# C30 MicroTurbine Liquid Fuels

# Capstone

# Achieve lower emissions and reliable electrical generation with diesel or kerosene fuels.

- Ultra-low emissions
- One moving part minimal maintenance and downtime
- Patented air bearing no lubricating oil or coolant
- 5 and 9 year Factory Protection Plans available
- Remote monitoring and diagnostic capabilities
- Integrated utility synchronization and protection<sup>(1)</sup>
- Small, modular design allows for easy, low-cost installation and easy transportation
- Reliable tens of millions of run hours and counting
- Portable units available



C30 MicroTurbine

# Electrical Performance(2)

Electrical Power Output 29kW

Voltage 400 – 480 VAC Electrical Service 3-Phase, 4 wire

Frequency 50/60 Hz, grid connect operation

10-60 Hz, stand alone operation

Maximum Output Current 46A, grid connect operation

46A, stand alone operation<sup>(3)</sup>

Electrical Efficiency LHV 25%

### Fuel/Engine Characteristics(2)

Liquid Fuels<sup>(4)</sup> Diesel (ASTM D975-07b Grade Low Sulfur No. 1-D, 2-D)

Aviation (ASTM D1655 Jet-A,

MIL-DTL-83133E JP-8, MIL-DTL-5624U JP-5) Kerosene (ASTM D3699 1-K, JIS K2203)

Inlet Pressure -35 to 35 kPa gauge (-5 to +5 psig)

Fuel Flow HHV 459 MJ/hr (435,000 BTU/hr)
Net Heat Rate LHV 14.4 MJ/kWh (13,700 BTU/kWh)

# Exhaust Characteristics(2)

NOx Emissions @  $15\% O_2^{(5)}$  35 ppmvd (72 mg/m³) NOx / Electrical Output<sup>(5)</sup> 0.9 g/bhp-hr (2.6 lb/MWhe) Exhaust Gas Flow 0.31 kg/s (0.68 lbm/s) Exhaust Gas Temperature 275°C (530°F)

# **Dimensions & Weight**(6)(7)

Width x Depth x Height 0.76 x 1.5 x 1.8 m (30 x 60 x 70 in)

Weight - Grid Connect Model 405 kg (891 lb) Weight - Dual Mode Model 578 kg (1,271 lb)

### Minimum Clearance Requirements<sup>(8)</sup>

Vertical Clearance 0.61 m (24 in)

Horizontal Clearance

Left & Right 0.76 m (30 in) Front 0.93 m (37 in) Rear 0.92 m (36 in)

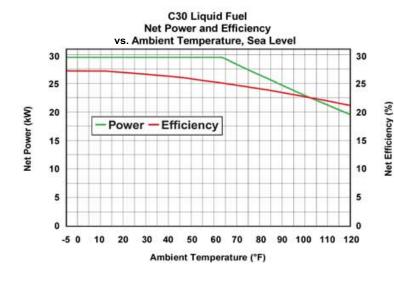
### **Sound Levels**

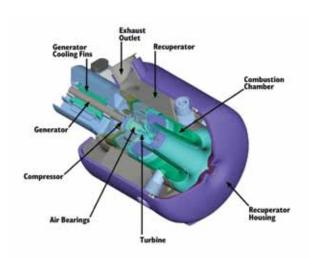
Acoustic Emissions at Full Load Power

Nominal at 10 m (33 ft) 65 dBA

### **Certifications**

Models available with optional equipment for CE Marking





- (1) Some utilities may require additional equipment for grid interconnectivity
- (2) Nominal full power performance at ISO conditions: 59°F, 14.696 psia, 60% RH
- (3) With linear load
- (4) Contact Capstone for additional information
- (5) For Diesel #2 according to ASTM D975-07b
- (6) Approximate dimensions and weights
- (7) Height dimensions are to the roof line. Exhaust outlet extends to at least 7 in above the roof line
- (8) Clearance requirements may increase due to local code considerations

Specifications are not warranted and are subject to change without notice.

