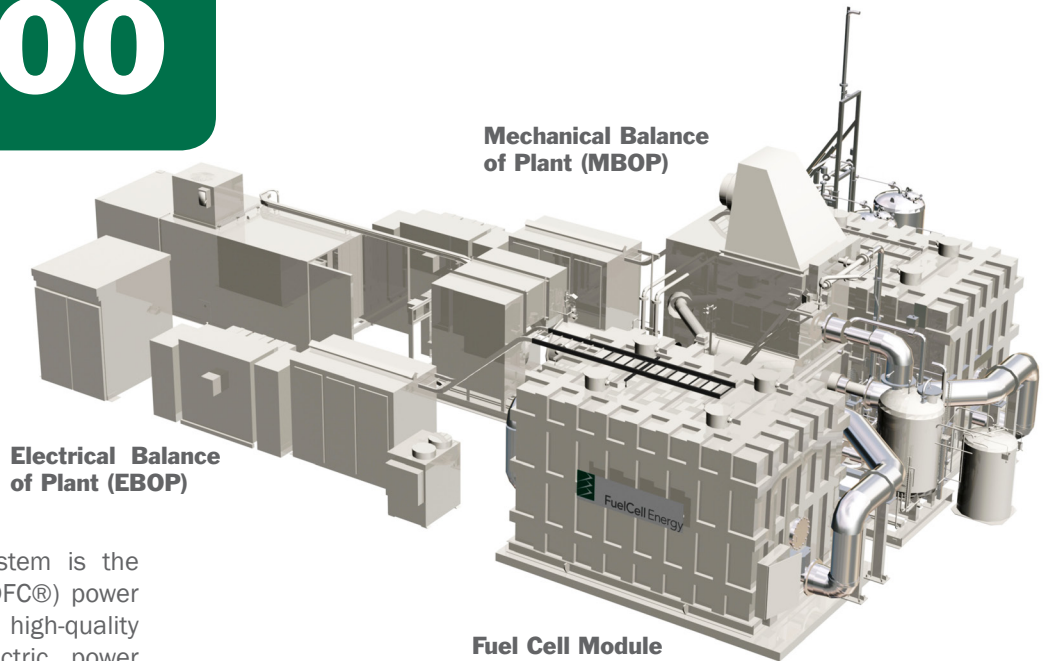
2.8 MEGAWATTS DFC3000

KEY FEATURES

- High Efficiency
- Low Environmental Impact
- Fuel Flexibility
- High Reliability
- Quiet Operation

ADVANTAGES

FuelCell Energy's DFC3000™ system is the largest of the Direct FuelCell® (DFC®) power plant fleet, capable of providing high-quality baseload power with 47% electric power generation efficiency around-the-clock. Scalable for Multi-Megawatt Fuel Cell Parks, the system is especially suitable for applications with larger load requirements such as universities, manufacturing facilities, wastewater treatment plants, and utility/grid support.



**2.8 MW, 13.8 kVAC,
3,110 kVA, 50 or 60 Hz**

PERFORMANCE

Gross Power Output

| | |
|-----------------------------|------------|
| Power @ Plant Rating | 2,800 kW |
| Standard Output AC voltage | 13,800 V |
| Standard Frequency | 60 Hz |
| Optional Output AC Voltages | By Request |
| Optional Output Frequency | 50 Hz |

Efficiency

| | |
|-----|------------|
| LHV | 47 +/- 2 % |
|-----|------------|

Available Heat

| | |
|------------------------|---------------|
| Exhaust Temperature | 700 +/- 50 °F |
| Exhaust Flow | 36,600 lb/h |
| Allowable Backpressure | 5 iwc |

Heat Energy Available for Recovery

| | |
|-------------|-----------------|
| (to 250 °F) | 4,433,000 Btu/h |
| (to 120 °F) | 7,460,000 Btu/h |

Fuel Consumption

| | |
|---|---------------|
| Natural gas (at 930 Btu/ft ³) | 362 scfm |
| Heat rate, LHV | 7,260 Btu/kWh |

Water Consumption

| | |
|---------------------------|--------|
| Average | 9 gpm |
| Peak during WTS backflush | 30 gpm |

Water Discharge

| | |
|---------------------------|---------|
| Average | 4.5 gpm |
| Peak during WTS backflush | 30 gpm |

Pollutant Emissions

| | |
|------|----------------|
| NOx | 0.01 lb/MWh |
| SOx | 0.0001 lb/MWh |
| PM10 | 0.00002 lb/MWh |

Greenhouse Gas Emissions

| | |
|--|----------------|
| CO ₂ | 980 lb/MWh |
| CO ₂ (with waste heat recovery) | 520-680 lb/MWh |

Sound Level

| | |
|----------|---------------------|
| Standard | 72 dB(A) at 10 feet |
|----------|---------------------|



FuelCell Energy

Ultra-Clean, Efficient, Reliable Power

SPECIFICATIONS

DFC3000

WEIGHTS

Water Treatment Skid

20,000 lb

Main Process Skid

50,000 lb

Desulfurization

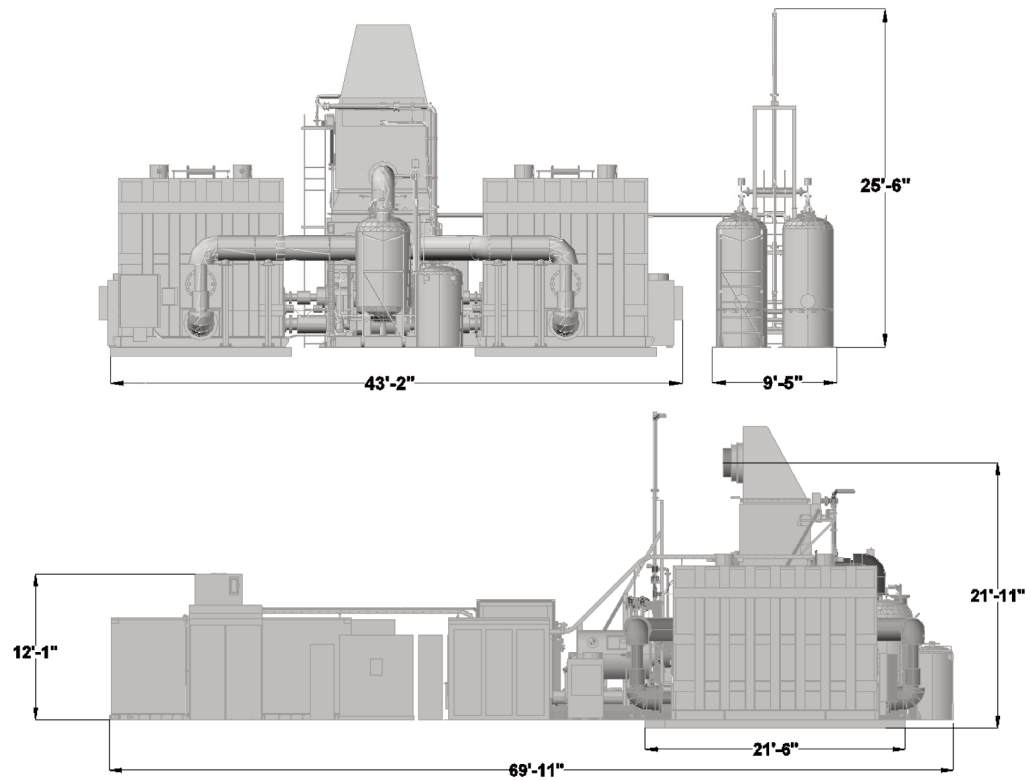
15,000 lb

Electrical Balance of Plant

52,000 lb

Fuel Cell Module

107,000 lb (each module)



EXPERIENCE & CAPABILITIES

Direct FuelCell® power plants are generating ultra-clean, efficient and reliable power at more than 50 locations worldwide. With more than 300 megawatts of power generation capacity installed or in backlog, FuelCell Energy is a global leader in providing ultra-clean baseload distributed generation to utilities, industrial operations, universities, municipal water treatment facilities, government installations and other customers around the world. The Company's power plants have generated more than 1.7 billion kilowatt hours of ultra-clean power using a variety of fuels including renewable biogas from wastewater treatment and food processing, as well as clean natural gas.

This brochure provides a general overview of FuelCell Energy products and services. This brochure is provided for informational purposes only. Warranties for FuelCell Energy products and services are provided only by individual sales and service contracts, and not by this brochure. This brochure is not an offer to sell any FuelCell Energy products and services. Contact FuelCell Energy for detailed product information suitable for your specific application. FuelCell Energy reserves the right to modify its products, services, and related information at any time without prior notice.

FuelCell Energy's fleet of Direct FuelCell power plants are certified to or comply with a variety of commercial and industrial standards, such as: ANSI/CSA America, UL, CARB, OSHA, IEEE and NFPA.

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