C200 MicroTurbine High-pressure Natural Gas



World's largest air-bearing microturbine produces 200kW of clean, green, and reliable power.

- 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
- Small, modular design allows for easy, low-cost installation
- Proven technology with tens of millions of run hours and counting
- Internal fuel gas compressor available for low fuel pressure natural gas applications



C200 MicroTurbine

Electrical Performance(1)

Electrical Power Output 200kW

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 290A RMS @ 400V, grid connect operation

240A RMS @ 480V, grid connect operation

310A RMS, stand alone operation(2)

Electrical Efficiency LHV 33%

Fuel/Engine Characteristics(1)

 Natural Gas HHV
 30.7–47.5 MJ/m³ (825–1,275 BTU/scf)

 Inlet Pressure⁽³⁾
 517–552 kPa gauge (75–80 psig)

 Fuel Flow HHV
 2,400 MJ/hr (2,280,000 BTU/hr)

 Net Heat Rate LHV
 10.9 MJ/kWh (10,300 BTU/kWh)

Exhaust Characteristics(1)

NOx Emissions @ 15% $O_2^{(4)}$ < 9 ppmvd (18 mg/m³) NOx / Electrical Output⁽⁴⁾ 0.14 g/bhp-hr (0.4 lb/MWhe)

Exhaust Gas Flow 1.3 kg/s (2.9 lbm/s)

Exhaust Gas Temperature 280°C (535°F)

Exhaust Energy 1,420 MJ/hr (1,350,000 BTU/hr)

Dimensions & Weight⁽⁵⁾

Width x Depth x Height⁽⁶⁾ 1.7 x 3.8 x 2.5 m (67 x 150 x 98 in)

Weight – Grid Connect Model 2776 kg (6,120 lb) Weight – Dual Mode Model 3413 kg (7,525 lb)

Minimum Clearance Requirements⁽⁷⁾

Vertical Clearance 0.6 m (24 in)

Horizontal Clearance

 Left & Right
 1.1 m (42 in)

 Front
 1.1 m (42 in)

 Rear
 1.8 m (70 in)

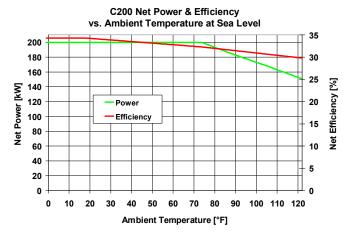
Sound Levels

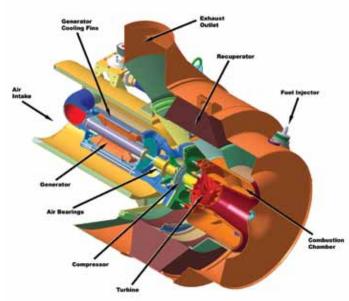
Acoustic Emissions at Full Load Power

Nominal at 10 m (33 ft) 65 dBA

Certifications

- UL 2200 and UL 1741 natural gas operation⁽⁸⁾
- Complies with IEEE 1547 and meets statewide utility interconnection requirements for California Rule 21 and the New York State Public Service Commission
- · CE certified





- (1) Nominal full power performance at ISO conditions: 59°F, 14.696 psia, 60% RH
- (2) With linear load
- (3) Inlet pressure for standard natural gas at 39.4 MJ/Nm³ (1,000 BTU/scf) (HHV)
- 4) Emissions for standard natural gas at 39.4 MJ/Nm³ (1,000 BTU/scf) (HHV)
- 5) Approximate dimensions and weight
- (6) Height dimensions are to the roof line. Exhaust outlet extends at least 8 inches above the roof line
- 7) Clearance requirements may increase due to local code considerations
- (8) All natural gas models are planned to be UL Listed

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

